

THE ROLE OF VIRTUAL COMMUNITIES IN BUILDING BRAND TRUST

Muhammad Tabish¹, Dr.Amanat Ali Jalbani² and Dr. Adnan Bashir³

Abstract

The aim of this study is to investigate the role of virtual communities in building brand trust through community trust by participation and social networking of the members of a virtual community. All the constructs were adapted from previously established studies that's why all the measures were validated. The conceptual model and measurement model representing the hypothesized relationship between virtual community, community participation, community social network, community trust, and brand trust. Total of 856 responses was collected from automobile virtual community members and based on that data confirmatory analysis and structural modelling have been done accordingly. Virtual community participation and virtual community social networking have a positive influence on community trust, whereas that community trust transforms into brand trust later on. Participation and social networking in a virtual community play a vital role in order to build community trust that transfers into brand trust. Because if a member trust in a virtual community will ultimately trust a brand, that is suggested by that community so marketers can get an advantage through observing the behaviour of their target groups and making more effective strategies by getting closer to them.

Keywords: Virtual Community, Community Participation, Community Social Network, Community Trust, Brand Trust.

JEL Classification: M310

Introduction

Due to the rising access to information, the internet has become the first choice for people to communicate and share their ideas (Kim, Lee, & Lee, 2019). This increase in usage of the internet has also effected on customer's attitude toward brands and their purchase process. Certainly, the internet influences customer decisions and preferences (Casaló, Flavián, & Guinalú, 2007). In beginning organizations inform customers about their product or service later on customers also got able to

¹Lecturer, College of Business Management, IoBM Korangi Creek, Karachi, Pakistan. Email :muhammad.tabish@iobm.edu.pk

²Professor and Vice-Chancellor, Shaheed Benazir Bhutto University Benazirabad / Nawabshah, Pakistan.
Email: vc@sbbusba.edu.pk

³Asst. Professor College of Business Management, IoBM Korangi Creek, Karachi, Pakistan. Email :adnan.bashir@iobm.edu.pk

provide feedback to them. But in recent years, the internet allows customers to interact with other customers on different online platforms, these online platforms could be different social network sites like Twitter, Facebook, LinkedIn, etc. these platforms could be in the form of blogs and vlogs as well (Chih, Hsu, & Liou, 2017).

The rising popularity of social networking sites has created a new social platform for members to connect and share their enthusiasm about their favorite brand with their friends, personal contacts, and other acquaintances (Christensen et al., 2017). Both commercial companies and professional consulting firms have invested considerable resources in developing various marketing strategies related to user engagement in online brand communities on social networking sites. There is a strong professional focus on operational issues of engagement (Zheng, Cheung, Lee, & Liang, 2015).

The concept of virtual community has emerged due to the era of internet and technology. This has helped the consumers at large as they get the opportunity to communicate with each other about their interests regarding the brand. Virtual communities give a platform to participate and get information about the brand in the decision journey (Kamboj & Rahman, 2017). A virtual community is one of the online platforms that allow a customer to share his experiences, common interests and practices with other customers (Shafique, Ahmad, Kiani, & Ibrar, 2015). Virtual communities give a platform for C2C (consumer to consumer) communication, which directly or indirectly influence customer's purchase behaviours and their emotional experiences. Through studying and analyzing the customer's influenced purchasing behaviours, firms can have a better perspective on business expansions, growth, and profitability. It builds an emotional connection between consumers as well as towards the products/services and experiences, which makes the virtual community network stronger (Chou & Sawang, 2015).

Consumer to consumer communication has rapidly increased by the means of Virtual communities. This is due to the exposure of these online communities. These are not only mediums of communication but also getting information about the brand (Wilkin, Campbell, Moore, & Simpson, 2018). Therefore, not only the consumers but firms are also indulged in these brand communities. Community social networking through these sites has enhanced the E-WOM (electronic word of mouth). Community member's WOM plays a vital role in influencing other members. Firms are using these sites to promote their brands to the customers. This can be done in a few seconds with the help of these sites (Chih, Hsu, & Liou, 2017). Pakwheels forums and SWOT Facebook pages are the most consuming online communities in Pakistan. Virtual communities can connect to the millions of people so easily.

Literature Review

Virtual Community

Online community comes into existence due to the exposure of social networking sites which help companies in interacting with their customers through the internet. On Social websites such as Twitter, Facebook, and LinkedIn consumers and Firms share information around the globe regarding product upgrading and company reports. Through virtual communities, members get a sense of belonging and membership towards the community members. Consumers have a social influence because they get recommendations and online reviews through the communities (Chih, Hsu, & Liou, 2017).

According to Fournier and Lee(2009), there are three types of virtual communities:

- i. Pool
- ii. Web
- iii. Hub

Pool

Pool virtual communities based on shared activities, or shared values, or shared goals.

Web

Web virtual communities based on strong one to one relationship and having the same interest and goals.

Hub

Virtual communities based on Hub association having a strong central figure but the weak connection among members.

