# An empirical assessment of consumer-brand engagement and brand knowledge through social media marketing activities: a study on online garments buyers

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#### **ABSTRACT - REZUMAT**

## An empirical assessment of consumer-brand engagement and brand knowledge through social media marketing activities: a study on online garments buyers

The use of social media marketing (SMM) use in the garment sector is increasing daily, and well-known brands are shifting their marketing campaign to social media. This study aims to assert the relationship between SMM customer-brand engagement (CBE) and brand knowledge (BK). For this purpose, data were collected from online garment buyers through a questionnaire. Results of the study show that SMM significantly enhances the CBE and BK. Results further elaborate that the CBE substantially mediates the relationship between SMM and BK. This study will bridge the gap in the literature between SMM and CBE. Moreover, this study will help the management of garment brands to shift their marketing campaign on social media to meet the requirements of modern marketing tools. Although this study only focuses on garments brands, future researchers can apply the model of this study to other brands and also enhance the sample size.

Keywords: brand knowledge, branding, social media, garments, textile marketing

# O evaluare empirică a angajamentului client-brand și a cunoștințelor despre brand prin activități de marketing pe rețelele sociale: un studiu despre cumpărătorii de articole de îmbrăcăminte online

Utilizarea marketingului pe rețelele sociale (SMM) în sectorul articolelor de îmbrăcăminte este în creștere în fiecare zi, iar brandurile cunoscute își mută campania de marketing către rețelele sociale. Acest studiu își propune să afirme relația dintre angajamentul client-brand (CBE) SMM și cunoașterea brandului (BK). În acest scop, au fost colectate date de la cumpărătorii de articole de îmbrăcăminte online prin intermediul unui chestionar. Rezultatele studiului arată că SMM îmbunătățește semnificativ CBE și BK. Rezultatele arată în continuare că, CBE mediază în mod substanțial relația dintre SMM și BK. Acest studiu va reduce decalajul din literatura de specialitate dintre SMM și CBE. Mai mult, acest studiu va ajuta managementul brandurilor de îmbrăcăminte să-și schimbe campania de marketing pe rețelele sociale, pentru a îndeplini cerințele instrumentelor moderne de marketing. Deși acest studiu se concentrează doar pe brandurile de articole de îmbrăcăminte, viitorii cercetători pot aplica modelul acestui studiu altor branduri și, de asemenea, pot spori dimensiunea eșantionului.

Cuvinte-cheie: cunoașterea brandului, branding, rețele sociale, articole de îmbrăcăminte, marketing textil

### INTRODUCTION

Marketers recognize the advantages of social media marketing (SMM) over traditional advertising in terms of reaching customers and developing a powerful brand [1]. The majority of social media marketing research done up to this point has concentrated on the following topics: the attraction of user-generated content, content analysis, creative techniques, and customer behaviour as members of a social media brand community. As a consequence, social media marketing is still considered a fresh form of advertising, and its influence on CBE is not well understood. Research on consumer-brand engagement, also known as CBE, is a topic that is currently popular in the field of marketing. Over the next five years, more than eighty percent of marketers plan to emphasize client participation. If this is done, it is anticipated that there will be a 40% rise in annual visits and a 20% gain in profitability [2].

CBE is an acronym for "brand-related cognitive, emotional, and behavioural activity associated with focal brand interactions" [3]. CBE is a multidimensional construct with cognitive, emotional, and behavioural dimensions. The significance of CBE for marketing strategy, which includes creating positive relationships between brands and their target customers, has interested academics. Marketing researchers have singled out CBE as a prominent topic of investigation because it can boost companies' bottom lines and the level of consumer pleasure and brand loyalty [4]. For this reason, marketers must get a more indepth grasp of the processes that give rise to and maintain CBE. As a direct result, there have been numerous calls for additional empirical evidence to

support the theoretical framework that underpins CBE, particularly its causes and effects. It is possible to make the case that further empirical research on CBE is required to gain a deeper understanding of the concept, the factors that drive it, and the strategies used to implement it, such as the promotion of consumer-brand relationships through marketing communications [5].

