



Does user-generated content trigger university graduates' online purchase intention? Mediating role of brand image

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Abstract

Academic interest in understanding the impact of user-generated content (UGC) on consumer behavior in digital marketing has grown exponentially. However, we know little about the effect of UGC on customers' online purchase intention from developing country aspects. This underpins the current study to examine the impact of UGC on the purchase intentions of university graduates in Bangladesh. With a convenient sampling approach, a structured questionnaire was provided directly to 400 respondents; 275 usable and complete responses were extracted for data analysis. Data were empirically validated using principal component analysis, reliability test, correlation, and Hayes PROCESS macro for regression and simple mediation analysis. The findings revealed that bloggers' recommendations, online communities, and social media content positively and significantly influence customers' online purchase intention. Brand image also directly impacts purchase intention and mediates the relationship between bloggers' recommendations, online community, social media content, and online purchase intention. The results of this study will facilitate policymakers and online marketers in devising UGC management policies and digital marketing strategies. The study's results may also help online marketers, sellers, and brand representatives to understand how to enhance brand image and amplify customers' online purchasing behavior.

Introduction

The emergence of information and communication technology (ICT) and an increasing number of social media and online platform users are creating various challenges for business and digital marketers (Amin et al., 2023; Tiong et al., 2022). In addition, interactive information and communication technologies have made the data world more significant and robust than before (Rahman et al., 2023). In this way, the availability of information and communication technologies significantly impacts people's day-to-day lives and has significantly changed peoples' consumption behaviors and lifestyles (Rahman et al., 2022). The Internet is one of the most remarkable innovations of modern technology that has altered every aspect of business and human life. Internet technologies have altered communication processes, which are crucial between businesses and customers. Companies use this means to communicate with customers and advertise products and services to the target audience (Lacarcel & Huete, 2023). The Internet has also enhanced consumers' power, and they are using it to gather needed information to make an effective purchase decision.

Customers go through several stages during online purchase decisions. They search for authentic and needed information to evaluate a product or service. Social media trends in business and online marketing make information available to customers. Users of a product or service can share their judgments and experiences and generate content through social media and online

platforms. Those are authentic sources of information for potential customers (Sheikh et al., 2019). User-generated content (UGC) is any form open to consumers created by product or service users and distributed online (Yang et al., 2019). Social media is the most effective channel for consumers to share content, and this media is becoming the most influential consumer network (Irfan et al., 2019). Researchers have evaluated the buying process to sense the consumer buying decision process and how chain reactions create value in the decision-making process. Consumers seek needed information and are involved in various psychological events to add value to their purchase decisions (Park et al., 2021).

The extant literature on customer purchasing behavior has shown that UGC is a credible source of information that affects customers' purchase decisions (Raji et al., 2019; Sheikh et al., 2019). For instance, Xu (2020) argued that customers' recommendations in product reviews significantly influence online shoppers' behavior. This is because customers tend to collect data from social media and online communities to know others' opinions before purchasing (Sheikh et al., 2019). In such cases, various social media (e.g., Facebook, Youtube, Twitter, Instagram, etc.) have emerged to provide needed information to customers through UGC. Park et al. (2021) argued that consumers search for information and content about a product on social media during purchase decisions (Park et al., 2021). Research also proves that blog posts and bloggers' recommendations also significantly impact consumers' purchasing behaviors (Ing & Ming, 2018). On the other hand, Raji et al. (2019) identified that brand image mediates social media advertising and customer purchase intention. Nevertheless, the extant body of literature on UGC is inadequate to present the effects of UGC on consumer purchase intention (Appel et al., 2020; Raji et al., 2019). More specifically, there is a paucity of research exploring the effects of bloggers' recommendations, online communities, and social media content on brand image dragging toward purchase intention. Social media content, product reviews, community interaction, bloggers' recommendations, and online information are crucial to understanding consumers' behavior, needs, and expectations of a product and service (Liu et al., 2019). Hence, the current study will be a pioneer in filling this research gap and adding value to the extant literature from customer and marketer endpoints.

Though previous studies extended the literature on the impact of UGC on online purchasing decisions and contributed significantly, there are still a few research gaps. First, most previous studies were conducted on various types of goods and services, such as travel products (Tsai & Bui, 2021), smartphones (Alrwashdeh et al., 2019), and hotel booking (Chakraborty & Biswal, 2020). These studies have yet to show how customers' intention is derived from bloggers' recommendations, community interaction, social media content, and brand image. Secondly, there is still a lack of empirical research from developing country contexts. For instance, Kamalaseena and Sirisena (2021) showed the effects of online communities and word of mouth on the purchase intention of Sri Lankan consumers. Similarly, Duong and Liaw (2022) identified Vietnamese students' online shopping intentions. These scholars have emphasized initiating future studies in developing countries due to holding most of the world's population. Thirdly, most previous studies evaluated the direct impact of UGC on purchase behaviors. Importantly, the relationships between UGC determinants (e.g., blogger recommendation, online community, and social media content) and consumer behavior (e.g., online purchase intention) might be mediated by other variables, which must not be unheeded. More specifically, studies have yet to examine the mediating role of brand image on online purchase intention in developing countries like Bangladesh. No past studies used bloggers' recommendations, online communities, and user-generated social media content as predictors and mediating the role of brand image to understand their impact on customers' online purchase intention. So, comprehensively understanding the role of UGC on online purchase intention, these research gaps call for this study, which might be crucial for sellers, marketers, policymakers, and brand representatives.