Virtual communities give a platform for C2C (consumer to consumer) communication, which directly or indirectly influence customer's purchase behaviours and their emotional experiences. Through studying and analyzing the customer's influenced purchasing behaviours , firms can have a better perspective on business expansions, growth, and profitability .It builds an emotional connection between consumers as well as towards the products/services and experiences, which makes the virtual community network stronger (Chou & Sawang, 2015).

Community Participation

These communities become a platform for expanding electronic word of mouth which creates an impact on sales. Apart from building relationships on these virtual communities one could get information about trendy items or new product ideas (Wilkin et al., 2018). Furthermore, these communities have some shared interest people who shared rules, rituals, laws, and for the feeling of belongingness they do technological-aided communication) rather than face to face interaction (Kamboj & Rahman, 2017). Along with the understanding of the creation of values, understanding of the most suitable effort is essential for the success of any virtual community and due to these necessary efforts of a sponsor, trust could be foster among the members of a community which encourages the members to build up the trusted bond with the sponsor for sharing information. Therefore, the participation of a customer in a virtual community depends on the effective content which is managed by the sponsors (Rivera & Cox, 2016).

Community Social Networking

These communities become a platform for expanding electronic word of mouth which creates an impact on sales. Apart from building relationships on these virtual communities one could get information about trendy items or new product ideas (Vătămănescu, Andrei, & Pînzaru, 2018). Furthermore, these communities have some shared interest people who shared rules, rituals, laws, and for the feeling of belongingness they do technological-aided communication) rather than face to face interaction (Zhang et al., 2017). Furthermore, along with the understanding of the creation of values, understanding of the most suitable effort is essential for the success of any virtual community and due to these necessary efforts of a sponsor, trust could be foster among the members of a community which encourages the members to build up the trusted bond with the sponsor for sharing information. Therefore, the participation of a customer in a virtual community depends on the effective content which is managed by the sponsors (Kananukul, Jung, & Watchravesringkan, 2015).

Community Trust

A few communities are created over the web where people say they have friends but it's all vague and in such a case it's hard to believe in those so-called real friends. For example: would you trust a review of another person who may be your Facebook friend but not exactly a real friend, it is mostly situational (Ruan & Durresi, 2016). Building strong trust in a brand through information shared through online forums require strong communication. For strong communication to be there amongst the members of the communities, active participation by the members is essential. The absence of active participation leads to not so effective communication (Becerra & Badrinarayanan, 2013). As a consequence of this, the development of trust relating to a brand is slowed or hindered. Lack of effective communication serves as an obstacle in building brand trust which leads to the creation of community trust (Perepelkin & Di Zhang, 2011). Knowledge sharing mediates virtual

team effectiveness, the more the sharing of information would be there through virtual community members, the deeper the level of trust is to be built for the brand and vice-versa (Hur, Ahn, & Kim, 2011). Community trust in association with brand trust revolves also around the effectiveness of knowledge sharing that happens by community members over virtual community platforms.

Brand Trust

The brand trust aims to achieve competitive advantage and higher generation of performance. It is a combination of familiarity, security, privacy, word-of-mouth, advertising, and brand image, however, all of this has not been proved to work in the online sector (Cheng, Fu, Sun, Bilgihan, & Okumus, 2019). There are four components of trust, namely the perception of competence, predictability, benevolence, and integrity competence is the ability of the brand to satisfy the needs of the customers by the generation of higher satisfaction. Predictability is the initial trust that the customers have the brand without any ambiguity (Du & Mao, 2018). Benevolence is referred to as the maximum promotion of shareholder interests. Integrity is the representation of fairness and honesty towards the business and customers (Hegner & Jevons, 2016). All these are the components of establishing brand trust.

Brand trust plays a more important role in influencing the customers more particularly when a higher level of risk is involved in the purchase and buying decision. This usually occurs for more expensive products and services. Brand trust is basically the degree of confidence of the customer in the ability of the brand to satisfy their needs and influences their decisions (Sharma, Alavi, & Ahuja, 2017). Brand trust results in the establishment of brand loyalty. The degree of change and evolution that is to occur in any brand or brand line is a factor of its degree of trustworthiness among the customers, which indicates whether or not the customers welcome the changes and evolution (Reast, 2005).

Hypothesis Development

Virtual Community and Community Participation

Participation in the community creates a sense of responsibility among the members. They are also inclined towards playing their individuals roles with sharing information. In this manner, they add value to the community and community also add value to them by giving them rewards (Zhang, Wang, Chen, & Guo, 2019). It also enhances motivation among members to participate and give positive information regarding the brand, which leads towards brand loyalty and trust. Members get closer to each other as they have common interests (Bottini, 2018). The members sometimes influenced by their beliefs and transform the communities vision and goals into them (Zhou, 2011). This can have a sometimes negative and sometimes positive effect on the participation of them and others also.

Furthermore, community participation empowers the members of the community as they have the right to openly interact with each other and discuss a particular brand. This gives them the motivation to participate and add value to the community (Laux, Luse, & Mennecke, 2016). Communities are not only to promote the brands only but it also helps the members to create social awareness in the country e.g. sexual harassment, child labor, etc. It needs the participation of the members (Hu, Zhang, & Luo, 2016). The more the participation, the more the awareness about any social topic occur. This benefits the masses at large.