The purpose of this research is to investigate the impact that elements of social media marketing, specifically user-generated content, personalization, electronic word-of-mouth (EWOM), and fashionable content, have on the level of involvement and familiarity that consumers have with the brands that they shop for online in Pakistan. After that, we do a complete literature review to locate any gaps in the research. As a consequence of this, a conceptual model is developed in which the characteristics of SMM have an impact on CBE and brand awareness. Finally, the work concludes after a discussion of the work's limits, implications for theory and practice, and future research opportunities.

# LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

The phrase "a set of Internet-based apps that extends the underlying ideology and technology of Web 2.0 to ease the development and transmission of user-generated content" is what is meant to be referred to when someone uses the acronym "social media" [6]. Its interactive capabilities enable collaborative, participative, and knowledge-sharing activities, which makes it one of the most critical communication channels for brand information because it reaches a larger audience than traditional media such as print, television, and radio. Traditional media include print, television, and radio. The term "social media" refers to various online communities and platforms, from customer review sites to complete encyclopedias and discussion boards to microblogging platforms like Facebook, LinkedIn, and Twitter [7]. The term "social media" encompasses many online communities and platforms. Advertisements on social media platforms (like YouTube and Facebook), endorsements from bloggers, and the management of user-generated content are a few examples of the types of SMM activities that businesses partake in to increase awareness of their brands and, ideally, positively influence customers.

The use of social media marketing (SMM) has gained widespread favour in Asia as a means of boosting sales and improving consumer loyalty and satisfaction. For example, Kyriakopoulos et al. [8] researched social media marketing (SMM) terminology in Hong Kong and presented an SMM framework for marketers to use in promoting favourable brand perception and repeat sales. In addition to providing consumers with personalized and interactive material that can go in either direction, Kyriakopoulos et al. [8] suggest that marketers should also share captivating movies and photographs with customers. Because

they capture consumers' attention and fortify the link between the brand and the consumer, advertisements of this kind can boost consumers' intentions to make additional purchases.

#### SMM activities and customer-brand engagement

The notion of customer brand efficacy, commonly known as CBE, is gaining traction in the marketing industry, both academically and practically. CBE is a psychological condition defined as customers' affection for the brand and emerges from the strength of the consumer-brand connection. One way to think about CBE is customers' affection for the brand. CBE is gaining popularity in the marketing world, both academically and in the real world. The phrase "consumers' particular level of cognitive, emotional, and behavioural involvement in brand interactions" is what this notion alludes to. It is essential in determining customer behaviour, particularly self-brand connection, purchase intent, and brand loyalty. To be more specific, the term "self-brand connection" refers to the extent to which individuals identify with their brand [9-11].

The literature discusses the reasons for and the consequences of CBE, including the role that brand communication through social media, may play in the development of CBE and consumer familiarity with the name of a product [12]. Also included in this discussion is the role that CBE may play in developing CBE [13]. The potential part that CBE could play in the expansion of CBE is another topic that will be covered in this debate. For instance, Harrigan et al. [14] asserted that social media might function as a valuable medium for strengthening the connection between customers and businesses, increasing CBE. They were under the impression that this would increase CBE [15]. However, the guidance provided by Harrigan et al. [14] supported emphasizing social media content to encourage customers to engage with brand community postings and, consequently, increase CBE. They could accomplish this according to the directions provided by Ashley and Tuten [16]. Hence, we proposed the following hypothesis:

H1: SMM activities significantly strengthen Customer-Brand Relationship.

### SMM activities and brand knowledge

Brand communications with funny elements viewed as pleasant and playful enable customers to expend more significant cognitive effort to understand more about the firm, which is consistent with the findings of the earlier assessment of SMM aspects [17]. Furthermore, exciting information shared via social media can give customers amusing and helpful details, thereby boosting the customers' devotion to the company [18]. According to the research findings, site visitors are likelier to share and enjoy brand pages that include games, stories, contests, freebies, dynamic animations, photographs, and videos [19, 20]. These elements appeal to clients' aspirations to experience visual pleasure and emotional release [21]. Therefore, the humorous nature of brand pages

contributes to overall favourable user experiences, increasing consumers' emotional investment in the brand and their awareness of it. Consequently, we suggest the following hypothesis:

H2: SMM activities significantly enhance Brand Knowledge.