Considering the significance of the research in digital marketing addressing the mentioned research gaps and adding important information to the literature on UGC and consumers' behavior in online purchasing decisions, this study is conducted to evaluate the impact of bloggers' recommendations, online community interaction, user-generated social media content, and brand image on consumers' online purchase intention. In addition, this study evaluated the relationship

between bloggers' recommendations, online community interaction, user-generated social media content, brand image, and consumers' online purchase intention and the mediating role of brand image to better understand the consumers' online purchasing behavior during online shopping. This study also uses process macro to understand the mediating impact of brand image on the relationship between bloggers' recommendations, online community, social media content, and online purchasing behaviors. Finally, this study will contribute to understanding university graduates' online shopping behavior in developing countries. Previous studies, such as Zhang et al. (2019) showed the rationality of employing university graduates. They argued that many university graduates tend to buy from online marketplaces due to having sound access and knowledge of usage.

Literature Review and Hypotheses Development

The extant body of knowledge of UGC in digital marketing has conceptualized UGC as the content created by end-users or consumers who voluntarily create, communicate, and exchange information through websites or media platforms so that actual and potential users can benefit from meeting their information needs (Nguyen et al., 2018; Thomas, 2020). This aligns with the concepts of the social interaction theory. The social interaction theory suggests that individuals tend to interact with persons or objects based on cost-benefit analysis (Ghahtarani et al., 2020). This means individuals' level of interactions and engagement becomes high where perceived benefits are high. Similarly, people who engage in various social media platforms want to avail utilitarian (e.g., information) and hedonic (e.g., fun and entertainment) benefits, which are positively related to consumer purchasing behavior (Ghahtarani et al., 2020).

There are many instances of UGCs, product or service ratings, reviews, verbal and video content sharing, blog writing, and online community discussion. Evidence suggests that the emergence of new communication and internet technologies, such as social media and Web 2.0, enable consumers to create media content and interact with one another (Thomas, 2020). Using various social media (e.g., Facebook, Youtube, Instagram, Twitter, etc.), people can share their experiences and satisfaction (Nusairat et al., 2021; Roma & Aloini, 2019). Even nowadays, firms offer financial benefits to professional content creators for creating such UGCs (Mayrhofer et al., 2020). However, UGCs may contain negative and positive facts about a product or service, allowing potential buyers to evaluate products during decision-making (Nguyen et al., 2018).

In the context of UGCs, blogs are a popular online platform where users can share and discuss experiences, ideas, personal feelings, and opinions about events, products, and daily life (Ing & Ming, 2018; Tran & Nguyen, 2020). For instance, Tran and Nguyen (2020) argued that bloggers' recommendations are increasingly popular among consumers because they trust consumers' comments more than advertising content from companies, and bloggers' recommendations influence consumer purchase intention. For this reason, scholars (e.g., Hughes et al., 2019) have highlighted the importance of sponsored blogging campaigns to increase online customer engagement.

Besides, research has shown that an online community impacts consumers' sharing of ideas, feelings, and prior experiences (Fisher, 2019; Kamalaseena & Sirisena, 2021). Zhu et al. (2016) identified that sharing information through consumer-to-consumer settings, especially in online communities, significantly influences consumer purchase decisions. Online communities' information credibility, quality, and tie strength are positively related to evaluating product usefulness and making purchase decisions (Zhu et al., 2016). From the social media perspective, Hajli (2018) argued that an ethical environment needs to be incorporated into an online community along with information credibility.

Every day, consumers encounter thousands of social media feeds (contents). Social media allows consumers to share content and information with friends and family (Mayrhofer et al., 2020). Evidence shows that users engage in various social media, interacting and even posting experiences about the products or services they avail (Zhang et al., 2020). Such interaction helps consumers to know about the goods and services before purchasing. This increases consumers' trust and intention to purchase (Ghahtarani et al., 2020).