Therefore, on the bases of the above argument on the relationship between Virtual Community and Community Participation we can propose the following hypothesis:

H1: Virtual Community positively influences Community Participation.

Virtual Community and Community Social Networking

Community social networking enables a member to develop directly as well as indirect relationships. Directly when member's interaction with each other and indirectly by interacting with other member's social circle (Huang, Zhao, & Hu, 2019). Firms not only share information through these sites but also solve their customer's problems. They can provide after sale services through communities e.g. how to use a product, how to operate the device or how to solve any issue regarding the product (Toral, Martínez-Torres, & Barrero, 2010). These community social networking sites lead towards creativity and innovation as members come up with new ideas and thoughts (Teng, 2015). These ideas help marketers to invest those ideas into transforming their products and services.

Abubakar, Ilkan, and Sahin (2016) highlight another point that social identification is also one of the important elements in a virtual community which describes that how an individual's self-concept is derived from the membership of a social group. Social identity also facilitates and creates a sense of belongingness and commitment towards the virtual community and social community network. Chang, Hsieh, and Fu (2016) further explain that social identification and social capital creates a positive relationship between the virtual community and the social community network. Social capital does not guarantee the long-lasting participation it only explains how individuals exchange and access the resources to create the relationship via virtual community which helps organizations and customers to build a strong social network.

Therefore, on the bases of the above argument on the relationship between Community Participation and Community Social Network, we can propose the following hypothesis:

H2: Virtual Community positively influences Community Social Network.

Community Participation and Community Trust

Participation associated with interaction that becomes very helpful and brings positivity in the brand community. Brand community participation relates to the tight tie between brand to customer, customer to the brand, and even between customer to customer (Sirola, Kaakinen, Savolainen, & Oksanen, 2019). Community participation involves perceived familiarity of any brand and perceived brand personality too. There can be seen a positive relationship between community participation and community trust. Interaction effects virtual communities, customer can easily and freely give his opinion by participating in virtual communities (Chen, Xia, & Wang, 2018). Acquaintance among participant also does matter in virtual brand communities because it develops trust among the participant. In virtual communities usually, there is a customer to customer interaction that is very common and effective and builds trust in the community (Kang, Shin, & Gong, 2016).

Active participation in virtual brand communities may favor higher levels of consumer loyalty to the brand around which the community is developed since a key aspect of membership and participation in these communities is the ongoing purchase and use of the brand products. Participation in a virtual brand community has a significant effect on customer trust and loyalty (Habibi, Laroche, & Richard, 2014). Customers tie emotional ties with the brand. That's why these sort of communities is beneficial for the customer and as well as for organization because organizations can easily trace the needs and want of their customers (Casaló, Flavián, & Guinalíu, 2007). So firms should promote and facilitate these sort of communities.

Therefore, on the bases of the above argument on the relationship between Community Participation and Community Trust, we can propose the following hypothesis:

H3: Community Participation positively influences Community Trust.

Community Social Networking and Community trust

Social networking in online communities can be defined as a person to person or customer to customer interaction and share their views about any product or brand that both persons are using or interested in. These sort of interaction and networking can be the cause of loyalty and trust (Asim, Malik, Raza, & Shahid, 2019). Due to the increase in usage of internet customer has become more empowered to make social networks online. Customer not only interact through this social network but they solve their product or brand related problems too (Wu, Fan, & Zhao, 2018). These sort of activities and networking would be the cause of building trust on those communities that could be later on transform into the brand trust. Familiarity among the community members also plays an important role in social networking and community trust (Kang, Shin, & Gong, 2016).

Trust is considering a strong factor in marketing either it could be on brand or the community which you belong. In relational marketing consumer engagement through social networking could

be very beneficial for building community trust that later on transforms into brand trust and leading to purchase intention (Alonso-Dos-Santos, Rejón Guardia, Pérez Campos, Calabuig-Moreno, & Ko, 2018). The content that customer creates on different online platform is very valuable for the organizations for knowing the needs and wants of their customer and acting as regard of them in order to satisfy them (Ruan & Durrezi, 2016). Basically, this content creates on online platforms by the networking of members of these online platform forms, most of the members trust the content created on these online platform forms and this will increase the trustworthiness of that platform or online community itself (Kananukul, Jung, & Watchravesringkan, 2015). Therefore, on the bases of the above argument on the relationship between Community Social Networking and Community Trust, we can propose the following hypothesis:

H4: Community Social Network positively influences Community Trust.

