AN ANALYSIS OF FACTORS RELATED TO CONSUMER ACTIVE PARTICIPATION, BRAND ENGAGEMENT AND COMMUNITY TRUST IN ONLINE FOOD COMMUNITY PLATFORMS

-Neha Gupta, Associate Professor Marketing BIITM, Odisha
-Parul Singh, Assistant Professor, Indian Institute of Foreign Trade, Delhi

ABSTRACT

Purpose – With the growing importance of consumer interaction on web and social media platforms, consumer engagement has been extensively examined for various brands but not for online food community platforms. To mitigate this gap in the literature, the current study is undertaken to identify the factors that impact the customer engagement model for an online food community platform. The study also discusses the drivers of the customer engagement model and its outcomes for an online food community platform. To investigate how well these online food communities, engage with customers, the study examines the constructs i.e. community active participation, brand engagement and community trust.

Design/methodology/approach – A questionnaire-based survey is conducted with the online food community members to gather data. Exploratory factor analysis followed by confirmatory factor analysis has been applied to analyse the data.

Findings – The study identifies the role and significance of encouraging active participation in engaging customers in an online food community context. Further, it also recognizes community trust to be a key factor in consumer brand engagement.

Research limitations/implications – The study presents understanding to the marketers in terms of managing customer engagement with their online food communities.

Originality/value – There are numerous views among researchers regarding the customer engagement. Only limited studies have focussed on this construct in the perspective of markets in developing economies. No previous study is done on studying customer engagement in an online food community platform. Thus, the study attempts to close this gap.

Keywords: *Social networks, online food community platforms, consumer behaviour internet, active participation, brand engagement and community trust*

INTRODUCTION

With the advent and quick proliferation of the Internet across the world, customer engagement over the Internet for promoting the brands has become of the most important marketing tactics these days. With consumers becoming more active over the Internet and interacting

more with each other, brands have become more conscious and alert about consumers engagement online on the usage of social media platforms by them.

The term brand engagement was first noticed in the literature in 2006 and, since then, research in this field has grown with every passing day. In such a kind of two-way interactive surrounding, consumers are not only engaging themselves in brand related communication but also creating unique content related to brand (Hollebeek and Macky, 2019). In this ever changing competitive business scenario, efforts placed by a consumer in engaging with the brand indicates the connection and efforts consumers (Hollebeek et al,2019) are ready to lay in the brand of their interest (Islam et al,2017), and is of immense importance (Wirtz et al,2013). It has been seen from past research that engaged customers have led to increase in sales, organisation performance and positive feedback (Bijmolt et al., 2010), thus proving its importance. With the rapid increase in the number of Internet facilities and social media users, and interactivity is an important part of customer relationship management and digital marketing environment, the combination of the two types represents a potential field for research to develop experimental design. This is also stated in the literature (Habibi et al, 2014)regarding the growing importance of achieving greater customer engagement (Schultz and Peltier, 2013)through social media channels (Hollebeek et al, 2014).As per social media marketing report by Ernst and Young , India (economic times 2016) states that 72 percent marketers believed that prime reason of their presence on social media is customer engagement. This emphasizes further the importance that customer engagement comprises of for a topic of research. With the advent of Internet 2.0, customers have become more active (from passive), and not only go for information search but also involve themselves actively in exchanging their views and feedback on social media platforms, studying consumer engagement is of paramount importance.

LITERATURE REVIEW

Brand Engagement

As stated by Google in 2014, in this current era consumers have shifted from passive participation in brands to active participation and becoming a co party in creation of brand content and consumption of valuable offerings. The Major business giants like Facebook, Amazon, Google have taken note of this shift and are giving prime emphasis on keeping more focus on engagement efforts. The major reason cited behind this importance to engagement is that more engaged customers tend to purchase more and advocate more about brand.

