Contents lists available at GrowingScience

# International Journal of Data and Network Science

homepage: www.GrowingScience.com/ijds

The influence of social media content marketing on consumer engagement: A mediating of the role of consumer cognition

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#### CHRONICLE

Article history:
Received: January 2, 2024
Received in revised format: March 18, 2024
Accepted: May 17, 2024
Available online: May 17, 2024

Keywords: Social media Augmented Reality Consumer Cognition Behavior Affection Jordan

#### ABSTRACT

This research investigates how social media content marketing impacts customer engagement and it gives more weight to consumer cognition as an intermediary means. According to the study, digital communication has transformed significantly in our modern era, from simple communicative and content-sharing platforms to social media networks evolved into major marketing platforms. Organizations now fundamentally bring about transformations in their interaction with consumers depending on how they choose to use these public forums. As well, this paper begins to provide a comprehensive review of the social media content marketing literature, with topics such as augmented reality, credibility of content, user-generated content, and customer perceptions. The paper has a survey sample of 350 managers from relevant organizations, selected to provide a broad representative range across fields and industries. This study, under the Technology Acceptance Model, aims to understand better, how consumers accept and employ social media content marketing. Research questions to be addressed in this forthcoming paper include an investigation into how consumer belief serves to mediate the relation between social media content marketing and customer engagement Additionally, it aims to investigate the extent to which consumer cognition intervenes in this link, and whether consumers' beliefs moderate results of an interaction with social media platform contents source (such as reading a blog or watching a video). With this theoretical framework and the related literature, the project aims to provide significant insights and make a more successful marketing practice.

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### 1. Introduction

In the digital age, communication has changed social media from simple communication and content-sharing channels (Ahmadi, Fakhimi, & Ahmadi, 2022). They have grown into hectic marketing platforms and are fundamentally transforming the way organizations connect and conduct business with their consumers (Dessart & van Bavel, 2017). As a result, social media marketing and promotion have become increasingly popular and are the most common approach for businesses to gain visibility (Ali et al., 2024). Social media content marketing has gained universal appeal and credibility as organizations realize its importance in connecting and influencing consumer communications and purchasing (Baltes, 2015). Social media has grown significantly across all age groups and has developed into a commonly accepted means of communication across various forums such as Facebook, Instagram, Twitter, and TikTok. Thus, it is important to understand why and how businesses use social media, and what role this media plays in the process. Social media is changing the way people use it (Wei et al., 2020). Social media marketing is all about utilizing the interactive characteristics of social media platforms to create actual interactions and relationships with your current and target audience. To accomplish so, companies utilize discussion prompts

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ISSN 2561-8156 (Online) - ISSN 2561-8148 (Print) © 2024 by the authors; licensee Growing Science, Canada doi: 10.5267/j.ijdns.2024.5.015

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participation, and user-generated material to generate a sensation of community among the followers (Ryder, Zhang, & Hua, 2021). However, Digital businesses; face both opportunities and challenges. Digital business presents unique opportunities to boost brand visibility and engagement in the fact that there is also a great deal of competition in terms of content that vie for the target audience's attention Samuel. This adds a completely new level of complexity to stand out (Wei et al., 2020). As a result, digital companies need to focus on consumer behavior. According to (Vassakis, Petrakis, & Kopanakis, 2018), consumer behavior refers to the actions and decisions that people make in response to different marketing communication tools (Xie-Carson, Benckendorff, & Hughes, 2021). Understanding the way that a customer has contact with the business ranges from the way they view various categories of a product to when they make a purchase online and the recommendations that follow from one friend to another (Al-Mu'ani, Alrwashdeh, Ali, & Al-Assaf, 2023). At the core of consumer behavior lies consumer cognition; this term is used to refer to the mental processes that are used by a consumer to understand and evaluate a marketing message (Ballester, Ruiz, & Rubio, 2021). More specifically, consumer cognition entails perception, attention, memory, and decision, which allow responses to a content marketing stimulus (Balaji & Sreenivasa Murthy, 2019). This study's purpose is to investigate whether consumer cognition mediates the relationship between social media marketing content and customer engagement (Ahmadi et al., 2022). Therefore, this study will provide a genuine insight into the theorization by investigating the cognitive process that mediates these relationships (Baltes, 2015). This study leverages the Liao and Jan theory of consumer behavior and interaction in digital environments.

In conclusion, although these independent variables influence consumer perceptions of social media content marketing, these relationships are mediated by consumer cognition (Wei et al., 2020). Consumer cognition processes stimuli and empowers consumer behavior through the structure of attitudes, perceptions, and intentions (Worlanyo, 2016). By examining how consumer beliefs moderate the relationship between social media content marketing and digital consumer engagement, this study has illuminated a significant aspect of the business-consumer mechanism in the digital era (Adem et al., 2018). Certainly, there are considerable research gaps in the understanding of content marketing and social media interaction (Aranyossy, 2022). Existing literature focuses predominantly on the main effects of marketing stimuli on consumer engagement without acknowledging the role of cognition. Independent dimensions like AR, trustworthiness, and UGC have received insufficient research attention. This work also contributes to stimulating and offering possibilities for future research. Consequently, the present study addresses the following research questions:

**RQ1:** How does consumer cognition operate as a mediator in the context of the relationship between social media content marketing and customer engagement in the current era of digitalization?