Community Trust and Brand Trust

Nowadays consumers are more inclined towards online communication during their buying process. Virtual communities have become a strong medium for the exchange of reviews about brands of consumer's interest, which leads towards the community trust and ultimately it transforms into brand trust (Sirola et al., 2019). Being a member of the virtual community consumers have a sense of moral responsibility towards it. They do not have the only mutual interest towards a particular brand but they also play community roles such as storyteller, brand ambassador, and Partner, etc. This makes their relationship stronger with the community as well as with the brand (Zhang, Bilgihan, Kandampully, & Lu, 2018). Loyalty plays an important role in building and maintaining community and brand trust. The consumers share their experiences and give reviews accordingly about a product or brand. The more information consumers get about a brand the more interest is developed towards it. Ultimately when the consumer's expectations are met, he becomes more loyal to the community and brand (Casaló, Flavián, & Guinalíu, 2007).

Virtual communities not only help customers but also help marketers. Marketers can better understand their customers through related virtual communities and position their brand in a better way. This builds a strong long-term relationship between the consumers and brand, which helps in creating loyalty and trust of their brand (Frasquet, Mollá Descals, & Ruiz-Molina, 2017). In this way, they can better serve and satisfy their customers by offering products according to their needs. Ultimately, this activity leads them to community and brand trust.

Everyone in the community has the right to share their opinions. The negative participation of dissatisfied customers can have a negative impact on brand trust and loyalty (Hur et al., 2011). In this case, brand trust can be adversely affected but other members can play a role of advocates to change their attitudes towards the brand. Consumers involvement in the brand plays an important role in creating brand trust. Involvement in a certain brand motivates the consumer to search for information about that brand. If the consumer has personal relevance or emotional attachment to the

brand, then the involvement in the community would be effective (Shang, Chen, & Liao, 2006). This creates a positive image of the brand in his mind.

Therefore, on the basis of the above argument on the relationship between Community Trust and Brand Trust, we can propose the following hypothesis:

H5: Community Trust positively influences Brand Trust.

On the basis of the above hypotheses following conceptual model can be proposed:

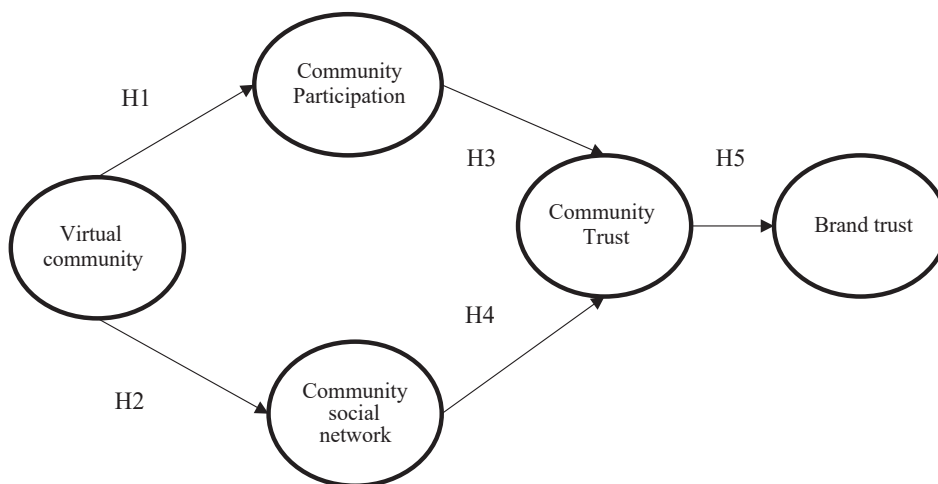


Figure 1: Proposed conceptual framework

Methodology

Measures and Instrument Development

All the constructs used in the draft questionnaire were validated measures as they were adapted from previously established studies. The questionnaire consists of five constructs i.e. virtual community, community participation, community social network, community choice, and brand choice including demographic information. Table 1 shows the list of all measurement items to each construct. All constructs were measured through five-point Likert scale, where 1 stands for “strongly disagree” to 5 “strongly agree”.

The Sample and Data Collection

According to “Pakistan Bureau of Statistics and 6th Population and Housing Census,”

(2018) the total population of Pakistan in 2017 is 207 million of which 35.1 million are internet users that is 18% of the total population of Pakistan. Active social media users are 31 million that is 16% of the total population of Pakistan (Pakistan Advertisers Society, 2017).

Sekaran (2010) suggest 30 respondents for every single construct. As this study consist of five constructs ($30 \times 5 = 150$). But to increase the generalisability of the study researcher took a larger sample size ($n=850$). Data were collected from different online communities and online brand communities as per the scope of this study.

Data Analysis and Results

The Respondent Profile

All most half of the respondents were female (52.6 percent, $n=438$), and the remaining half were male (47.4 percent, $n=394$). The range of the age of most respondents was between 18 to 30 (87.9 percent, $n=745$). Half of the respondents were graduate (30.3 percent, $n=256$), or masters (17 percent, $n=138$). Most of the respondents have family income above 100K (47.7 percent, $n=937$), while some of them have a family income less than 50K (16.5 percent, $n=137$).

The Measurement Model and the Confirmatory Factor Analysis

Confirmatory factor analysis used to check the consistency of the measures of a construct and to validate the measurement model. The measurement model contains 5 constructs that consist of 16 items. Due to weak factor loading 8 items were dropped. Factor loading of all items of measurement model was greater than 0.7 and the t-value range of 34.71 to 103.73 with the significant $p\text{-value} < 0.01$. The overall measurement model was fit and results are satisfactory. Table 1 shows the details of the measurement model.