Many previous studies have linked UGC to brand image (Nusairat et al., 2021; Raji et al., 2019). Kotler and Armstrong (1996) define the brand image as a “set of beliefs about a particular brand”. Evidence (see Mao et al., 2020) shows that brand image and customer online behavior are positively connected. In order to enhance brand image, companies patronize UGC as a valuable and credible source of information that can help customers improve their knowledge about products and services (Geng & Chen, 2021). Kamalaseena and Sirisena (2021) showed the relationship between eWOM, online communities, and purchase intention mediated by brand trust. However, our study attempts to present the mediating effects of brand image in the associations of bloggers’ recommendations, online community, and social media content with online purchase intentions.

Overall, this study combines bloggers’ recommendations, online community, social media content, and brand image to determine their effects on online purchase intentions. Based on these constructs, we propose the conceptual framework (Figure 1), which reflects the study’s objectives. Thus, the hypotheses of this study are formulated based on guidance from previous research on UGC variables (such as bloggers’ recommendations, online community, and social media content), brand image, and online purchase intention.

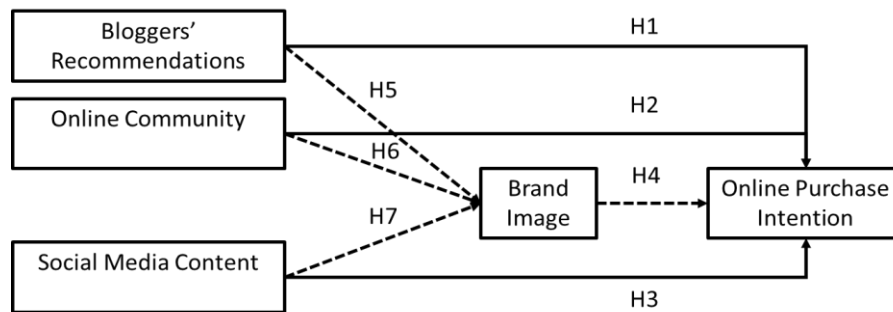


Figure 1. Proposed Conceptual Model

Note: mediation shown in dotted lines

Bloggers’ Recommendations and Online Purchase Intention

Bloggers are sponsored by organizations to share their recommendations on their blogs and get benefits from supporting marketing (Hughes et al., 2019). Nugraha and Setyanto (2018) show that bloggers’ recommendations help increase brand awareness, influencing consumers’ purchase intention, known as customers’ inclination or intention to buy. Credible and honest blog advertising influences consumers to engage with bloggers and significantly impacts their purchase intention (van Esch et al., 2018). Tran and Nguyen (2020) found that bloggers’ recommendations positively affect consumers’ purchase intention. Another study by Ing and Ming (2018) found that consumers follow credible and honest blogs to get updated information about new products and services. In line with the previous studies, this study hypothesizes that:

H₁: Bloggers’ recommendations have a positive impact on online purchase intention.

Online Community and Online Purchase Intention

Online community means socialization activities in an online environment where consumers group to create interactive relationships (Babu et al., 2021). Online communities work as virtual platforms where consumers can share ideas and view product-related information (Wang et al., 2021). As the primary purpose of online community engagement is information sharing and discussion about a product or service, it directly impacts online purchasing intention (Babu et al., 2021). Essamri et al. (2019) reported that online communities enhance knowledge about a product or service that helps consumers match a product with their needs. The exchange of information among members of online communities significantly impacts consumers’ purchase decisions (Zhu et al., 2016). This study suggests that online retailers should engage with online communities to understand their customers. In line with this, this study hypothesized that online communities significantly positively impact online purchase intention.

H₂: Online communities have a positive impact on online purchase intention.

Social Media Content and Online Purchase Intention

Social media is an online platform that allows people from all over the world to connect. This also allows them to share content and information with friends and family (Mayrhofer et al., 2020). They can engage in conversation and post self-generated content of mutual interest (Zhang et al., 2020). Today, companies use social media content marketing to ensure consumers are satisfied with brands (Lou & Xie, 2021). Consumers use social media to socialize with others and generate content, and social media content and social interaction increase trust and intention to purchase among consumers (Ghahtarani et al., 2020). Mayrhofer et al. (2020) also identified that UGC on social media significantly impacts young consumers' purchase intention compared to farm-created content (FCC). Many studies evaluated the impact of social media content generated by consumers on consumers' online purchase intention (Tsai & Bui, 2021). This study hypothesizes that:

H₃: Social media content has a positive impact on online purchase intention.

Brand Image and Online Purchase Intention

Brand image is a set of beliefs about a particular brand (Kotler & Armstrong, 1996). This set of beliefs helps consumers to select the best alternative brands. Mao et al. (2020) conceptualized brand image as a set of brand associations that is anything linked in memory to a brand, usually in some meaningful way. That definition reveals that brand image is a set of associations in a consumer's mind about a brand. Molinillo et al. (2017) identified that brand image helps to set reputation and credibility in the minds of consumers and works as guidelines to encourage them to purchase or use a product or service. The brand image allows consumers to evaluate the quality of a product or service, reduce risks, and help to recognize products and confirm consumer satisfaction (Kim & Chao, 2019). Mao et al. (2020) identified that brand image significantly impacts consumer purchase intention. In line with this, this study hypothesized that:

H₄: Brand image has a positive impact on online purchase intention.