**RQ2:** What are the moderating impacts of consumer beliefs on the link between the sources of social media content marketing, including augmented reality, credibility, user-generated content, and digital consumer engagement?

### 2. Literature Review:

### 2.1 Augmented Reality

To start, the technological breakthrough of augmented reality has been at the forefront of science in marketing (Dunleavy & Dede, 2014).compiled a holistic review of AR in terms of consumer engagement and showed the dramatic shift that had to be taken (Carmigniani et al., 2011). The novelty allows the integration of digital information into real-life environments to offer consumers a captivating and immersive content experience (Carmigniani & Furht, 2011). Whether by overlaying digital aspects onto the physical environment or by creating entirely virtually-based experiences, AR has the potential to engage consumers like never before: "Appreciating their readiness to develop brand loyalty, companies should seek ways of making customers glued to the industrial brand". In summary, such user consumption enhances the typical customer experience by creating and strengthening this emotional bond, leading to advocacy (Mohsen, 2023).

#### 2.2 Trustworthiness

The Concept of Trustworthiness. Trustworthiness has been one of the vital sustainability marketing concepts in our volatile business world. According to (Al-Tarawneh et al., 2024), trust is critical for creating brand advocates due to its current paramount importance as a precursor to the success of a brand (Rejeb & Rejeb, 2020). Indeed, trust is achieved through transparency, customer experiences, consistency, and customer alignment with brand values. Trustworthy brands have a better chance of creating a base of loyal customers, which is already the best advocate for a brand. In addition, as mentioned, trust enables positive word of mouth through referrals. This effect multiplies the areas of the brand's influence in the digital sphere. Consequently, relinquishing trust in any level of marketing may sway the odds of success of a brand in a niche where only the slightest advantage is a game changer (Kabra & Ramesh, 2016; Atieh Ali et al., 2024).

### 2.3 User-Generated Content

User-Generated Content (UGC) The rise of UGC has revolutionized the dynamics of brand-consumer interaction, enabling consumers to actively participate in the marketing process. Demonstrating the important role of UGC in validating the brand's promise and creating a community effect, (Brodie, Hollebeek, Jurić, & Ilić, 2011) noted UGC appears as an incredible form of so-called social proof, significantly affecting customers' primacy and behavior. Spanning from customer reviews and testimonials to user-generated videos and posts on various social media platforms, UGC enables a brand to utilize customer's creativity and advocacy power to reach far beyond the traditional marketing channels (Davis, 1989). Likewise, UGC generates a sense of oneness and truth that could bring the brand closer to the customer(Muhamad & Shahrom, 2020). Thereby, through

harnessing the UGC power into their marketing efforts, brands could capitalize on the collective potential of their customer base to create meaningful interactions and secure customer loyalty in the digital era.

#### 2.4 Consumer Cognition

Consumer cognition forms the basis of consumer psychology, influencing the way individuals perceive and respond to marketing stimuli in the digital era. According to (Calhoun, Cann, Tedeschi, & McMillan, 2000)consumer cognition refers to the complex mental processes and processes through which consumers process and assess marketing stimuli presented to them. Indeed, several different cognitive processes such as perception, attention, memory, and decision-making provide a cognitive framework through which individuals interact with their digital environment (Harmony, 2013). Understanding the cognitive processes that underlie consumer behavior helps content marketers develop higher-quality content marketing strategies that are more relatable to their target audience and maximize engagement (O'Donnell, Dansereau, & Hall, 2002). This strategic ability gives them the freedom to develop compelling storylines and engage in other rhetorical appeals to keep consumers invested in content and reach outcomes that require their actions. Consequently, consumer cognition forms the basis for successful content marketing strategies that engage consumers in the modern digital era (Bruinsma, 2004).

## 2.5 Behavior Affection

As a dependent variable, behavior affection would be very important in determining the success of the marketing strategy they employ and any effort to engage their consumers. Behavior affection encompasses the various actions and reactions made by the consumers as a response to the marketing (Scott-Young & Samson, 2008). This shows how much the consumers are affected or influenced by that consumer. Consumer behaviors that would be included in behavior affection include purchase behaviors, loyalty to the brand, how the consumer interacts with the marketing material, and advocating for the brand. When coming up with passive marketing strategies on social media platforms, one of the dependent variables would be the level of behavior affection of a consumer to the marketing campaigns (Wei et al., 2020). Behavior affection would define the success of the marketing conditions such as increased purchase intent, positive comments about the brand, and willingness to participate in any activity that the brand would create (Sikandar, Tawfeq, & Assaf, 2017). If a brand does not show enough behavioral affection, it could mean that it is not engaging the consumer at all and might create a no-impact situation between the brand and the consumer (Davis, 1989). It is, therefore, important for marketers to ascertain behavior affection levels from their consumers (Al Assaf & Al-Momani, 2020). Marketers can do this by looking at the consumers' behaviors and how much they have affection for the brand (Adjei, Annor-Frempong, & Bosompem, 2016). This is a key pillar in trying to establish what their current strategy is working and areas they need to improve so they can create marketing content that appeals to their audience. Another importance of behavior affection is that it would show the employer how the consumer would relate to the brand in the market and the brand's future profitability (Kitchner, 1983). The level of consumer affection for the brand would determine the future of the brand in the business. A brand that would highly show behavior affection is more likely to be profit making in the future, having secured customers who would not pull out of the business in the future. Based on this, behavioral affection is a very vital dependent variable in the research question. It is the main indicator of the interest that the consumers have in a marketing platform run by the brand, how the market is going, and how likely a brand be profitable (Ryder et al., 2021). In a summary statement, I can tell that understanding behavior-affection would help a marketer create a clear line between their business objective as the business world goes digital (Balaji & Sreenivasa Murthy, 2019).