# Consumer-brand engagement and brand knowledge

The mental representations that consumers have of a brand, including their perspectives on the brand's characteristics, benefits, and attitudes, and how those mental representations compare to those of competing brands, are included in the overall brand image of the brand [22]. The features and traits that customers associate with a brand and employ when describing the brand are referred to as the brand's attributes [23]. Customers associate the brand with a variety of characteristics and characteristics [24]. Customers' perceptions of a brand's benefits are influenced in various ways by the values they connect with that brand, including those that are sensory, practical, and symbolic [25]. When we talk about how customers feel about a brand, we are referring to their impressions of the product's qualities and advantages and the total of their recollections of everything associated with the brand [26]. When we talk about how customers feel about a brand, we refer to their impressions of the product's qualities and advantages [27]. When we discuss how customers think about a specific brand, we refer to how they feel about the particular item they sell [17].

Consumers will give more weight to brands and retailers with a solid reputation when making purchases, as stated by Koçak et al. [28]. Therefore, marketers are incentivized to build customer-brand engagement (CBE) across all media to provide their customers with powerful and meaningful interactions with their brands [29]. Arguably, the interaction between customers and brands during the course of CBE development is an essential part of constructing a brand identity. This is because CBE development occurs during customer-based experience (CBE) development. As a result, an increase in CBE is advantageous to customers since it enables them to build a fuller mental picture of the qualities and benefits of the product [30].

Furthermore, consumer-based advertising makes customers more likely to have a favourable impression of a brand if they feel a personal connection. This increases the likelihood that the customer will have a reasonable opinion of the brand (CBE). Hence, we proposed the following hypotheses:

H3: CBE is associated with Brand Knowledge.

H4: CBE mediates between SMM activities and Brand Knowledge.

### RESEARCH METHODOLOGY

This paper explores how social media marketing (SMM) influences consumer behaviour and brand understanding. Online questionnaires were filled out

by students attending several universities in Pakistan. The administrations of the v various universities and the directors of the relevant departments approved the research. Before questionnaires were sent out, participants in the study were briefed about the aims of the investigation. Everyone who participated in the survey gave their informed consent. When gathering the data, the researchers made sure to abide by all relevant ethical norms. The data collection took longer than five weeks to complete (25 June 2022 to 29 July 2022). The total number of distributed questionnaires was 638, and 517 were subsequently returned. Surveys that were not filled out on their whole were excluded. Therefore, only 460 surveys were eligible for inclusion in the final data pool after the outliers were considered. There were two different programs utilized to perform the analysis of the data. First, AMOS was used to analyze descriptive data. A framework for Structural Equation Modeling (SEM) was established in the second step. This framework was named Partial Least Square Path Modeling (PLS) and was based on components.

SMM activities were adopted from a previous study [31] and calculated with eleven items. CBE was adopted by Yeh et al. [32] and was computed with six items. Brand knowledge was also adopted from Sarstedt et al. [33], which comprised six items.

#### **RESULTS**

In this study, the 2-step approach was evaluated using Smart PLS 3.3.2 [34], which was used to assess the measurement and structural models. PLS was chosen as the statistical method of choice because this study aimed to find a strategy to predict customers' level of familiarity with a specific brand [34]. Calculating the common method variance allowed us to establish the Method bias, which was also determined using the individual factor technique. It was measured using exploratory factor analysis, with each item of the latent components being placed into a single factor. As a result of the fact that 81% of the variance explained had a significant difference from the mean, there was no systematic bias in the approaches used. After running an analysis on the individual factor model in AMOS, the model fitness indices were as follows: 2=1647.51, DF=901, CFI= 0.881, NFI=0.761, and RMSEA=0.209. The findings from the earlier study are supported by these indices, which claim in Hair et al. [35], that there is no evidence of bias in the data caused by a common method. The non-response bias was supported by the t-test, which found that respondents who did not provide all of their demographic values were considered non-respondents.