Table 1

A Confirmatory Factor Analysis; Items and Standardized Loadings

Construct and Scale Items		Standardized Loadings
Virtual Community (Laroche, Habibi et al., 2012)		
The members share a common bond with other members of the community.		0.85
The members are strongly affiliated with other members.		0.90
Comm. Participation (Casaló, Flavián & Guinalíu, 2007)		
In general, I'm very motivated to participate actively in the virtual community		0.84
In general, I participate in order to stimulate our virtual community		0.85
I usually provide useful information to other community members		0.73

(Table Continued...)

In general, I post messages and responses in the community with great excitement	0.83
Comm. Social Network (Laroche et al., 2012)	
The community is concerned with my needs.	0.75
The community collects my opinions about the services/product.	0.80
The community recognizes special occasions and sends me greetings.	0.77
I share my opinions on the community.	0.79
Community Trust (Hur, Ahn, & Kim, 2011)	
I trust this online community	0.88
I rely on this online community	0.85
This is an honest online community	0.88
Brand Trust (Laroche et al., 2012)	
My brand gives me everything that I expect out of the product.	0.86
I rely on my brand.	0.84
My brand never disappoints me.	0.85

As shown in Table 2 the average value extracted is higher than the cut off value i.e. (0.50) of each construct in the model (Anderson & Gerbing, 1988; Fornell & Larcker, 1981). While the composite reliability is also higher than the threshold i.e. (0.70) of each construct (Hair et al., 1998). It confirms the convergent validity of all constructs. Discriminant validity was measured by comparing the square root of average variance extract (AVE) with a square of correlations. Square of correlations among a couple of constructs was lower than the average variance extracted (AVE) (Anderson & Gerbing, 1988; Fornell & Larcker, 1981).

Table 2
Descriptive Statistics and Associated Measures

Constructs	Mean(SD)	AVE	CR	VC	CP	CSN	CT	BT
VC	3.4(0.88)	0.76	0.87	<i>0.87^a</i>	0.55 ^b	0.45	0.44	0.35
CP	3.23(0.89)	0.66	0.89	0.30 ^c	<i>0.81</i>	0.63	0.51	0.39
CSN	3.36(0.87)	0.61	0.86	0.20	0.40	<i>0.78</i>	0.51	0.45
CT	3.34(0.92)	0.75	0.90	0.19	0.26	0.26	<i>0.87</i>	0.49
BT	3.51((0.85)	0.72	0.88	0.12	0.15	0.20	0.24	<i>0.85</i>

Notes: VC = Virtual Community; CP = Community Participation; CSN = Community Social Network; CT = Community Trust; BT = Brand Trust; ^aSquare root of AVE is indicated along the diagonal(italic); ^bcorrelations are above the diagonal; ^cSquare of correlations are below the diagonal.

Figure 2 Shows the standardized path coefficient (outside the parentheses) and t-value (inside the parentheses). All hypotheses were accepted with the p-value less than 0.01 and t-value range of 7.75 to 74.73.

Variance Explained

Virtual community explained 32 percent variance in community participation and 21 percent variance in community social network. While community participation and community social network together accounted for 32 percent variance in community trust. Community trust explained 24 percent variance in brand trust.