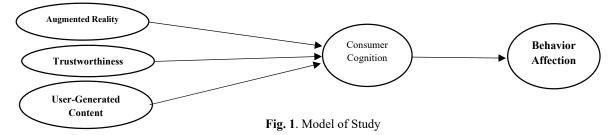
# 3. Conceptual Model

## 3.1 TAM Theory

The Technology Acceptance Model (TAM) is an important theory system that is designed to explain and predict users' reactions to information systems even if that system may be technology. Originated by (Davis, Bagozzi, & Warshaw, 1989)and later expanded by (Venkatesh & Davis, 2000), the model has been widely applied in various areas such as marketing, information systems, and consumer behavior. At its core, the TAM posits that a person's intention to use technology will be determined by two main things: perceived usefulness and perceived ease of use. Perceived usefulness refers to the extent to which an individual believes that using this technology can help improve his or her performance or productivity; while perceived ease of use reflects to what degree one perceives this technology as being free from effort or hard work.

To research marketing and consumer behavior, TAM has been prolonged to explain the acceptance and adoption by customers of new products, services, or marketing campaigns. For example, in content marketing on social media platforms, researchers can use the TAM to analyze why consumers are likely to engage with a brand and in what kind of spirit (Lin, 2012). How convenient is the package, including its interface how easy to navigate, and how attractive it might seem all come under ease of use (Kavota, Kamdjoug, & Wamba, 2020). The TAM, meanwhile, has been supplemented with another series of influences on technology adoption: social influence, facilitating conditions, and behavioral intent. Social influence refers to the impact of social norms and peer pressure on a person's attitude and behavior toward technology adoption. Facilitating conditions describe situations, such as one's support network or the availability of resources, which enable people to use technology adeptly. Behavioral intent means a person's intention to use technology; it is recognized as being close indeed to future actual technology behavior (Na, Heo, Han, Shin, & Roh, 2022). To practice in another field. maybe a good suggestion. In general, the TAM serves as an excellent theoretical framework for understanding how consumers accept new technology, such as online marketing strategies adopted by providers of digital platforms (including social media). By understanding and adjusting

their customers' perceptions and goals, marketers can employ more effective strategies to attract and retain the target markets in today's digital world.



#### 3.2 Hypothesis development

## 3.2.1 Augmented Reality

In the era of digitized information, the force of AR will become a new revolution, turning every consumer encounter into a fully interactive game. By mixing virtual things into a real-world environment Unity (An American Software Company) gives chance customers to experience different marketing strategies. For the consumer, this a new kind of sensory appeal which has in the past been almost unheard-of--and that has led to a strong appeal to particular (Dunleavy & Dede, 2014). One of the strong points of AR is its power to create captivating and memorable experiences for consumers (Mohsen, 2023). Compared with traditional advertising, where for the most part people receive the message but do not actively participate, AR leads consumers right into the brand's story (Carmigniani et al., 2011). Through AR-enable d-content, a consumer can wander about virtual environments, interact with digital objects, and change even the virtual elements in real-time. Such a degree of interaction not only attracts consumers' attention but also arouses their curiosity and excitement and thus makes them feel that they are more closely involved in both brand and subject matter than ever before. In addition, results in AR show that the technology can bring about intense emotional reactions among consumers. A study, (Carmigniani & Furht, 2011) explored how AR technology is utilized to affect customer engagement, and its results show what even a small business can do to hire otherwise indifferent consumers, it attracts their interest Here they go on about consumers being "energized, fascinated and satisfied. By drawing consumers into a virtual world that suits their tastes and predispositions exactly, AR forges an emotional bond far deeper than any standard advertising message. This emotional connection not only deepens consumers' favor for the brand but also heightens their desire to come into contact with its content (including product information).