#### Measurement model

When examining reflective constructs, it is recommended [36] to conduct a confirmatory composite analysis (CCA). This study considers item loadings, composite reliability, AVE, discriminant validity,

nomological validity, and predictive validity [37]. To conduct additional research on the measurement model, the factor loadings, Cronbach's Alpha composite reliability (CR), and the average variance extracted (AVE) of the latent components were all calculated. In table 1, the factor loadings displayed on the various latent structures may be seen. These loadings are analyzed to determine the degree to which individual survey questions can be trusted. Cronbach's Alpha and Composite reliability are two more indicators generally employed in PLS-SEM to examine the construct dependability of the measurement model. Both of these indicators can be found in the reliability statistics section. The findings of this research show that both indicators have values higher than 0.7, which indicates that they fall within a suitable range and validate the overall reliability of the measurement model. In addition, Cronbach's Alpha and Composite reliability are two more indicators frequently utilized in PLS-SEM to analyze the construct dependability of the measurement model. Both of these indicators are reliability composites.

#### Validity of the constructs

When assessing the dependability of instruments in smart pls, two measures are commonly utilized. First, we determined the convergent validity of the measurement model by looking at the values of the average variance extracted (more than 0.5) and the composite reliability (more than 0.7). This was done by. It can be seen from the information shown in table 1 that all of the findings are greater than the cutoff value, which is evidence of the convergent validity of the method. The procedures specified by Hu and Trivedi [38] were followed to determine the discriminant validity of the study. It is expected that the square root of the extracted average variance will be bigger than the row and column values of the correlations. The results shown in table 2 demonstrate that

all diagonal values fared better than the row and column values, which is evidence of excellent discriminant validity.

#### Structural model

The hypothesized paths in the study framework are mirrored in the structural model. R2, Q2, and path significance are the three metrics used to evaluate a structural model. The value of the coefficient of determination, or R2, for the dependent variable, can be used to measure the strength of the structural route [33]. This allows the quality of the model to be evaluated. R2 must have a value that is either higher than or equal to 0.1. The information can be found in table 3. An R2 value of more than 0.1 indicates that the structural model's predictive capacity is more significant than 0.1, thus demonstrating that the model's predictive ability is more important than 0.1.

In addition, the results of Q2 illustrate that the endogenous constructs have predictive significance. For example, the results show that the structural model has predictive relevance with a Q2 of 0.469, as demonstrated by the results (table 3). In addition, SRMR was utilized to do the model fit evaluation. As a result, it was determined that the SRMR was 0.071, which is considerably less than the threshold value. Ten and is suggestive of a satisfactory model fit [33].

#### Hypotheses testing results

Calculating the standard error with T and P-values and the significance of the path coefficient Bootstrapping (1000 subsamples) was used, which provided direct evidence of the hypotheses being accepted or rejected. In addition, immediate effect analysis was performed to assess the relation between latent constructs. The results indicate a significant relationship between SMMA and CBE ( $\beta$ =0.629, t=10.241, p<0.01); SMMA and BK ( $\beta$ =0.241, t=2.961, t=0.01); and CBE and BK

Table 1

RELIABILITY AND VALIDITY, DESCRIPTIVE OF THE MEASURES								
Constructs Skewness		Kurtosis	Cronbach's Alpha CR		AVE	Skewness	Kurtosis	
SMM activities	-0.6949319	0.211971	0.899	0.945	0.881	0.0979498	0.31639	
CBE	-1.5161892	2.195919	0.841	0.729	0.649	0.0979498	0.31639	
Brand Knowledge	-1.0921892	0.413119	0.781	0.901	0.631	0.0979498	0.31639	

Table 2

DISCRIMINANT VALIDITY (FORNELL LARKER CRITERION)							
Criterion	coo	СВР	cuo	EO	Ю		
COO	0.779						
CBP	0.639	0.831					
CUO	0.559	0.811	0.839				
EO	0.441	0.681	0.551	0.709			
Ю	0.589	0.561	0.561	0.769	0.891		

( $\beta$ =0.409, t=4.151, p<0.01). Hence, it can be concluded that H1, H2, and H3 were supported for this study, as shown in table 3. Furthermore, table 3 indicates that SMMA  $\rightarrow$  CBE  $\rightarrow$  BK ( $\beta$ =0.109, t=0.361, p<0.000). This demonstrates that CBE mediates the relationship between SMMS and BK.