Mediating Effects of Brand Image

Brand image is a set of associations in a consumer's mind regarding a brand (Mao et al., 2020). Raji et al. (2019) found that brand image positively related to customers' purchase intentions. Many studies used the brand equity dimension as an intervening variable to evaluate the relationship between UGC and consumer purchase intention. For instance, Kamalaseena and Sirisena (2021) reported that the relationship between eWOM, online communities, and consumer purchase intention is mediated by brand trust. Additionally, Raji et al. (2019) reported that the relationship between social media advertising content and consumer purchase intention is mediated by brand image. Chakraborty and Biswal (2020) showed that the relationship between online hotel reviews and booking is mediated by brand image. Numerous research (Saraswati & Giantari, 2022) have used brand equity characteristics as intervening factors to assess the association between UGC and purchase intention. This research assesses the mediating effect of brand image on the interaction between bloggers' recommendations, online community and social media content, and university graduates' online purchase intention in order to access further current trends. As a result, the following hypotheses are put forth:

H₅: The relationship between bloggers' recommendations and online purchase intention is mediated by brand image.

H₆: The relationship between the online community and online purchase intention is mediated by brand image.

H₇: The relationship between social media content and online purchase intention is mediated by brand image.

Research Methods

Sample and Data Collection

This study selected university graduates because they are used to shopping in the online marketplace (Zhang et al., 2019). Four hundred graduates from the University of Barishal,

Bangladesh, participated in this study. According to Zhang et al. (2019), university students tend to adopt technology and engage in online shopping. In addition, the online purchase intention among university students is high. Thus, university graduates could be an effective target population to evaluate the impact of UGC on online purchase intention. To measure the online purchase intention of university graduates, this study considered the users of three popular social media platforms, including Facebook, YouTube, and Instagram. The reasons for choosing these platforms are availability, accessibility, and popularity, especially among young consumers (Liu et al., 2019; Nusairat et al., 2021; Zhang et al., 2019). We also considered the university graduates who surf various product and service-related web blogs (e.g., Techtunes).

A non-probability-based convenience sampling technique was used to collect data from the university graduates. Duong and Liaw (2022) used this sampling approach to gather data from university graduates, and they argued that this approach is time-saving, cheap, and efficient. A self-administered questionnaire was provided to the individuals with graduate degrees from the University of Barisal after obtaining their consent to participate in this study. Data has been collected from 400 interested graduates through a questionnaire survey from May 10 to June 20, 2023. After excluding outliers and incomplete responses, 275 were extracted for analysis, and the complete response rate was 70%. This sample size can be compared with a similar study (Kamalasena & Sirisena, 2021).

Measures

Previous literature and studies in the context of the current study were evaluated to select items in the questionnaire, and previously validated items are adopted in this research (see Table 1). According to Burton and Mazerolle (2011), validated items ensure the content validity of a study. All the items in the questionnaire were written in simple and familiar language to make it sensible to respondents (Harrison & McLaughlin, 1993). To avoid mistakes and redundancy, questionnaire items were evaluated by a marketing scholar from the University of Barisal, Bangladesh. The questionnaire was also pretested and discussed with ten students with bachelor's degrees in marketing to get their feedback and ensure necessary changes. The questionnaire was divided into two sections. The first section consists of questions to know the respondents' demographics. The second section consists of 20 items for examining the impact of UGC and brand image on online purchase intention and mediating the effect of brand image in online shopping. Twenty items were developed by Ing and Ming (2018), Anusha et al. (2020), Poturak and Softic (2019), Alrwashdeh et al. (2019), and Manzoor et al. (2020). The 5-point Likert scale, "strongly disagree = 1", "disagree = 2", "neutral = 3", "agree = 4", and "strongly agree = 5", was used to ask participants to show their level of agreement/disagreement with each item.

Data Analysis

At first, this study adopted descriptive statistics to get demographics and evaluate preliminary test results. This study adopted factor analysis through principal component analysis (PCA) with Kaiser normalization and varimax rotation to evaluate the factor structures of measurement items. Factor loading from PCA is used to determine the value of average variance extracted (AVE), composite reliability (CR), and square roots of AVE. A scale reliability test has been adopted to find out inter-item correlations and the value of Cronbach's alpha to measure the discriminant validity and reliability of the construct. This study also adopted multiple regression and Pearson's correlation to evaluate inter-item correlation, variance inflation factor (VIF), and tolerance to analyze multicollinearity issues (Senaviratna & Cooray, 2019). This study adopted a simple mediation analysis using bootstrap-based Hayes' PROCESS macro model 4 (Hayes, 2013). This process is more effective than the causal step approach in analyzing accurate and precise confidence intervals, standard errors, and model parameters (Hayes, 2009). This study used SPSS version 23 and MS Excel for data analysis.