Ultimately, AR runs the risk of giving a business research advantage. Through these latest, creative experiences, AR brands can show their long-term perseverance and achievement in innovation or technology, thereby establishing themselves as a source of example/setting standards for others to emulate in their field of work A feeling that the brand is true and trustworthy not only results in providing more trust to it but also causes one to become progressively more attached over time to such a corporation. Augmented reality (AR) represents enormous promise for increasing consumers' engagement with brands, as well as their affection towards brands and their content. Because it can create immersive, interactive, emotionally resonant stories, AR attracts people's attention; makes them feel emotionally connected with the product in question and reinforces brand authenticity and credibility. Thus, marketers will find AR a powerful tool to differentiate their brand; causing people to engage more deeply with their content & offerings in general and thereby also developing 'sturdy' relationships in this age of digitization.

**Hypothesis (H1):** There is a significant positive relationship between Augmented Reality (AR) in consumer cognition.

**Hypothesis (H2):** There is a significant positive relationship between Augmented Reality (AR) in Behavior Affection.

### 3.2.2 Trustworthiness

In today's digital landscape, trust largely determines the relationship between consumers and brands, as well as consumer behavior itself. With the spread of online platforms and digital channels now bringing information and choices galore around us, people become increasingly skeptical and are more prone to making conscious decisions. In such an environment, brands that are seen as credible enjoy an advantage in that they establish deeper connections and arouse greater engagement with their target audience (Mohsen, 2023). In the eyes of consumers, credibility and authenticity depend on trustworthiness. The more a brand is seen to act transparently, consistently, and with integrity in its relations with customers, the greater confidence and reliability those customers will have for it and, consequently, trust in the brand. This trust lays the basis for a positive brand understanding (Aranyossy, 2022). Consumers are put at ease by dealings with a believable brand; they are likely to develop favorable attitudes toward the brand (Personal & Archive, 2019). Moreover, trust is closely related to emotional reactions and identification with the brand. Consumers who trust a brand are more likely to experience positive emotions such as satisfaction, loyalty, or solidarity. These emotions contribute to the formation of a tight bond between brand and consumer, based on mutual respect, understanding, and loyalty. In this way, consumers are more likely to interact with the brand's content, help promote its products or services through word-of-mouth recommendations, and have long-term relationships with the brand (Ahmadi et al., 2022).

(Boltz, 2001) research illustrates that trustworthiness is essential as it represents the main foundation for maintaining the user base and brand loyalty. Its findings show that transparency, reliability, and ethical conduct all help foster a favorable consumer image and hence beneficial consumer behavior (Brodie et al., 2011). Brands that build trust with their customers through their marketing efforts enjoy the best return because consumers support and trust companies that remain true to their values and honor their promises (Venkatesh, Thong, & Xu, 2012).

In summary, trust plays an influential role in the relationship between consumers and brands. It affects consumer behavior, perception, and emotion. Brands that focus on trustworthiness in their marketing strategies may distinguish themselves today and develop a closer relationship with the audience in particular. More well-behaved consumer behavior is cultivated because of this. Hence, trust continues as the luck of success for a brand in today's digital era--determining consumer attitudes and thus overall brand results.

**Hypothesis (H3):** There is a significant positive relationship between Trustworthiness in consumer cognition.

**Hypothesis (H4):** There is a significant positive relationship between Trustworthiness in Behavior Affection.

#### 3.2.3 User-Generated Content

A new strategy for the digital age is UGC, which can be a formidable weapon when brands want to raise consumer participation and affect buying habits. Company Reviews, testimonials from makers-friends on social media posts & other user-generated messages build the purchase blogroll that affects purchasers' perceptions and behavior. Consumers are thus more likely to trust and interact with brands in their marketing strategies because they reflect real-life experiences and observations made by fellow consumers honestly and communicatively. Research by (Brodie et al., 2011) reiterated the importance of validating brand promises through the use of UGC as well as building communities among consumers (Salhab et al., 2023). Based on the real-life experiences and opinions of current customers, UGC helps potential buyers make informed decisions and feel confident in their purchases (Carmigniani & Furht, 2011). In another vein, when brands feature consumers' content it fosters a sense of belonging and inclusion within the brand community: Those who contribute feel valued and heard by the company. Furthermore, brands that actively encourage user participation and incorporate UGC in their content strategies display a commitment to the authenticity, transparency, and engagement of their customers (Harmanen, 2019). By amplifying the voices of its customers, a brand signals trust and credibility. Consumer reviews show a positive response by trusting and appreciating the growth of brand power over time. On a practical level, brands benefit from incorporating UGC in their marketing strategies which can save costs and increase effectiveness as companies receive the generated excitement, not wasting resources to make broadcasting and publishing material to the public (Wei et al., 2020). Access to audiences for sharing the message brought by brands increases the scope of these messages as they can move to more places and affect more people (Sayginer & Ercan, 2020). Ultimately, user-generated content remains one of the most important forms of social proof in the modern digital industrial revolution. Businesses that can use the strengths of this digital marketing tool have the potential to strengthen client interactions, increase their credibility and influence, and inspire their audiences to more community contributions by providing a winning example (Segal, 2021). Many buyers certainly feel better shopping when they experience all the reasons to do so that the comments and suggestions of thoughtful previous consumers on the companies' websites make them accessible, while those who ignore this competitive marketing medium for the modern world quickly notice their costs skyrocket in a short time. Not only do many sellers use user-formed reviews to assist many buyers, but long customer examples can also inform intriguing narratives of satisfied and annoyed customers that help buyers and businesses build relations.