### **DISCUSSION AND IMPLICATIONS**

In addition to having an impact on consumers' ability to identify a particular brand, the incorporation of social media optimization (SMM) elements was discovered

HYPOTHESIS TESTING RESULTS								
Hypotheses	Relationship	Beta	St.	T Statistics	Р	BCI LL	BCI UL	Accepted/
			Dev		Value			Rejected
Hypothesis 1	$SMMA \to CBE$	0.629	0.149	10.241	0.000	0.531	0.731	Accepted
Hypothesis 2	$SMMA \rightarrow BK$	0.241	0.210	2.961	0.004	0.141	0.329	Accepted
Hypothesis 3	$CBE \rightarrow BK$	0.409	0.181	4.151	0.000	0.261	0.559	Accepted
Hypothesis 4	$SMMA \to CBE \to BK$	0.109	0.149	0.361	0.000	0.209	0.191	Accepted
Endogenous Construct		R <sup>2</sup>	Q <sup>2</sup>					
СВР		0.789	0.469					

to have a substantial effect on the growth of customer-based experiences (CBE) in the course of this research project's findings [5]. This study confirms the results of other studies by demonstrating that contact, EWOM, and trendiness all contribute to strengthening CBE and promoting brand awareness and image. This study confirms the findings of other studies by showing that connection, EWOM, and trendiness enhance CBE. This study demonstrates the results of other studies by establishing that contact, EWOM, and trendiness all contribute to strengthening CBE. This study provides broad confirmation of the findings of earlier studies. This study provides comprehensive verification of the conclusions of earlier studies by establishing that contact, EWOM, and trendiness are all contributors to the strengthening of CBE. This discovery confirms the findings of other studies [38]. The conclusions of previous investigations are secured to a large extent by this latest research. Because they improve consumers' cognitive processing, attachment, and activation of the target brand, it is reasonable to consider interaction, EWOM, and trendiness to be successful strategies for influencing consumers' brand impressions. These factors improve consumers' cognitive processing, attachment, and activation of the target brand. These aspects strengthen customers' cognitive processing of the target brand, their connection to it, and their activation of it [20].

According to the findings, CBE has a significant influence, which may be construed either positively or negatively, on the brand's image and the level of awareness regarding the brand. This study lends credence to the hypothesis that CBE plays a significant role in creating brand knowledge [36]. The abbreviation "CBE" refers to "customer-based education". In addition to this, the findings indicate that the characteristics of interaction, word-of-mouth marketing, and fashion have an indirect influence on the opinions that people have regarding the brand.

The researchers got to this conclusion after conducting a study of the data and finding that it was, in fact, the case that this was the situation. Regarding social media branding, these findings offer even more validity to the value of word-of-mouth marketing, updates relevant to current events, and interactive material [39]. This investigation did not reveal any link between humorous content shared on social media and

increased brand awareness, which contrasts with the conclusions of other studies that looked into the same topic. The significance of this observation lies in the fact that it suggests no association between the two variables. The nature of customer value can explain this finding; in particular, the possibility that company-initiated entertainment content does not favour customers' ideas about a brand that is linked with the company [40]. This finding was made possible by a survey conducted in the United States. Even though humorous marketing communications on social media may be engaging, the reason for this is most likely because the humour results from the reader enjoying the content without actively participating in the experience. In other words, the reader is merely a passive observer. In other words, the reader enjoys the humour without actively participating. Although this might be the case, the primary reason why humorous marketing messages posted on social media might be attractive to customers is not because of this circumstance. Yoshida et al. concluded that the fulfilment that one derives from entertainment might be a lonely, non-social behaviour that is best characterized as "passively consuming" [41]. According to the study's findings, high-engagement devices such as smartphones may benefit from using characteristics of social media marketing (SMM), such as interactive content, word-of-mouth marketing, and trending content, from increasing customer base expansion and brand comprehension [41]. It is possible to boost the likelihood of a successful marketing effort by encouraging positive word-of-mouth (EWOM) and producing popular and participatory material. One way to do this is through social media. It is hoped that this will increase the number of customers who can identify the brand, as well as increase the processing of the brand by those customers, their connection to the brand, and their activation of the brand by those customers. As a direct consequence of this fact, we propose that marketers should make it easier for customers to access the information they seek, such as product-specific EWOM, and that they should offer support whenever it is essential.