Table 1. Measurement Items

Constructs	Indicators	Items	Source
Bloggers' Recommendations	BR1	Bloggers' recommendations can help me learn about products and services that help me to make effective online purchase decisions.	Ing and Ming (2018)
	BR2	Bloggers' recommendations can help me judge product quality during online purchasing.	
	BR3	Bloggers' recommendations can help me gain knowledge about how the product works and user manual.	
	BR4	Bloggers' recommendations help me to obtain needed information during online shopping.	
Online Community	OC1	I will be discussing with my online community while buying products through an online platform.	Anusha et al. (2020)
	OC2	I will have a conversation with my online community about buying a product which we see or hear through advertisement.	
	OC3	I will have trust in my online community opinions.	
	OC4	My online communities ask for my advice regarding the product which they buy from online.	
Social Media Content	SMC1	I am satisfied with the content generated on social media sites by other users about brands.	Poturak and Softic (2019)
	SMC2	The level of the content generated on social media sites by users meets my expectations.	
	SMC3	The content generated by other users is very attractive.	
	SMC4	The content generated on social media sites by other users performs well during online purchase decision-making.	
Brand Image	BI1	The brands with positive user-generated content have a high quality.	Alrwashdeh et al. (2019)
	BI2	This brand has a personality that distinguishes itself from competitors.	
	BI3	The brands with positive reviews have better characteristics than their competitors.	
	BI4	The brands with positive feedback from users are one of the best brands in the sector.	
Online Purchase Intention	OPI1	I think shopping on the internet saves my time.	Manzoor et al. (2020)
	OPI2	It is a great advantage for me to buy products at any time of the day on the internet.	
	OPI3	Online shopping is as secure as traditional shopping.	
	OPI4	The information given about the products and services on the internet is sufficient.	

Results and Discussion

Sample Profile

The majority of the sample of this study is male (81.1%) and aged 25 to 29 years. All of them are university graduates and have online purchasing experience. Most students (84.7%) purchase various accessories products online (64%). The demographic profile is presented in Table 2.

Principle Component Analysis

This study also adopted PCA analysis to evaluate the factor structure of measurement items (Abdi & Williams, 2010). In this process, varimax rotation with Kaiser normalization is used. Results from this analysis show that the Kaiser-Meyer-Olkin (KMO) of sampling adequacy value is 0.924, and the value of Bartlett's Test of Sphericity is significant ($0.000 < 0.05$). The KMO value between 0.8

and 1 indicates sample adequacy (Tabachnick & Fidell, 2014), and the Bartlett's Test of Sphericity value < 0.05 indicates the effectiveness of factor analysis for a data set (Hair et al., 2014). This indicates that the sampling of this study is adequate. This study also adopted factor analysis to determine the items' internal consistency. From the analysis, it has been found that all factor loadings were above 0.6. This value exceeded the threshold level suggested by (Hair et al., 2014). In addition, Table 3 exhibits that Cronbach's alpha values also exceeded the threshold level of 0.70 recommended by (Nunnally, 1978). This indicates significant internal consistency of items.

Table 2. Demographics of Respondents

Categories	Frequency (n = 275)	Percentage (%)
<i>Gender</i>		
Male	223	81.1
Female	52	18.9
Third gender	0	0.0
Prefers not to say	0	0.0
<i>Age (years)</i>		
20-24	39	14.2
25-29	223	81.1
30-40	13	4.7
<i>Education level</i>		
Bachelor's degree	137	49.8
Master's degree	138	50.2
Doctorate degree	0	0.0
<i>Employment status</i>		
Full-time employee	6	2.2
Part-time employee	11	4.0
Student	233	84.7
Self-employed	25	9.1
Other	0	0.0
<i>Online purchase status</i>		
Yes	275	100.0
No	0	0.0
<i>Products of online purchase</i>		
Accessories	176	64.0
Apparels	72	26.2
Personal care products	27	9.8

Convergent Validity and Construct Reliability Analysis

This study measured convergent validity using average variance extracted (AVE), composite reliability (CR), and Cronbach's alpha. As per the recommendation of Hair et al. (2014), CR value higher than 0.7 and AVE value higher than 0.5 is well above an acceptable threshold. In addition, Cronbach's alpha value higher than 0.70 is acceptable (Fornell & Larcker, 1981).

As of Table 3, AVE ranges from 0.50 to 0.52, CR value ranges from 0.80 to 0.81, and Cronbach's alpha value ranges between 0.84 and 0.83. Moreover, the values of factor loading range between 0.60 and 0.81. The outcomes are within the recommended values, indicating the convergent validity of the data. The Cronbach's alpha value and composite reliability (CR) are higher than 0.70, indicating the constructs' reliability.