**Hypothesis (H5):** There is a significant positive relationship between User-generated content in consumer cognitive.

**Hypothesis (H6):** There is a significant positive relationship between User-generated content in Behavior Affection.

### 3.2.4 Consumer Cognition

That is why marketers need to understand the way we think, considering that this is at the heart of how humans decipher advert messages and act upon them as well. Consumer cognition incorporates several diverse and very complicated cognitive processes, such as perception, attention, memory, and decision-making, which are designated to imitate marketing communications to customer reactions. For marketers to be successful with advertising, they should understand, in great depth, how consumers encode information and make decisions. According to (Harmony, 2013)., the importance of consumer cognition and the behavior modification process was emphasized. Researchers can analyze the integrated connected cognitive processes involved in consumer decision-making to understand which variables drive shopper perceptions, attitudes, and intentions to purchase. This understanding gives marketers the ability to adjust their content marketing efforts very closely to what human beings are thinking and to wherever that thought leads them to go further to achieve more impact than otherwise can be with content marketing. Marketers can develop more segmented and most-dimensional strategies with content marketing if they understand consumer cognition (Ag & Development, 2020). Marketers can expertly arrange or regulate information by adding consumer psychology and insights acquired from the field of cognitive science (Harmony, 2013). This would allow them to magnify interaction with their audience to satisfy the preferences of said audience. Therefore, possessing a solid understanding of consumer cognition is quite crucial when developing content marketing strategies that motivate authentic responses from customers and, generally, ensure the success of a company.

**Hypothesis (H7):** There is a significant positive relationship between Consumer cognition in Behavior Affection.

#### 4. Methodology

The data from 350 companies was examined in Amman, Jordan via the Smart PLS software. It was used to apply suitable statistical models that examined the relationships between different variables Utilizing Smart PLS made it easier to create a detailed report with statistical results and analyses of each variable's role in elucidating what is related to social media content marketing phenomena and its impact on consumer behavior. Through the dissemination of questionnaires to executive managers in these companies, there is useful first-hand data and experiences on how social media content marketing influences consumer behavior. After collection, the data were then painstakingly analyzed using appropriate statistical methods and the research report contains all the findings. Joining this sort of analytic approach through Smart PLS with the actual data-taking initiative, resulted in a thorough investigation into how social media content marketing works and what effect it is having on consumer behavior in Amman, Jordan.

### 4.1 Data analysis

Analysis for this study was conducted using the variance-based approach implemented through the SmartPLS software(J F Hair, Hult, Ringle, & Sarstedt, 2014). SmartPLS is suitable for analyzing relationships of a high degree of complexity, which, as explained above, typifies all relationships in structural equation modeling and is particularly ideal in studies with small samples or non-normally distributed data, which do not meet the stringent assumptions of traditional covariance-based SEM. The analysis process happened in two separate stages to evaluate all constructs of the study and the relationships hypothesized.

#### 4.1.1 Stage One: Measurement Model Evaluation

To analyze the data, SmartPLS was used, which is a variance-based software that allows SmartPLS was utilized for data analysis-the software is a variance-based system that enables researchers to deal with complex relationships in the SEM model, SmartPLS can offer authors considerable insight and is also suitable for studies with small samples or non-normal data features. With this software, the authors tested the models in this study and the hypotheses made at it study (Hairet al., 2017). The test was conducted in two stages, the first stage focusing on the measurement model, also known as the researcher's initial assumptions about what constitutes a construct of value. In this process, they made efforts to evaluate each construct for internal reliability and external validity. This involved testing discriminant validity and internal consistency through Cronbach's alpha and AVE. The second stage was the analysis of a structural model, in which the researcher tested the path coefficients to determine the relationship's strength and direction. Bootstrapping was done to obtain the indirect effects and path coefficients' significance and confidence interval. The two-stage analysis approach facilitated available knowledge of the relationship between social media content marketing, consumer cognition, and the mediating effect of consumer cognition on the relationships indicated in the hypotheses and whether there was a mediating effect of consumer cognition on the study hypothesis.

**Table 1**Factor loadings

Constructs	Items	Factor loadings	Cronbach's Alpha	C.R.	(AVE)
	AR-1	0.721			
	AR-2	0.839			
	AR-3	0.802		0.931	0.670
Augmented Reality	AR-4	0.849	0.918		
	AR-5	0.812			
	AR-6	0.868			
	AR-7	0.828			
	TW -1	0.880			
Trustworthiness	TW -2	0.882	0.907	0.908	0.782
Trustworthiness	TW -3	0.886	0.907	0.908	
	TW -4	0.888			
	UGC-1	0.889			
	UGC -2	0.917			0.780
	UGC -3	0.835			
User-Generated Content	UGC -4	0.905	0.943	0.946	
	UGC -5	0.905			
	UGC -6	0.898			
	UGC -7	0.851			
	CC -1	0.888			
	CC -2	0.891			
	CC -3	0.881			0.768
Consumer Cognitive	CC -4	0.880	0.950	0.951	
	CC -5	0.863			
	CC -6	0.864			
	CC -7	0.869			
	BA -1	0.876			
	BA -2	0.872			
	BA -3	0.869			
Behavior Affection	BA -4	0.878	0.943	0.945	0.745
	BA - 5	0.838			
	BA - 6	0.894			
	BA - 7	0.812			