So question arises what exactly engagement mean? There is no specific agreeableness on the meaning of engagement in context to business but it has been defined as: "a set of consumer mental, emotional and physical experience that will have a positive impact on a brand. It includes all steps that companies take to reach out to consumers and establish relationship with them Thompson(2014), Google (2014). CBE, the concept of brand customer engagement has been focused and focused in the study marketing literature since 2005 (Brodie et al., 2011; Islam and Rahman, 2016)

Since this study is focussed on virtual brand community so here term consumer becomes

more relevant as compared to customers as consumers are not getting anything paid for being engaged (Hollebeek et al., 2014). Brand engagement origination roots can be traced from Vivek et al. (2012) where consumer engagement is referred as a way to build relationship with customers, and broadly reflect consumers' Brodie et al. (2011) experience from different brands Islam et al (2019). In spite of all the doubts regarding concept of engagement but still its two-way interactivity is proven in many previous researches (Hollebeek et al., 2019, Groeger et al., 2016; Hollebeek, 2013) in his paper define CBE as a customer's will to invest their time and efforts in brand interactions (Hollebeek et al., 2014, Algesheimer et al., 2005). In current situation of increasing spread of online environment, consumers do not only get brand-related content, but also indulge in a great manner in creating it themselves (e.g. via user-generated content), hence showcasing the two way interactivity in CBE (Hollebeek and Chen, 2014). (Mollen and Wilson, 2010) the maximum number of present studies about concept of engagement view it as a multi-dimensional concept which can be categorize under intellectual or cognitive, emotional aspects (Brodie et al., 2011).

Based on the literature discussed above, we can define CBE as the mood of consumers related to their psychological thinking, which is reflected in their commitment, awareness, gratitude and relationship with brands (Paruthi and Kaur, 2017, p. 133). This CBE concept fits well into the context of the brand's virtual community, which considers consumer exchange, participation and brand connectivity (De Valck et al., 2009; Baldus et al., 2015). Given the time consumers spend in online communities, it is necessary to understand the fundamental forces that characterize their participation in these communities (Islam and Rahman, 2017; Baldus et al., 2015).

Active participation

When we talk about online brand communities there can be two type of members active members and passive members (Tonteri et al. 2011, Kang et al. 2014). Passive users or members benefit from being stupid viewers in the community without much participation, while active users are the one's who are content creator in spreader of news and information in communities. This research gives importance to active members in the brand community and hence known as "active participation". Active participation takes place when members provide their constant evaluations and opinions to the community, leading to a closer relationship between them (Henning-Thurau et al., 2004).

As per the current study and on basis of past studies it becomes important to consider active participation as a key factor for sustaining in this online platform. So, when to do online community related research taking active participation in account is very important as it has important role in outcome in form of engagement.

Community Trust

For any relationship building exercise trust is central and important construct (Hess and Story, 2005). Trust can be judged by a person's belief in reliability, honesty, and security (Chaudhury and Holbrook, 2001, p. 82). Recently, Kim and Peterson, (2017) the study of trust in the management of network relationships has

become increasingly important (Chahal and Rani, 2017, Ridings et al.,2002). In this context, it was suggested that while most empirical research on trust examines this structure, social media leads to trust in social media and communication and thus requires special research Cheng et al. (2017). So, in this study we try to fill this gap by examining the relationship of community trust with engagement and active participation. We will study community trust both as antecedent and consequence of community engagement.

Research Methodology, Analysis and Findings

For this study, the scales for constructs have been taken from the previous studies and are modified to suit the present context on online food community platform. The questionnaire comprised of three sections pertaining to active participation, consumer engagement and consumer trust. Cognitive, affective, and behavioural three dimensions explained the construct of engagement.

To measure customer engagement and its three dimensions i.e. cognitive, affective, and behavioural, different established scales from the literature were considered. A scale comprising of seven items (adapted from Cheung, et al. 2011 and Hollebeek et al. 2014) was used to measure the dimension namely affective. A five-point scale was adjusted by Cheung et al in terms of behavior, (2011) Holbeck, Glen & Brody (2014). Six component scales have been adapted for the cognitive plane by Cheung et al. (2011): The community trust scale consists of six elements: Casalo et al. (2011) & Horppu et al. (2008): A four-point scale was adapted to measure active participation by Casalo et al. (2011):The constructs and their measurement instruments considered for this study have been adapted from their respective original studies and are as depicted in table 1.

Table 1: Construct Items.