Discriminant Validity Analysis

Discriminant validity refers to the distinction of a construct from other constructs. Consequently, the square root of AVE must be greater than elements of inter-correlation among constructs (Hair et al., 2014). The results of discriminant validity and collinearity statistics are reported in Table 4. The measures of the square root of AVE were presented in bold on diagonal and non-diagonal measures to show the correlation among variables. As the corresponding measures in columns and

rows are lower than the square root of AVE, this ensures discriminant validity (Fornell & Larcker, 1981). In addition, there are strong and positive correlations across variables at a 0.99 confidence level. Furthermore, there are no multicollinearity issues if the value of variance inflation factors (VIF) is lower than 10 and tolerance is higher than 0.1. As reported in Table 4, the highest value of VIF is 1.875, and correlation elements are below the threshold level of 0.85, indicating multicollinearity issues are absent, as recommended by Hair et al. (2012) and Kline (2016).

Table 3. Summary of Convergent Validity and Construct Reliability Assessment

Variables	Items	Factor Loadings	AVE	CR	Cronbach's Alpha
Bloggers' Recommendations	BR1	0.730	0.506	0.804	0.845
	BR2	0.723			
	BR3	0.644			
	BR4	0.744			
Online Community	OC1	0.751	0.529	0.817	0.844
	OC2	0.735			
	OC3	0.767			
	OC4	0.649			
Social Media Content	SMC1	0.757	0.510	0.805	0.837
	SMC2	0.697			
	SMC3	0.783			
	SMC4	0.604			
Brand Image	BI1	0.628	0.521	0.811	0.841
	BI2	0.636			
	BI3	0.790			
	BI4	0.811			
Online Purchase Intention	OPI1	0.654	0.500	0.800	0.831
	OPI2	0.761			
	OPI3	0.703			
	OPI4	0.706			

Table 4. Summary of Correlation Coefficient, Square Root of AVE, and Variance Inflation Factor (VIF)

	BR	OC	SMC	BI	OPI	VIF
Bloggers' Recommendations	0.711					1.789
Online Community	0.564	0.727				1.805
Social Media Content	0.590	0.555	0.714			1.875
Brand Image	0.498	0.554	0.555	0.721		1.691
Online Purchase Intention	0.557	0.555	0.593	0.650	0.707	

Model Analysis and Hypotheses Testing

The hypothesized relationship among constructs of the structural model was tested for analysis. The value of R^2 for the mediating variable (brand image) is 0.408, and the dependent variable (online purchase intention) is 0.538. The values of R^2 are well above the threshold level of 0.333, confirming that the structural model is statistically acceptable. The results exhibit that independent variables (bloggers' recommendations, online community, and social media content) explain 40.8% variation in brand image. Also, bloggers' recommendations, social media content, online community, and brand image explain a 53.8% variation in online purchase intention. Table 5 exhibits the path analysis results of the hypothesized direct relationship. The results indicate that bloggers' recommendations ($\beta = 0.227$, $p = 0.00$, and $t = 3.819$), online community ($\beta = 0.249$, $p = 0.00$, and $t = 4.316$), social media content ($\beta = 0.322$, $p = 0.00$, and $t = 5.466$), and brand image ($\beta = 0.374$, $p = 0.00$, and $t = 6.956$) have positive and statistically significant impact on online purchase intention. Thus, H1, H2 H3, and H4 are supported.

Table 5. Summary of the Tested Hypotheses

Hypothesis	Structural Path	Standard estimate (β)	SE	t-value	P-value	Findings
H1	BR -> OPI	0.227	0.062	3.819	0.000	Supported
H2	OC -> OPI	0.249	0.062	4.316	0.000	Supported
H3	SMC -> OPI	0.322	0.060	5.466	0.000	Supported
H4	BI -> OPI	0.374	0.054	6.956	0.000	Supported

Notes: Bloggers' Recommendations (BR), Online Community (OC), Social Media Content (SMC), Brand Image (BI), Online Purchase Intention (OPI)

Simple Mediation Analysis

Bootstrap-based Hayes' PROCESS macro was used for regression analysis to test the mediating role of brand image on the relationship between bloggers' recommendations, online community, social media content, and online purchase intention. This effective statistical resampling technique helps strictly evaluate standard errors and model parameters from the sample (Hayes, 2013). A bootstrap-based resampling procedure was followed to test the mediation (the bootstrapping number was 5000). A summary of the mediation analysis is reported in Table 6. The results revealed that the indirect effect of brand image on the relationship between bloggers' recommendations and online purchase intention is statistically significant ($\beta = 0.2580$, $t = 4.699$). The direct effect of bloggers' recommendations on online purchase intention in the presence of a mediator is also significant ($\beta = 0.323$, $p = 0.00$). The value ($R^2 = 0.49$) indicates that bloggers' recommendations and brand image explain a 49% variation in online purchase intention.