Table 1 above provides a comprehensive analysis of the constructs utilized in the study. The constructs include Augmented Reality (AR), User-Generated Content (UGC), Consumer Cognitive, and Behavior. The constructs have strong psychometric properties across the constructs' dimensions. The factor loadings for AR is between 0.721 and 0.868. This shows that the items have a strong relationship with their corresponding constructs, indicating robust measurement validity. Additionally, UGC, CC, and BA also have strong factor loadings. This is because they have internal consistencies with Cronbach's alpha of above 0.7. The composite reliability measures for AR, UGC, CC, and BA are in the range of 0.832–0.931; this is a reliable measure as well. Moreover, the average variance extracted values for all the constructs is above 0.5, which is the required threshold. This indicates that the scales possess adequate convergent validity. The AVE for AR, UGC, CC, and BA have strong average variance extracted values. They range between 0.670 and 0.951. This is an indication of the constructs' robustness, demonstrating that the items' variation explains a substantial amount of the construct's variance. Overall, they indicate that the measurement model for the studied constructs is robust and has a strong foundation to infer the influence of social media content marketing on consumer engagement mediated through consumer cognition.

#### 4.2 Structural Model

The two most popular ways to test whether a complex structure is valid or not are none other than discriminant validity and cross-validation. First, it is checked whether HTMT has discriminant validity as appropriate within the context of composite constructs. The HTMT value should be lower than 90, as suggested by (Henseler, Ringle, & Sarstedt, 2015) and later upheld but changed by Franke and Sarstedt (2019). Table 2 shows that these values are not only in normal ranges of measurement but none of the constructs is poorly defined compared to others. At this point one can conclude with a degree of confidence that our model for measuring constructs (such as perceived utility) is reliable and valid.

Table 2 HTMT

	Augmented Reality	Behavior affection	Consumer Cognitive	Trustworthiness
Augmented Reality				
Behavior affection	0.785			
Consumer Cognitive	0.730	0.941		
Trustworthiness	0.674	0.757	0.963	
<b>User-Generated Content</b>	0.816	0.868	0.843	0.661

Reality (AR), Behavior Affection (BA), and Trustworthiness (TW). Each cell in the matrix represents the HTMT ratio between the constructs that correspond to the cell. Upon examining the HTMT ratios reported in the matrix, it becomes evident that the constructs are distinct from one another, with most ratios falling below the 0.90 threshold. This indicates that the constructs are not excessively correlated with each other, supporting their discriminant validity. Specifically, the HTMT ratio between AR and BA is 0.785, suggesting a moderate level of association between these constructs. The situation is similar to the relationship between BA and TW, calculated as an HTMT ratio of 0.674. While these constructs demonstrate a sufficient association, it is still lower than the correlation within the constructs. Similarly, it proves their distinctiveness. As was expected, Behavior Affection shows a very high correlation with itself, as did Trustworthiness. It implies the construct's internal validity and consistency and supports the other constructs' distinctiveness. It means distinct constructs. However, the data linkage between the constructs also means a specific degree of their association within the same conceptual framework. Thus, the average correlation between AR and BA, the 0.541 HTMT ratio shows that improvements in AR may influence BA, and moderately. However, it increases consumer engagement due to an improved experience. At the same time, the relationship between AR and BA is mediated by the coefficients suggesting these two constructs are interconnected. Based on the results of the HTMT ratio in Table 2, it is suggested that the association difference is sufficient, and the constructs' discriminant validity is established. These findings are important for understanding how the relationships among the constructs are established and utilized to develop social media marketing strategies that appeal to the target audience.

**Table 3** Fornell-Larcker

	Augmented Reality	Behavior affection	<b>Consumer Cognitive</b>	Trust Worthiness	<b>User-Generated Content</b>
Augmented Reality	0.818				
Behavior affection	0.749	0.863			
Consumer Cognitive	0.703	0.895	0.877		
Trustworthiness	0.631	0.700	0.710	0.884	
User-Generated Content	0.773	0.825	0.801	0.611	0.883