Construct	Item
Active Participation (Casola et al., 2011)	AP1: I participate actively in food community page
	AP2: I contribute messages, responses and other information to the food community page
	AP3: I provide useful information to other members of the food community
	AP4: I post messages and responses in the community with excitement and on a regular basis
Consumer Brand Engagement (Cheung, et al., 2011; Hollenbeek et al., 2014) Affective	ABE1:I am enthusiastic about this food community page
	ABE2: This food community page inspires me
	ABE3: This food community page seems meaningful to me
	ABE4: Visiting food community page fills me with excitement
	ABE5: I am interested in this food community page
	ABE6: My mind is focussed when visiting this food community page
	ABE7: I am proud to be a member of this food community page

Behavioral (Cheung, et al., 2011)	BBE1: I become very active while visiting this food community page
	BBE2: I feel mentally connected with this food community page
	BBE3: I put lot of efforts while browsing this food community page
	BBE4: I try hard to perform well on this food community page
	BBE5: this food community page hols special place in my heart wa compared to other pages
Cognitive (Cheung, et al., 2011)	CBE1: Time flies when I am visiting this food community page
	CBE2: I get completely involved while reading information and posts on the food community page
	CBE3: I give my full attention to food community pages
	CBE4: I am completely involved in food community pages
	CBE5: My mind is focussed while surfing this food community page
	CBE6:I pay full attention to this food community page
Community Trust (Casola et al., 2011; Horppu et al., 2008)	CT1: I think that the information offered in food community page is sincere and honest
	CT2: The food community page does not provide any misleading information
	CT3: I Consider tips and suggestions for food in this site is designed for mutual benefit.
	CT4: I do not think that the community food site will inten-tionally place advertisements or endorse anything that would harm me or other users
	CT5: I think I trust other contributions from others members on the food community page
	CT6: In general, most of the food community members do not make false Statements

Data for the study was collected from actual members of food community group on Facebook or Instagram in India. Prior to actual collection of data, the questionnaire was pilot tested for 150 respondents and after receiving satisfactory results the questionnaire was distributed further. The questionnaire was also tested for its reliability and validity. Of 500 distributed questionnaires, 198 filled and complete questionnaires were received. This represents the response rate of 39.6 percent. The data collected from the questionnaire-based survey was analyzed using Statistical Package for Social Sciences SPSS v.21. AMOS v.21. Methods used for analysis consists of descriptive data analysis, exploratory factor analysis (EFA), confirmatory factor analysis (CFA) and reliability analysis. Within CFA, goodness-of-fit, convergent validity, discriminant validity and composite reliability were also conducted.

To identify the factors, multivariate data analysis is performed in two steps. The first step consists of extracting the factor structure of the research framework. To do this, principal component analysis (PCA) was performed to reduce the larger set of variables to a categorized and more manageable set of scales. Before performing EFA, another important parameter is Kaiser-Meyer-

Olkin (KMO) Test that is a measure of how well the data is suited for factor analysis. The test is run to measure the sampling adequacy for each variable in the model along with the complete model. The high value (close to 1) of KMO test indicates that a factor analysis may be useful with the data. The result of Kaiser-Meyer-Olkin Measure of Sampling Adequacy was 0.866 indicating that the sampling was adequate. Another test which is Bartlett's Test of Sphericity is also used to assess the equality of variance in different samples. Small values (less than 0.05) of the significance level specify that a factor analysis may be useful with the data. The result of Bartlett's Test of Sphericity was 0.00. The table 2 below represents the results of KMO and Bartlett's Test.

Table 2: Results of KMO and Bartlett's Test.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.866
Bartlett's Test of Sphericity	Approx. Chi-Square	1909.624
	df	231
	Sig.	.000

Post KMO and Bartlett's Test principal component analysis (PCA) was performed on the items with varimax rotation and five factors were extracted. These five factors are labelled based on items included in each of them. The total variance explained for this is 51.67%. The table 3 below represent the results of principal component analysis (PCA) on the items. This stage also consisted of finding out internal consistency and reliability among the items of each construct by performing Cronbach's alpha. To check the reliability of the items, Cronbach alpha was performed. The result of the Cronbach alpha for these items was identified and it came out to be 0.918 suggesting satisfactory level of construct reliability.

Table 3: Results of Principal Component Analysis (PCA).

