

# Uncertain Supply Chain Management

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## The mediating role of social media marketing effectiveness in the relationship between customer engagement and brand loyalty: A study of Amazon as a retail brand store

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### ABSTRACT

#### Article history:

Received May 2, 2024

Received in revised format May 30, 2024

Accepted July 2 2024

Available online

July 2 2024

#### Keywords:

Cognitive Engagement

Emotional Engagement

Behavioral Engagement

Transactional Engagement

Social Engagement

Social Media Marketing

Effectiveness

Brand Loyalty

This study aims to examine the mediating role of social media marketing effectiveness in the relationship between customer engagement dimensions (cognitive, emotional, behavioral, transactional, and social) and brand loyalty in the context of Amazon as a retail brand store. A quantitative approach was adopted, employing a survey-based method to collect data from 320 consumers who engage with Amazon as a retail brand store on social media platforms. Findings reveal positive effects of cognitive, emotional, transactional, and social engagement on brand loyalty and social media marketing effectiveness. However, behavioral engagement exhibited a negative impact. Social media marketing effectiveness positively influenced brand loyalty and mediated the relationships between customer engagement dimensions and brand loyalty. This study contributes to literature by challenging assumptions and providing insights into the interplay among customer engagement dimensions, social media marketing effectiveness, and brand loyalty. This offers brands the opportunity to promote and increase their awareness with the use of social media to interact with existing customer base that will boost loyalty in the long run. Only a few studies have examined social media marketing effectiveness as a mediator between customer engagement dimensions and brand loyalty. Therefore, this work endeavors to fill this gap by investigating consumer engagement, social media marketing and brand loyalty in an age when the internet plays an important role.

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## 1. Introduction

In the ever-evolving digital landscape, social media has emerged as a powerful platform that has revolutionized the way businesses engage with their customers and foster brand loyalty. It is the retail industry that indeed has been subject to sort of a revolution with the advent of media like social media, which is now the one largely responsible for the evolution of customers' tastes and preferences, and impact on their purchasing decisions. The vibrant retail sector along with the rapidly growing outreach of the internet and social media brings up a business field that involves identifying and examining the interesting relationships between customer engagement, social media marketing effectiveness, and brand loyalty. A customer engagement which is multidimensional may be split into cognitive, emotional, behavioral, social and transactional aspects (Moliner-Tena et al., 2019; Al-Shakri et al., 2024). The cognitive dimension features consumers' thinking and concentration

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ISSN 2291-6830 (Online) - ISSN 2291-6822 (Print)

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doi: 10.5267/j.uscm.2024.7.002

around brand-relevant endeavors, which express their cognitive and logical connections towards the brand. In comparison with this emotional dimension the emotional side shows customers the emotional links between them and the brand, which is represented by the level of client's deep relations with the brand. The behavioral part includes customers engaging, responding, or even co-creating value with the brand. This also represents their bodily interaction with the brand – both involving materials and objects. The social dimension consists of customers' relationships, communications, and mutual experiences among brand communities and social networks. This dimension focuses on customers' social interaction and sociability which determines the consumers' relation to the brand. To end the paragraph, the transactional dimension includes customers' financing transactions and resource exchanges with the brand which are reflected by the economic value they receive (Tsai, et al., 2021). Having an impact of this dynamic market environment, available social media marketing effectiveness is one of the major tools to drive engagement and brand loyalty (Helme-Guizon, & Magnoni, 2019; Almomani et al., 2021). Efficient social media marketing strategies guarantee one brand image is engaged by consumers, customer intimacy is promoted; and ultimately, tourists become brand loyal (Ibrahim, 2021). Through the usage of social media networks, retailers can communicate with shoppers, get precise facts, and design special experiences for their audience using a contextual approach. Social media marketing effectiveness becoming multifaceted customer engagement plays a mediation role in influencing the brand loyalty that happens in retail brands at Amazon stores. The fast-growing significance of social media for marketing and engagement of customers in retail certainly seems not to be an exception though. This study particularly intends to fill the gaps and cover the challenges which lie within the existing research literature. First off, customers' engagement (cognitive, emotional, behavioral, social, and transactional) dimensions' interaction with loyalty regarding the shopping brands remains a pet dilemma for academics (Magatef, et al., 2023). Prior to the current research, various reports highlighted the relationship between customer engagement and commitment to a brand. However, in many cases, the multidimensional nature of this topic has been neglected, resulting in an imperfect comprehension of the overall phenomenon. The gap between research studies proved that mediated marketing channels by social media in determining customer engagement that leads to brand loyalty is not an area of investigation (Samarah, et al., 2022). The research focuses on the discussions as to the direct impact of the customer engagement and social media marketing on the brand loyalty but at the same time mediating effects and underground mechanisms are still not so much explored, therefore letting us know not in full details of the complex interaction between these constructs. Also, in the literature, the same studies could not assign the exact weight to every customer engagement dimension in predicting the brand loyalty for all the contexts, which is why it is needed to investigate context-specific matters (Islam & Rahman, 2017; Alsahli, 2021; Ismaeel et al., 2023). Different cultural, economic, and social contexts which impose different influences and impacts on engagement depth must be taken into consideration during the research in retail context, which advocates further studies in this context. Furthermore, very few studies consider the variable altering effects of the factors such as brand type, product category and customer demographics on the relationships of instant brand acceptance, social media marketing effectiveness and brand loyalty (Ceyhan, 2019). Diagnosing the strength of this phenomenon would be essential to provide important information necessary to help businesses in customizing their strategies successfully. Besides that, issues related to how engagement has been operationally measured and how to verify and validate robust measurement scales have been highlighted (Barlow, et al., 2020). As this pertains to measurement issues is essential for obtaining trustworthiness and results, and for the facilitation of comparisons across studies as well as for generalizability. Consequently, the research hence aims at investigation of the moderating role of social media marketing effectiveness on the relationship between customer engagement dimensions (i.e. cognitive, emotional, behavioral, transactional and social) and brand loyalty. In this study, we explore the effect of social media marketing in the case of Amazon as a retail brand store.