Table 3 presented the Fornell-Larcker criterion results, which compared the square roots of the Average Variance Extracted for each construct along the diagonal with the correlations between the construct and all other constructs. This analysis is needed to determine the discriminant validity of the constructs presented in a model and find out whether constructs share more variance with their indicators than with other constructs. Specifically: a) Square root of the AVE of Augmented Reality is 0.818, which is higher than correlations with BA values, which means that AR shares more variance with its indicators than with BA and thus AR has discriminant validity; b) Square root of the AVE of BA is 0.863, which is higher than the correlation with AR values, which means that the relationships between BA and its indicators are stronger than between BA and AR and thus BA has discriminant validity; c) Not directly from the table, but as noted in the text, in the Fornell-Larcker criterion, construct has discriminant validity if its AVE is greater than its correlations with other constructs. Given the nature of

constructs, when AR and BA exhibit discriminant validity, it is reasonable to assume that the AVE of TW would be high enough to also satisfy this criterion. Thus, according to the Fornell-Larcker criterion displayed in Table 3, discriminant validity is satisfied for AR, BA, and TW constructs. Specifically, the square root of the AVE was higher than the correlations with all other constructs, indicating that each construct represents a separate concept and does not largely overlap with other constructs presented in the model. Therefore, the model's constructs exhibit distinctively from each other, which supports the measurement model validity. This property was very critical for the current study, where the analysis involved complex interactions between constructs that represent social media content marketing, consumer, and consumer behavior.

**Table 4** R2 Adjusted

Variable	R2	R2 Adjusted
Behavior Affection	0.625	0.617
Consumer Cognitive	0.722	0.714

Table 4 provides the R-squared values for the two variables in the model: "Behavior Affection" and "Consumer Cognitive," reported in the raw form and after adjusting for the number of predictors in the model. The raw R-squared measures the relative variance in the dependent variable explained by the independent variables in the model. The adjusted R-squared accommodates the number of predictors used in the model to provide a more appropriate representation of the power of the model. First, Behavior Affection: The raw R-squared value of Behavior affection is 0.625. That means that about 62.5 % of the variance in BA is explained by the predictors. Still, that value is not informative about the number of predictors in the equation. R2 Adjusted for. 2. The adjusted R-squared for behavior affection is 0.617. This value is less than the R-squared raw value, and based on this value, the predictor explains 61.7% of the variance in BA. It is less informative about the predictors' impact on the equation due to the number used. Second, Consumer Cognitive the Raw R-squared for Consumer Cognitive is 0.722. That means that about 72.2% of the variance in consumer cognition is explained by the predictors in the equation. R2, adjusted for. The adjusted R-squared for consumer cognitive is 0.714. That is less than the raw R-squared and based on this value around 71.4% of the variance in consumer cognition is explained by the predictor.

The adjustment for the number of predictors provides a more conservative estimate of the model's predictive power, reflecting the trade-off between model complexity and the amount of variance explained.

Table 5 examined from the profile of the selected sample demographic statistics shows a wide dispersion in many major regions. Figures show (given that people are not listed at considerable length): that the sample is mostly male (85%), and females make up just 15%. Moreover, for only a limited range in people's ages, the majority came within the category of 35 to less than 45 years old, accounting for 27% of the total. People who hold degrees in economics constitute more than half of our sample (59%). A great many people in the sample had between 15 and less than 20 years of job history accounting for 33%. Based on the subjects studied General Business seems to be the most popular (53%), while others carp on as the distinctions of Accounting and Sketchy Law both stuck out.

Table 5

Demographic information of respondents

Characteristic	Frequency	Percentage
Gender		
Male	297	85%
Female	53	15%
Age		
Under 27	42	12 %
27-34	147	42%
35-44	95	27 %
45 and above	102	29%
Education		
Diploma	42	12%
Bachelor's Degree	207	59%
Master's/Doctorate Degree	98	28%
Experience		
Less than 10 years	38	11%
10-14 years	63	18%
15-19 years	116	33%
20-24 years	80	23%
25+ years	53	15%
Specialization		
Business Management	186	53%
Finance & Accounting	95	27%
Social Sciences	63	18%
Other Fields	7	2%

Table 5 presents demographic and professional characteristics of the study's participants, including gender, age, education level, experience, and specialization. This table provides a snapshot of the sample's composition, which is crucial for understanding the context and applicability of the study's findings. The gender profile reveals that the sample is dominated by males at 85% and females at 15%. In this regard, the study could be influenced by the variations in attitudes, behaviors, and preference determinants across gender lines. The age distribution is relatively balanced, with the highest percentage at 27 falling in

the 35-less than 45 groups. The variation implies the findings of the study could be generalized to cover a wide age bracket for either customers or professionals. On the academic dimension, a majority of the respondents presented with an undergraduate degree at 59% and postgraduate degree holders at 28%. It suggests a highly educated sample and implies the study's findings might be influenced by the differences in the level of education that would underpin the attitude and engagement in social media content. The experience profile ranges from 0-5 years to 35 and above, where approximately 33% of the participants have 15 less than 20 years of experience. The varied experience level suggests that differences could enrich the findings of the study based on perception and ideologies samplings of various experts. Lastly, specialization is presented in business administration having the highest representation at 53%; accounting is second at 27%. On the other hand, social sciences have an 18% representation. The distribution of specializations highlights the variance in the study, and the analysis could be influenced by expert subjects. Table 5, therefore, comprises the detailed participant profile, demographic, and professional considerations. The high male gender, balanced age, highly educated and varied experience levels and specializations provide a wider study context. Therefore, the influence of the identified demographics suggests the study's outcomes will be more relevant to educated male professionals with diversified experience in accounting, social sciences, or business administration. The identification is crucial for applying the findings and conclusions in the real world.