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadingsa
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1.	7.560	34.366	34.366	7.088	32.219	32.219	5.996
2.	1.934	8.790	43.156	1.425	6.479	38.699	4.218
3.	1.828	8.308	51.464	1.243	5.650	44.349	3.870

4.	1.341	6.094	57.558	.976	4.437	48.786	5.018
5.	1.118	5.084	62.641	.633	2.879	51.665	3.348
6.	.869	3.951	66.593				
7.	.779	3.543	70.136				
8.	.705	3.206	73.341				
9.	.675	3.069	76.410				
10.	.642	2.920	79.330				
11.	.578	2.626	81.956				
12.	.557	2.532	84.488				
13.	.474	2.157	86.644				
14.	.447	2.033	88.677				
15.	.433	1.969	90.646				
16.	.405	1.840	92.486				
17.	.372	1.691	94.178				
18.	.357	1.624	95.802				
19.	.276	1.254	97.056				
20.	.233	1.059	98.115				
21.	.220	.999	99.115				
22.	.195	.885	100.000				

The factor loading received ranged from 0.609 to 0.895 barring few factors which were rejected because of less factor loading i.e. below 0.5. The loadings indicated high correlations between the items and the corresponding. The factors were named as affective brand engagement, behavioral brand engagement, cognitive brand engagement, consumer trust and active participation.

For the construct active participation, all the four items remained intact with high factor loadings. For the construct consumer trust, variable CT4 was dropped due to its less factor loading. For the construct consumer engagement, BBE3 got eliminated (under behavioural construct) whereas for the construct affective brand engagement, all the seven variables remained intact and relevant for study. For the construct cognitive brand engagement, four variables got eliminated i.e. CBE1, CBE4, CBE5, CBE6. The table 4 below represent the results of factor loadings.

Table 4: Results of Factor Loadings of Items.

Pattern Matrixa					
	Factor				
	1	2	3	4	5
AP1		.695			
AP2		.654			
AP3		.720			
AP4		.787			
CT1			.691		
CT2			.763		
CT5			.618		
CT6			.698		
CT3			.538		
BBE4				.609	
BBE5				.680	
BBE1				.715	
BBE2				.895	
ABE1	.623				
ABE2	.615				
ABE3	.716				
ABE4	.814				
ABE5	.834				
ABE6	.685				
ABE7	.688				
CBE2					.613
CBE3					.711
Extraction Method: Maximum Likelihood.					
Rotation Method: Promax with Kaiser Normalization.					
a. Rotation converged in 6 iterations.					

Post this Cronbach alpha was performed for each of the five factors to check their reliability. For all these five factors Cronbach alpha ranged between 0.700 to 0.883 suggesting satisfactory level of construct reliability.

To achieve the objectives and to confirm the psychometric properties of the scale used, he results of exploratory factor analysis were tested using measurement model. On this measurement model, a CFA was performed to understand the strength of each variable in explaining its respective construct. Accordingly, CFA of measurement model is applied using AMOS 21. After identifying the constructs and their respective explaining variables, a measurement model was developed as shown in figure 1.