In addition, it has been suggested that businesses attempt to mould consumers' opinions of their brands by employing social media in an organized and deliberate manner. This would be carried out to provide a

higher level of service to the clientele. Businesses have the capability of carrying out activities such as this one, which involves the utilization of social media. For example, a company could offer an incentive to customers who generate positive word-ofmouth publicity for the company by providing the customers with additional information, increased value. or information that is easier to assimilate so that they can share it on the social network of their choice. This could be done by giving the customers additional information, increased value, or information that is easier to assimilate. This could be accomplished by providing the customers with more details, elevating the value of the information they already have, or simplifying the information to make it easier to understand. This could be accomplished by providing the customers with additional information, enhancing the value of the data, or making it more straightforward for the customers to assimilate the information.

# LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

Because the data were collected using a cross-sectional methodology, the findings can only be used to make conclusions about Hong Kong. No further data were available. Future studies may reach a higher

degree of generalizability if they combine long-term and international comparisons. Furthermore, this inquiry focuses entirely on smartphones, cuttingedge mobile devices that can perform various functions. As a consequence, the findings cannot be extrapolated to apply to other product categories, particularly those with a lesser level of complexity. A future study might extend the number of product categories to generalize the results to broader contexts. Additionally, the study could account for products with varying engagement levels. Likely, additional theoretical constructs or potential moderators (such as consumer experience) may affect the SMM aspects and/or the constructions that were studied in this article, and this might be the focus of research conducted in the future.

In this research endeavour, there was no attempt to assess the efficacy of traditional marketing strategies, either in conjunction with SMM or independently. Future research should compare and contrast the effects of SMM elements and traditional marketing elements, such as traditional advertising and distribution intensity, to determine whether marketing variables influence CBE and brand awareness. This will allow researchers to determine whether or not marketing variables affect CBE and brand awareness.