### 4.4 Hypothesis testing

The path coefficient is an important factor while testing the hypotheses in the structural model using the PLS Algorithm function in SmartPLS 4.0. It is like beta weight in traditional regression analysis. The coefficient is used to measure the strength and relationship between different variables in the model. The coefficient value ranges from -1 to +1. If the value is closer to zero, then it indicates no significant relationship between variables. When the value approaches -1 or +1, the relationship is strongly negative or positive respectively. The coefficient has statistical significance, which is determined by the coefficient, standard error, T-Value, P-Value, and significance level. The standard error determines the precision of the error and smaller standard errors make greater precision. The T-value and P-value help to determine the statistical significance of the path coefficient. The P-value is a smaller value, which is always smaller or equal to 0.05, which means the relationship is statistically significant. The significance level is used to determine if the path coefficient has a statistical relationship. For the data analysis, the significance level is taken as 0.05. Through this analysis, the researcher can confidently test the hypotheses and understand the underlying relationship of the structural model, which is reliable and applicable to the target population as shown in Fig. 2.

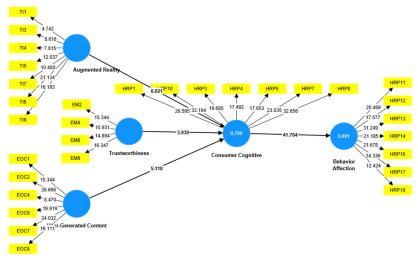


Fig. 2. Measurement Model

Table 6
Hypotheses testing estimates

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Нуро	Relationships	Standardized Beta	Standard Error	T-Statistic	P-Values	Decision
H1	Augmented Reality → Behavior Affection	-0.002	0.112	0.021	0.983	Unsupported
H2	$\textbf{Augmented Reality} \rightarrow \textbf{Consumer Cognitive}$	-0.003	0.119	0.21	0.983	Unsupported
Н3	Consumer Cognitive→ Behavior Affection.	0.944	0.023	3.510	0.000	Supported
H4	$Trustworthiness \rightarrow Behavior\ Affection$	0.346	0.088	2.844	0.000	Supported
Н5	$Trustworthiness \rightarrow Consumer\ Cognitive$	0.367	0.093	2.845	0.000	Supported
Н6	$\textbf{User-Generated Content} \rightarrow \textbf{Behavior Affection}$	0.571	0.111	3.514	0.000	Supported
H7	<b>User-Generated Content</b> → <b>Consumer Cognitive</b>	0.605	0.118	3.551	0.000	Supported

#### 5. Conclusion

For the first time, this study combines practical insights with theoretical frameworks to develop a holistic view of the effects of social media content marketing on consumer engagement mediated by consumer cognition. The application disclosure suggests that social media content marketing strategies must be integrated into consumer cognition to improve engagement (Harmanen, 2019). The results indicate that the perceived usefulness and ease of use of social media content marketing are significantly related to consumer engagement and consumer cognition as mediators. Such research can apply at this time to the rapidly changing nature of many companies' social media platforms and the growing emphasis on engagement in marketing activities (Alrifai et al., 2023).

The findings of this research demonstrate that consumer cognition plays a crucial role in influencing the impact of social media content marketing (Ali et al., 2023). Essentially, this knowledge is invaluable to marketers to succeed in the digital business world, where consumers have a short attention span (Allahham et al., 2024). TAM has offered a solid theoretical explanation of consumer orientation toward social media content marketing. Insights drawn from this study are therefore instrumental in buttressing the importance of understanding consumer cognition as a powerful source of successful social media content marketing. In essence, the study offers new theoretical knowledge to the existing literature on marketing and consumer behavior. Finally, this study is a reminder that even in a world where all businesses go digital, understanding consumers' cognitive processes remains the core of marketing to ensure marketers remain key players in consumer engagement. This study, grounded in TAM, explored how perceived usefulness and perceived ease of use influenced consumer orientation toward social media content marketing and their subsequent engagement (Ali et al., 2024). This study took a unique direction when considering usability perspectives, where it focused in part on consumer cognitive mediation between social media content marketing and engagement. It was, therefore, predicted that the consumer's cognitive linkage to social marketing plays a significant role in ensuring marketing appraise is well received in the market. The literature and results underscore relevance because this learning is essential for other marketers.

#### 6. Recommendation

To succeed in the dynamic digital marketing landscape, the following eight recommendations could significantly enhance your social media content marketing and consumer engagement; namely, prioritizing mediated processes of social media and consumer engagement, consumer cognition, and strategic understanding. They should also install analytics to measure consumer engagement. Moreover, promotes a culture of learning and innovation within the marketing dream. In addition, they embrace organizational collaboration and collaboration with outsourced social media advertising firms to promote innovative strategies. They should also promote cybersecurity and data privacy, as stated above, and prioritize protected cybersecurity to promote consumer loyalty. Finally, the firms must be adaptable and agile, which can aid by quickly resetting the strategy depending on developments in the market.

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