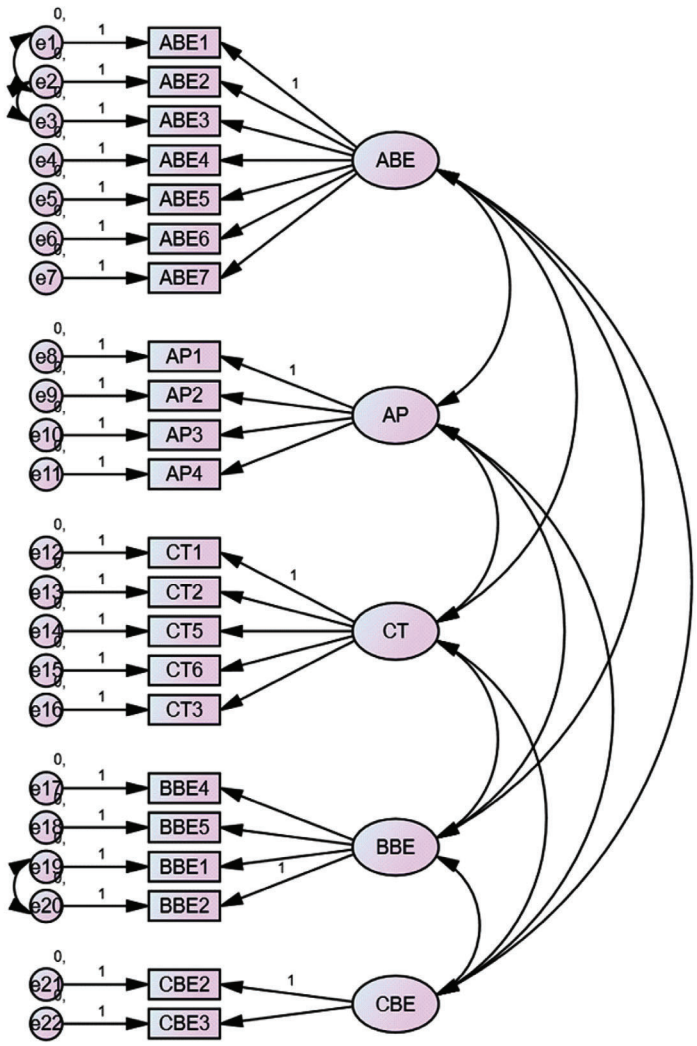

Figure 1: Measurement Model

After performing CFA, variables that strongly define the construct are retained whereas the variables that weekly defines the constructs are dropped. The CFA results demonstrated good reliability as the factor loading scores are within acceptable range.

Table 5: Factors and Factor Loading.

Factors	**Factor Loads**	
Factor 1: Affective brand engagement (ABE)	ABE1	0.675
	ABE2	0.671
	ABE3	0.719
	ABE4	0.777
	ABE5	0.805
	ABE6	0.764
	ABE7	0.795
Factor 2: Behavioral brand engagement (BBE)	BBE1	0.822
	BBE2	0.784
	BBE4	0.674
	BBE5	0.744
Factor 3: Cognitive brand engagement (CBE)	CBE1	0.699
	CBE2	0.770
Factor 4: Consumer trust (CT)	CT1	0.526
	CT2	0.870
	CT3	0.709
	CT5	0.610
	CT6	0.772
Factor 5: Active participation (AP)	AP1	0.723
	AP2	0.723
	AP3	0.677
	AP4	0.754

The measurement model indicates the relation between latent (unobserved) and indicator (observed) variables. This measurement model also represents confirmatory factor analysis (CFA). As discussed,

brand management has five dimensions and each and each dimension is measured by various items. As stated in the table 6, following results related to CFA are obtained at high statistical significance ($p < .01$). The results of the CFA obtained are obtained (CMIN/DF = 1.619); (CFI= 0.934); (RMSEA= 0.059); (IFI= 0.935). These model fit indices results recommend satisfactory overall model fit (Hair et al., 2006). The result of the model fit indices also confirms the external validity of the propose structure of the constructs.

Table 6: Model Fit Indices for Measurement Model.

Measure	Threshold	Model Statistics
CMIN	-	317.250
Df	-	196
CMIN/DF	<=3.000	1.619
IFI	>=0.900	0.935
CFI	>=0.900	0.934
TLI	>=0.900	0.922
RMSEA	<=0.080	0.059
SRMR	<=0.100	0.0585

The AVE values for all the constructs that are studied are tested and the found to be greater than the minimum recommended value of 0.40. Further the square root of AVE for each of the construct considered in the measurement model, as reported in the diagonal of the correlation of constructs matrix is larger than the corresponding off-diagonal correlations of the construct to their latent variables. These two measures of the model confirmed convergent and discriminant validity of the questionnaire.

Table 7: Convergent and Discriminant Validity of the Measurement Model.

	CR	AVE	CBE	ABE	AP	CT	BBE
CBE	0.701	0.541	0.735				
ABE	0.897	0.556	0.476	0.745			
AP	0.811	0.518	0.349	0.450	0.720		
CT	0.830	0.501	0.081	0.145	0.130	0.708	
BBE	0.843	0.575	0.629	0.668	0.568	0.200	0.758

CONCLUSION

The study discussed the online food community level factors for which CFA is used to test the measures of construct to check their consistency with the understanding of the constructs pertaining to these online food community platforms. The model fit measurements indicate that the data fit the measurement model. This hypothesized model is based on literature study. The study offers understanding towards inducing customer participation in an online food community platform. The findings of this study have many implications to understand consumers' behaviour towards online food community platforms. The study demonstrated how consumer engagement is also possible on online platforms where no buying and selling takes place only people with similar interest comes together and share their experiences. Study proved that consumer participation has impact on consumer engagement and consumer engagement also have an impact in building consumer trust. Further studies can be undertaken to identify similar factors pertaining to different industries.

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