#### REFERENCES

- [1] Hafez, M., The impact of social media marketing activities on brand equity in the banking sector in Bangladesh: the mediating role of brand love and brand trust, In: Int. J. Bank Mark., 2021, 39, 7, 1353–1376, https://doi.org/10.1108/IJBM-02-2021-0067
- [2] Yadav, M., Rahman, Z., Measuring consumer perception of social media marketing activities in e-commerce industry: Scale development & validation, In: Telemat. Informatics, 2017, 34, 7, 1294–1307
- [3] Ismail, A.R., Nguyen, B., Melewar, T.C., *Impact of perceived social media marketing activities on brand and value consciousness: roles of usage, materialism and conspicuous consumption*, In: Int. J. Internet Mark. Advert., 2018, 12, 3, 233–254
- [4] Seo, E.-J., Park, J.-W., A study on the effects of social media marketing activities on brand equity and customer response in the airline industry, In: J. Air Transp. Manag., 2018, 66, 36–41
- [5] Chen, S.-C., Lin, C.-P., Understanding the effect of social media marketing activities: The mediation of social identification, perceived value, and satisfaction, In: Technol. Forecast. Soc. Change, 2019, 140, 22–32
- [6] Weinberg, B.D., Pehlivan, E., Social spending: Managing the social media mix, In: Bus. Horiz., 2011, 54, 3, 275–282
- [7] Shen, B., Bissell, K., Social media, social me: A content analysis of beauty companies' use of Facebook in marketing and branding, In: J. Promot. Manag., 2013, 19, 5, 629–651
- [8] Kyriakopoulos, K., Hughes, M., Hughes, P., *The role of marketing resources in radical innovation activity: antecedents and payoffs*, In: J. Prod. Innov. Manag., 2016, 33, 4, 398–417
- [9] Ko, E., Megehee, C.M., Fashion marketing of luxury brands: Recent research issues and contributions, In: J. Bus. Res., 2012, 65, 10, 1395–1398
- [10] Dehghani, M., Tumer, M., A research on effectiveness of Facebook advertising on enhancing purchase intention of consumers, In: Comput. Human Behav., 2015, 49, 597–600
- [11] Sila, I., Cek, K., The impact of environmental, social and governance dimensions of corporate social responsibility on economic performance: Australian evidence, In: Procedia Comput. Sci., 2017, 120, 797–804
- [12] Hollebeek, L.D., Chen, T., Exploring positively- versus negatively-valenced brand engagement: a conceptual model, In: J. Prod. Brand Manag., 2014, 23, 1, 62–74, https://doi.org/10.1108/JPBM-06-2013-0332
- [13] Mustafa, S., Zhang, W., Anwar, S., Jamil, K., Rana, S., An integrated model of UTAUT2 to understand consumers' 5G technology acceptance using SEM-ANN approach, In: Sci. Rep., 2022, 12, 1, 20056
- [14] Harrigan, P., Evers, U., Miles, M., Daly, T., Customer engagement with tourism social media brands, In: Tour. Manag., 2017, 59, 597–609
- [15] Mustafa, S., Jamil, K., Zhang, L., Girmay, M.B., Does Public Awareness Matter to Achieve the UN's Sustainable Development Goal 6: Clean Water for Everyone?, In: J. Environ. Public Health, 2022, 2022
- [16] Ashley, C., Tuten, T., Creative strategies in social media marketing: An exploratory study of branded social content and consumer engagement, In: Psychol. Mark., 2015, 32, 1, 15–27
- [17] Brodie, R.J., Ilic, A., Juric, B., Hollebeek, L., Consumer engagement in a virtual brand community: An exploratory analysis, In: J. Bus. Res., 2013, 66, 1, 105–114
- [18] Baig, S.A., Rehman, M.Z.U., Naz, A., Jamil, K., *High core self-evaluation maintains patient oriented behavior: A motivational model of reward system*, In: J. Public Aff., 2020, September, https://doi.org/10.1002/pa.2488