Furthermore, the confidence interval values do not include zero (CI = 0.147, 0.363). Thus, the relationship between bloggers' recommendations and online purchase intention is mediated by brand image, supporting H5. The results also show that brand image has a statistically significant indirect effect on the relationship between the online community and purchase intention ($\beta = 0.2967$, $t = 5.233$). The direct effect of online community on online purchase intention is also significant ($\beta = 0.304$, $p < 0.01$). In addition, the online community and brand image explain a 48% variation in online purchase intention ($R^2 = 0.48$). There is no zero between confidence interval values (CI = 0.184, 0.405). Thus, the H6 is supported. The results also supported the H7. Results indicate that brand image has a significant indirect effect on the relationship between social media content and online purchase intention ($\beta = 0.2630$, $t = 5.000$). Results ($\beta = 0.343$, $p < 0.0$) indicate a significant direct effect of social media content on online purchase intention. 50% variation in online purchase intention can be explained by brand image and social media content ($R^2 = 0.50$), and the confidence interval does not include zero (CI = 0.158, 0.365). Thus, brand image mediates the relationship between social media content and online purchase intention.

Table 6. Mediation Test Summary

Hypothesis	Structural Path	Total Effect	Direct Effect	Indirect Effect	t-value	Confidence Interval		R ²	Findings
						LL	UL		
H5	BR → BI → OPI	0.581*	0.323*	0.2580	4.699	0.147	0.363	0.49	Supported
H6	OC → BI → OPI	0.600*	0.304*	0.2967	5.233	0.184	0.405	0.48	Supported
H7	SMC → BI → OPI	0.605*	0.343*	0.2630	5.000	0.158	0.365	0.50	Supported

Notes: Lower Limit (LL), Upper Limit (UL), * $P < 0.01$

Social media in digital marketing focusing on consumer adoption of new technologies significantly impacts marketing strategies and business practices (Chong et al., 2018). Because these technologies provide two-way communication facilities, consumers can quickly obtain needed information at a low cost through online platforms (Irfan et al., 2019). To justify these research findings from a developing country, the current research investigates the impacts of bloggers' recommendations, online community, social media content, and brand image on the online purchase intentions of university graduates. This study also examines how brand image mediates

the relationships between UGC-based constructs (i.e., bloggers' recommendations, online community, and social media) and online purchase intentions. The findings of this study reveal that these UGC-based constructs significantly influence university graduates' online purchasing intention; more specifically, bloggers' recommendations, online communities, and social media have substantial effects. The findings also present that brand image has a significant direct and mediation impact on purchase intention. The current research findings align with the previous studies, as mentioned below.

The results show that bloggers' recommendations positively impact university graduates' online purchase intention. This finding aligns with Tran and Nguyen (2020), who noted that bloggers' recommendations influence consumer purchase behavior positively because consumers believe in individual preferences more than companies. Another potential reason might be consumers' trust and belief in other consumers' product and service experience. Besides, university graduates have sound web surfing knowledge and experiences (Zhang et al., 2019), which may motivate them to use the insights of available blogs to make purchase decisions.

This study also found that online community interaction also positively impacts the purchase intention of university graduates when they make shopping decisions from online sellers. In line with Hajli (2018) and Zhu et al. (2016), community interaction and communication with other users through online platforms before making a purchase decision influence their decision behaviors. This is because online community engagement is getting popular. Consumers love sharing their purchase or consumption experience and satisfaction (dissatisfaction) in their online communities. In return, such community interaction helps them get needed information and enhance knowledge about goods and services (Essamri et al., 2019).

Besides, this study also proves that social media content positively influences the online purchasing decisions of university graduates, which is consistent with Mayrhofer et al. (2020). It implies that user-generated social media content and consumer interaction positively impact purchase decisions among the young generation. The potential reasons might be the active involvement of university graduates in different social media platforms. Evidence suggests that more active engagement with social media content impacts consumers' behaviors (Ghahtarani et al., 2020). Because consumers do not merely view the contents in social media; rather, they encounter voluminous product or service feeds.

The results also indicate that brand image significantly impacts online purchase intention and mediates the relationship between bloggers' recommendations, online community, social media content, and online purchase intentions of university graduates. In Bangladesh, it is found that most university graduates have a social media (i.e., Facebook) profile. This young consumer segment also tends to pass the time on other social media (Zhang et al., 2019). Thus, UGCs regarding bloggers' recommendations, online community, and social media affect brand image positively, and consequently, brand image drags them towards online purchase intention. These findings align with Molinillo et al. (2017), who identified that brand image increases reputation and credibility among consumers, which influence their purchase decisions. Bakri et al. (2020) found that UGC is helpful to decode brand images. In such cases, online sellers should effectively manage UGC to decode consumer brand image and positive brand image to increase credibility among consumers and influence online purchase intention positively.