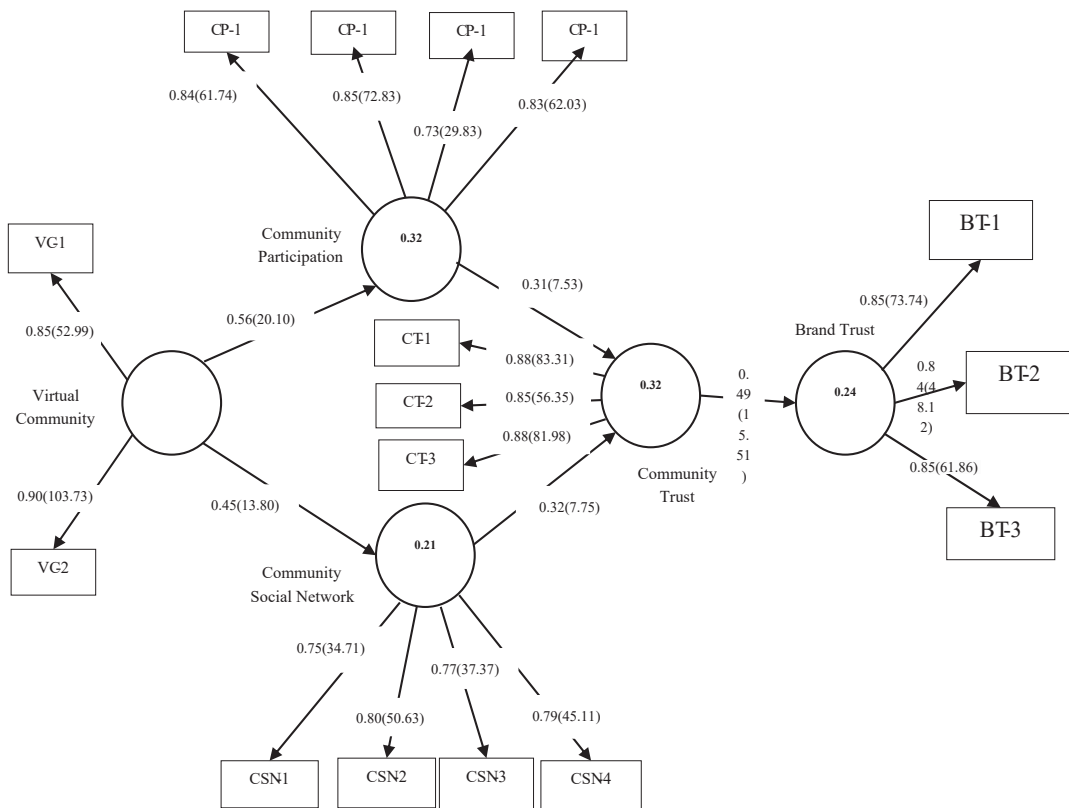


Figure 2: Structural model and path coefficient

Conclusion and Managerial Implications

This study provides a validated empirical model that explains the role of virtual communities in building brand trust through community participation and community social networking. Results show that virtual community participation and community social networking have a positive impact on community trust that later on transforms into brand trust. First, virtual communities have a significant positive impact on community participation and community social networking. Through the concept of online virtual communities, firms are taking advantage as the members share their experiences and tell stories about their experiences and also motivate other members to be part of the communities (Kamboj & Rahman, 2017).

Second, community participation and community social networking have a positive impact on community trust. When an online community member starts to participate in community and mingle up with other members of the community ultimately, he starts a trust in that community. Virtual brand communities can affect their members' behavior since individuals can use these communities to inform and influence fellow consumers about products, brands or organizations. Virtual brand communities may help to identify the needs and desires of particular individuals or groups of people (Tsai & Hung, 2018). Third, brand trust positively influenced by a community trust. By continuous participation and social networking in any virtual community, a member starts believing in that community and ultimately that community trust transforms into the brand trust. Through virtual communities, marketers also get closer to their targeted segments. The members develop an agenda to support marketer's strategies and exchange information of the brand on the community. Marketers get to know about consumers' needs and interests, with minimum efforts and it is also cost-efficient (Hur, Ahn, & Kim, 2011).

Limitations and Future Research

As any study has limitations, this study also has some limitations. First, the data was collected through a convenience sampling technique. Although data were collected from virtual community members through these virtual communities and through survey technique but it could be geographically biased. As offline surveys only conducted in one city. Second, Brand trust has been gauge through only community trust, there could be more factors that can be revealed in future research. Third, this stud only applies to the automobile industry, more sectors could be a target in future research as every industry has different behavior. Fourth, Mediating and moderating effect of other factors have been ignored in this study, so some mediating or moderating effects can be checked in future researches.

References

- Abubakar, A. M., Ilkan, M., & Sahin, P. (2016). eWOM, eReferral and gender in the virtual community. *Marketing Intelligence & Planning*, 34(5), 692–710. <https://doi.org/10.1108/MIP-05-2015-0090>
- Alonso-Dos-Santos, M., Rejón Guardia, F., Pérez Campos, C., Calabuig-Moreno, F., & Ko, Y. J. (2018). Engagement in sports virtual brand communities. *Journal of Business Research*, 89, 273–279. <https://doi.org/10.1016/j.jbusres.2017.12.053>
- Anderson, E.W. and Gerbing, D.W. (1988), “Structural modeling in practice: a review and recommended two-step approach”, *Psychological Bulletin*, Vol. 103 No. 3, pp. 411–423.
- Asim, Y., Malik, A. K., Raza, B., & Shahid, A. R. (2019). A trust model for analysis of trust, influence and their relationship in social network communities. *Telematics and Informatics*, 36, 94–116. <https://doi.org/10.1016/j.tele.2018.11.008>
- Bottini, L. (2018). The effects of built environment on community participation in urban neighbourhoods: an empirical exploration. *Cities*, 81, 108–114. <https://doi.org/10.1016/j.cities.2018.03.020>
- Casaló, L., Flavián, C., & Guinaliú, M. (2007). The impact of participation in virtual brand communities on consumer trust and loyalty: The case of free software. *Online Information Review*, 31(6), 775–792. <https://doi.org/10.1108/14684520710841766>
- Chang, H. H., Hsieh, P.-H., & Fu, C. S. (2016). The mediating role of sense of virtual community. *Online Information Review*, 40(7), 882–899. <https://doi.org/10.1108/OIR-09-2015-0304>
- Chen, X., Xia, C., & Wang, J. (2018). A novel trust-based community detection algorithm used in social networks. *Chaos, Solitons & Fractals*, 108, 57–65. <https://doi.org/10.1016/j.chaos.2018.01.025>
- Cheng, X., Fu, S., Sun, J., Bilgihan, A., & Okumus, F. (2019). An investigation on online reviews in sharing economy driven hospitality platforms: A viewpoint of trust. *Tourism Management*, 71, 366–377. <https://doi.org/10.1016/j.tourman.2018.10.020>
- Chih, W.-H., Hsu, L.-C., & Liou, D.-K. (2017a). Understanding virtual community members' relationships from individual, group, and social influence perspectives. *Industrial Management & Data Systems*, 117(6), 990–1010. <https://doi.org/10.1108/IMDS-03-2016-0119>
- Chou, C. Y., & Sawang, S. (2015). Virtual community, purchasing behaviour, and emotional well-being. *Australasian Marketing Journal (AMJ)*, 23(3), 207–217. <https://doi.org/10.1016/j.ausmj.2015.06.001>
- Christensen, K., Liland, K. H., Kvaal, K., Risvik, E., Biancolillo, A., Scholderer, J., ... Næs, T. (2017). Mining online community data: The nature of ideas in online communities. *Food Quality and Preference*, 62, 246–256. <https://doi.org/10.1016/j.foodqual.2017.06.001>
- Du, W. (Derek), & Mao, J.-Y. (2018). Developing and maintaining clients' trust through institutional mechanisms in online service markets for digital entrepreneurs: A process model. *The Journal of Strategic Information Systems*, 27(4), 296–310. <https://doi.org/10.1016/j.jsis.2018.07.001>

- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, Vol. 18 No. 1, pp. 39-50.
- Fournier, S., & Lee, L. (2009, April 1). Getting Brand Communities Right. *Harvard Business Review*, (April 2009). Retrieved from <https://hbr.org/2009/04/getting-brand-communities-right>
- Frasquet, M., Mollá Descals, A., & Ruiz-Molina, M. E. (2017). Understanding loyalty in multichannel retailing: the role of brand trust and brand attachment. *International Journal of Retail & Distribution Management*, 45(6), 608–625. <https://doi.org/10.1108/IJRDM-07-2016-0118>
- Habibi, M. R., Laroche, M., & Richard, M.-O. (2014). The roles of brand community and community engagement in building brand trust on social media. *Computers in Human Behavior*, 37, 152–161. <https://doi.org/10.1016/j.chb.2014.04.016>
- Hair, J.F. Jr, Anderson, R.E., Tatham, R.L. and Black, W.C. (1998), *Multivariate Data Analysis*, Prentice-Hall, Upper Saddle River.
- Hegner, S. M., & Jevons, C. (2016). Brand trust: a cross-national validation in Germany, India, and South Africa. *Journal of Product & Brand Management*, 25(1), 58–68. <https://doi.org/10.1108/JPBM-02-2015-0814>
- Hu, M., Zhang, M., & Luo, N. (2016). Understanding participation on video sharing communities: The role of self-construal and community interactivity. *Computers in Human Behavior*, 62, 105–115. <https://doi.org/10.1016/j.chb.2016.03.077>
- Huang, J., Zhao, L., & Hu, C. (2019). The mechanism through which members with reconstructed identities become satisfied with a social network community: A contingency model. *Information & Management*. <https://doi.org/10.1016/j.im.2019.01.006>
- Hur, W., Ahn, K., & Kim, M. (2011a). Building brand loyalty through managing brand community commitment. *Management Decision*, 49(7), 1194–1213. <https://doi.org/10.1108/00251741111151217>
- 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>
- Kananukul, C., Jung, S., & Watchravesringkan, K. (2015a). Building customer equity through trust in social networking sites: A perspective from Thai consumers. *Journal of Research in Interactive Marketing*, 9(2), 148–166. <https://doi.org/10.1108/JRIM-03-2014-0019>
- Kang, M., Shin, D.-H., & Gong, T. (2016a). The role of personalization, engagement, and trust in online communities. *Information Technology & People*, 29(3), 580–596. <https://doi.org/10.1108/ITP-01-2015-0023>
- Kim, K. K., Lee, A. R., & Lee, U.-K. (2019). Impact of anonymity on roles of personal and group identities in online communities. *Information & Management*, 56(1), 109–121. <https://doi.org/10.1016/j.im.2018.07.005>
- Laux, D., Luse, A., & Mennecke, B. E. (2016). Collaboration, connectedness, and community: An examination of the factors influencing student persistence in virtual communities. *Computers in Human Behavior*, 57, 452–464. <https://doi.org/10.1016/j.chb.2015.12.046>
- P. Becerra, E., & Badrinarayanan, V. (2013). The influence of brand trust and brand identification on