- [19] Cheung, M.Y., Luo, C., Sia, C.L., Chen, H., Credibility of electronic word-of-mouth: Informational and normative determinants of on-line consumer recommendations, In: Int. J. Electron. Commer., 2009, 13, 4, 9–38
- [20] De Vries, L., Gensler, S., Leeflang, P.S.H., *Popularity of brand posts on brand fan pages: An investigation of the effects of social media marketing*, In: J. Interact. Mark., 2012, 26, 2, 83–91
- [21] Anwar, A., Jamil, K., Idrees, M., Atif, M., Ali, B., *An empirical examination of SMEs sustainable performance through lean manufacturing,* In: Knowl. Process Manag., 2022, https://doi.org/10.1002/kpm.1740
- [22] Azam, T., Songjiang, W., Jamil, K., Naseem, S., Mohsin, M., *Measuring green innovation through total quality management and corporate social responsibility within SMEs: green theory under the lens*, In: TQM J., 2022, https://doi.org/10.1108/TQM-05-2022-0160
- [23] Shehzad, M.U., Jianhua, Z., Latif, K.F., Jamil, K., Waseel, A.H., Do green entrepreneurial orientation and green knowledge management matter in the pursuit of ambidextrous green innovation: A moderated mediation model, In: J. Clean. Prod., 2023, 135971
- [24] Langaro, D., Rita, P., de Fátima Salgueiro, M., Do social networking sites contribute for building brands? Evaluating the impact of users' participation on brand awareness and brand attitude, In: J. Mark. Commun., 2018, 24, 2, 146–168
- [25] Hussain, Z., Jusoh, A., Jamil, K., Rehman, A.U., Gul, R.F., *Analyzing the role of knowledge management process to enhance sustainable corporate performance: A mediation moderation model*, In: Knowl. Process Manag., 2021, June, 1–16, https://doi.org/10.1002/kpm.1679
- [26] Jamil, K., et al., Antecedents of Consumer's Purchase Intention towards Energy-Efficient Home Appliances: An agenda of energy efficiency in the post COVID-19 era, In: Front. Energy Res., 2022, 262
- [27] Awan, F.H., Liu, D., Anwar, A., Jamil, K., Qin, G., Gul, R.F., Mediating role of innovative climate among leadership and employee performance in textile exporting firms of Pakistan, In: Industria Textila, 2021, 72, 6, 613–618, http://doi.org/10.35530/IT.072.06.20206
- [28] Koçak, O., İlme, E., Younis, M.Z., Mediating Role of Satisfaction with Life in the Effect of Self-Esteem and Education on Social Media Addiction in Turkey, In: Sustainability, 2021, 13, 16, 9097
- [29] Amjad, A., Amjad, F., Jamil, K., Yousaf, S., Moderating role of self-congruence: Impact of brand personality on Brand attachment through the mediating role of trust, In: Inf. Manag. Bus. Rev., 2018, 10, 1, 13–22
- [30] Pang, H., Identifying associations between mobile social media users' perceived values, attitude, satisfaction, and eWOM engagement: The moderating role of affective factors, In: Telemat. Informatics, 2021, 59, 101561
- [31] Webster, F.E., Keller, K.L., *A roadmap for branding in industrial markets*, In: J. Brand Manag., 2004, 11, 5, 388–402, https://doi.org/10.1057/palgrave.bm.2540184
- [32] Muralidharan, S., Men, L.R., How peer communication and engagement motivations influence social media shopping behavior: Evidence from China and the United States, In: Cyberpsychology, Behav. Soc. Netw., 2015, 18, 10, 595–601
- [33] Yeh, C.-H., Wang, Y.-S., Yieh, K., Predicting smartphone brand loyalty: Consumer value and consumer-brand identification perspectives, In: Int. J. Inf. Manage., 2016, 36, 3, 245–257, https://doi.org/10.1016/j.ijinfomgt. 2015.11.013
- [34] Sarstedt, M., Ringle, C.M., Henseler, J., Hair, J.F., On the emancipation of PLS-SEM: A commentary on Rigdon (2012), In: Long Range Plann., 2014, 47, 3, 154–160
- [35] Hair, J., Joe, F., Sarstedt, M., Matthews, L.M., Ringle, C.M., *Identifying and treating unobserved heterogeneity with FIMIX-PLS: part I method*, In: Eur. Bus. Rev., 2016, 28, 1, 63–76, https://doi.org/ 10.1108/EBR-09-2015-0094
- [36] Bowden, J., Mirzaei, A., Consumer engagement within retail communication channels: an examination of online brand communities and digital content marketing initiatives, In: Eur. J. Mark., 2021, 55, 5, 1411–1439, https://doi.org/10.1108/EJM-01-2018-0007
- [37] Nitzl, C., Roldan, J.L., Cepeda, G., Mediation analysis in partial least squares path modeling: Helping researchers discuss more sophisticated models, In: Ind. Manag. data Syst., 2016, 116, 9, 1849–1864
- [38] Hu, F., Trivedi, R.H., Mapping hotel brand positioning and competitive landscapes by text-mining ser-generated content, In: Int. J. Hosp. Manag., 2020, 84, 102317
- [39] Lemon, K.N., Rust, R.T., Zeithaml, V.A., What drives customer equity?, In: Mark. Manag., 2001, 10, 1, 20-25
- [40] Chen, Y., Chang, C., Enhance green purchase intentions, In: Manag. Decis., 2012, 50, 3, 502–520, https://doi.org/10.1108/00251741211216250
- [41] Keller, K.L., Brand equity management in a multichannel, multimedia retail environment, In: J. Interact. Mark., 2010, 24, 2, 58–70

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