Implication and Conclusion

Theoretical Contributions

From the theoretical viewpoint, this study extended the model Kamalasena and Sirisena (2021) used by incorporating bloggers' recommendations, social media content, and brand image (direct and mediating effects) and revealed how these UGC-based constructs trigger consumers' (university graduates) online purchase intention. In this regard, by including bloggers' recommendations, social media content, and brand image as a mediating variable, this study goes beyond what Kamalasena and Sirisena (2021) evaluated.

More precisely, testing bloggers' recommendations and social media content and the impact of brand image on the relationship between social media content, online community, bloggers' recommendations, brand image, and online purchase intention are unprecedented in the extant literature relating to the impact of UGC on online purchase intention. This study also goes beyond Poturak and Softic (2019) by incorporating brand image as a mediating variable to test the impact of UGC on online purchase intention. This study mainly focused on university graduates to evaluate the phenomena. Poturak and Softic (2019) used brand equity as a mediating variable to evaluate the impact of social media content on purchase intention. Furthermore, this study complements and extends the findings of those previous studies by analyzing the impact of bloggers' recommendations, social media content, and brand image as a mediating variable on online purchase intention. This study also goes beyond the findings of previous studies by evaluating the impact of UGC on online purchase intention in the context of the developing country perspective, such as Kamalaseena and Sirisena (2021) in Sri Lanka and Duong and Liaw (2022) in Vietnam.

Using Hayes' PROCESS Macro approach for regression analysis, this study shows the direct and indirect impact of bloggers' recommendations, online community and social media content, and brand image on online purchase intention. This shows that UGC significantly impacts brand image and online purchase intention. These findings indicate that effective management of UGC helps enhance brand image, encouraging consumers to make online purchase decisions. As this study extends the previous model by incorporating bloggers' recommendations, social media content, and brand image, this reduced the gaps in the existing literature by adding knowledge on the impact of UGC and mediating the effect of brand image on the online purchase intention of university graduates.

Practical Implications

Apart from the theoretical contributions, the results of this study provide evidence and guidelines for online sellers and digital marketers to comprehensively understand the influence of UGC on online purchase intentions. More specifically, the results of this study offer insights into demising marketing strategies focusing on young consumers who are fond of engaging in social media and blogging websites. By utilizing the insights of this study, online marketers may employ famous bloggers to influence consumer purchase intention. Since brand image mediates the relationship between bloggers' recommendations and online purchase intention, online marketers should also focus on enhancing brand image among consumers. In addition, user-generated social media content should be customer-centered. In doing so, marketers should be careful and thoughtful to understand contemporary social media trends. Consequently, they might be able to generate and promote positive word-of-mouth. It might positively enhance brand image and influence the consumers' online purchase intention. Utilizing the insights of this study, marketers may be able to form a clear understanding of capitalizing on online community interactions dragging towards purchasing products or services through online platforms. This study revealed that university graduates interact with other users and experience people through online communities before making purchase decisions. Policymakers should focus on factors enhancing brand image while creating brand online communities. Effective management of online communities helps online marketers provide quick customer service and communicate essential information to customers. This will influence consumers' intention to purchase their products through online platforms.

As UGC significantly impacts brand image and online purchasing behavior, negative word-of-mouth can destroy the brand image and reduce sales. So, policymakers and online marketers should control negative social media content and reviews to protect brand image and maintain market share. Finally, online markets, sellers, and representatives of brands should be more sensitive about product quality, service quality, and effective management of UGC because today, consumers are more powerful with the development of two communication and social media platforms. Any mistake can spread negative word-of-mouth about products and services. This might damage the brand image and online purchase intention of target customers.

Limitations and Future Research Directions

Some limitations in this study might confine the implications of the findings of this study. First, this study collected information from university graduates, which could be enhanced by incorporating respondents from the younger and elderly generations. Second, this study solely used the quantitative research approach. UGC-based marketing is still emerging in developing and least-developed countries where qualitative or explorative research would be more effective. We recommend future studies to explore and examine customer online behavior using mixed methods (combining qualitative and quantitative research). Third, this study is also limited to using the cross-sectional design. Hence, future studies can be conducted using the longitudinal research design to collect data at several time points. Fourth, our study is confined to Bangladesh from contextual aspects. We suggest to extend this study's findings to other countries to compare and evaluate the differences. Finally, future research can also be extended by incorporating other independent variables instead of bloggers' recommendations, online communities, and social media content. This study used the brand image as a single mediating variable; future research can be conducted by replacing or integrating multiple mediators like brand trust, quality, loyalty, etc.

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