- brand evangelism. *Journal of Product & Brand Management*, 22(5/6), 371–383.
- Pakistan Advertisers Society | Pakistan Advertisers Society. (n.d.). Retrieved February 3, 2018, from <http://www.pas.org.pk/>
- Pakistan Bureau of Statistics | 6th Population and Housing Census. (2018). Retrieved February 18, 2018, from <http://www.pbscensus.gov.pk/>
- Perepelkin, J., & Di Zhang, D. (2011). Brand personality and customer trust in community pharmacies. *International Journal of Pharmaceutical and Healthcare Marketing*, 5(3), 175–193. <https://doi.org/10.1108/17506121111172194>
- Reast, J. D. (2005). Brand trust and brand extension acceptance: the relationship. *Journal of Product & Brand Management*, 14(1), 4–13. <https://doi.org/10.1108/10610420510583707>
- Rivera, G., & Cox, A. M. (2016). An actor-network theory perspective to study the non-adoption of a collaborative technology intended to support online community participation. *Academia Revista Latinoamericana de Administración*, 29(3), 347–365. <https://doi.org/10.1108/ARLA-02-2015-0039>
- Ruan, Y., & Durrezi, A. (2016a). A survey of trust management systems for online social communities – Trust modeling, trust inference and attacks. *Knowledge-Based Systems*, 106, 150–163. <https://doi.org/10.1016/j.knosys.2016.05.042>
- Shafique, M. N., Ahmad, N., Kiani, I., & Ibrar, M. (2015). Exploring Relationship among Factors of Virtual Communities, Trust and Buying in Pakistan. *International Letters of Social and Humanistic Sciences*, 49, 115–122. <https://doi.org/10.18052/www.scipress.com/ILSHS.49.115>
- Shang, R., Chen, Y., & Liao, H. (2006). The value of participation in virtual consumer communities on brandloyalty. *Internet Research*, 16(4), 398–418. <https://doi.org/10.1108/10662240610690025>
- Sharma, R., Alavi, S., & Ahuja, V. (2017). Generating trust using Facebook-A study of 5 online apparel brands. *Procedia Computer Science*, 122, 42–49. <https://doi.org/10.1016/j.procs.2017.11.339>
- Sekaran, U. (2010) *Research Methods for Business: A Skill-Building Approach*. 4th Edition, John Wiley & Sons, UK.
- Sirola, A., Kaakinen, M., Savolainen, I., & Oksanen, A. (2019). Loneliness and Online Gambling-Community Participation of Young Social Media Users. *Computers in Human Behavior*. <https://doi.org/10.1016/j.chb.2019.01.023>
- Teng, C.-I. (2015). Drivers of interdependence and network convergence in social networks in virtual communities. *Electronic Commerce Research and Applications*, 14(3), 204–212. <https://doi.org/10.1016/j.elerap.2015.01.004>
- Toral, S. L., Martínez-Torres, M. R., & Barrero, F. (2010). Analysis of virtual communities supporting OSS projects using social network analysis. *Information and Software Technology*, 52(3), 296–303. <https://doi.org/10.1016/j.infsof.2009.10.007>
- Tsai, J. C.-A., & Hung, S.-Y. (2018). Examination of community identification and interpersonal trust on continuous use intention: Evidence from experienced online community members. *Information & Management*. <https://doi.org/10.1016/j.im.2018.09.014>
- Vătămănescu, E.-M., Andrei, A. G., & Pinzaru, F. (2018). Investigating the online social network

- development through the Five Cs Model of Similarity: The Facebook case. *Information Technology & People*, 31(1), 84–110. <https://doi.org/10.1108/ITP-06-2016-0135>
- Wilkin, C. L., Campbell, J., Moore, S., & Simpson, J. (2018). Creating value in online communities through governance and stakeholder engagement. *International Journal of Accounting Information Systems*, 30, 56–68. <https://doi.org/10.1016/j.accinf.2018.06.004>
- Wu, J., Fan, S., & Zhao, J. L. (2018). Community engagement and online word of mouth: An empirical investigation. *Information & Management*, 55(2), 258–270. <https://doi.org/10.1016/j.im.2017.07.002>
- Zhang, H., Wang, Z., Chen, S., & Guo, C. (2019). Product recommendation in online social networking communities: An empirical study of antecedents and a mediator. *Information & Management*, 56(2), 185–195. <https://doi.org/10.1016/j.im.2018.05.001>
- Zhang, T., Bilgihan, A., Kandampully, J., & Lu, C. (2018). Building stronger hospitality brands through online communities. *Journal of Hospitality and Tourism Technology*, 9(2), 158–171. <https://doi.org/10.1108/JHTT-04-2017-0032>
- Zhang, Y., Li, Z., Bian, K., Bai, Y., Yang, Z., & Li, X. (2017). Modeling geo-homophily in online social networks for population distribution projection. *International Journal of Crowd Science*, 1(3), 249–269. <https://doi.org/10.1108/IJCS-08-2017-0008>
- Zheng, X., Cheung, C. M. K., Lee, M. K. O., & Liang, L. (2015). Building brand loyalty through user engagement in online brand communities in social networking sites. *Information Technology & People*, 28(1), 90–106. <https://doi.org/10.1108/ITP-08-2013-0144>
- Zhou, T. (2011). Understanding online community user participation: a social influence perspective. *Internet Research*, 21(1), 67–81. <https://doi.org/10.1108/10662241111104884>