## 2. Literature Review

### 2.1 *The Customer Engagement Theory*

The Customer Engagement Theory gives each of its elements as the complex and multi-dimensional reality of a customer engagement, which is accepted to be the core of the theoretical model. This theory defines engagement as a multidimensional cognitive, emotional, behavioral, social and transactional process with its base in the relationship between individual and environment. These dimensions all express the different levels at which customers can engage a brand. Customers may invest with their feelings and thoughts (cognitive), actively participate and co-create value with their inputs (behavioral), emotionally involved along with brand communities (social), transactions through investments of their money (transactional), or combinations of several of these (sensory-symbolic). The Customer Engagement Theory sees deliberation that customers are props to involve with the brand at distinct levels via diverse modes. It also highlights the complexity of the overall engagement process. The model is proposed with diversified dimensions. It implies comprehensive insights of several customer engagement touchpoints that impact brand loyalty in the context of retail brands in Amazon stores. Besides, the Customer Engagement Theory acknowledges the dynamic and cyclical process of engagement, where the customers' prior experiences and interactions can influence their follow-up engagement levels and behaviors (Lim, & Rasul, 2022). This social cognitive theory dimension is in line with the argued social media marketing effectiveness mediation mechanism, which spurs on or reinforces audience engagement, finally leading to brand loyalty. Along with the C.E.T. (Customer Engagement Theory), the S-O-R (Stimulus-Organism-Response) Model contributes a lot to the explanation of the influence of marketing activities (environmental stimuli) using social media which triggers behavioral and response features in customers. According to the model, there will be external stimulation (for instance social media marketing) that determines people to experience certain

cognitive and emotional states (e.g. cognitive and emotional engagement) finally there will be the behavioral responses (e.g. brand loyalty) (Dolan, et al., 2019; Quoquab, et al., 2021; Ma, et al., 2022). The social media marketing activities become the outside stimulants that control cognitive and emotional processes which work as clever targeting and communication mechanisms to influence customers' perceptions of a brand. These internal feelings which are present can become important factors in decision-making, including the level of consumers' brand loyalty. Applying the S-O-R Model, the role of social media marketing effectiveness is to explain the link between engagement dimensions and brand loyalty as a dependent variable which is influencing customer behavior through forming internal states and a consequent response. The proposed data model integrates the Customers Engagement Theory, as well as the S-O-R Model. It combines these two models, which together provide a powerful and well-grounded base for a research model that describes the relationships among dimensions of customer engagement, effectiveness of marketing strategies, and brand loyalty in retail organizations. The mixture of these theories helps the scientists to organize, examine, and understand the relationships investigated, and it gives them solid grounds to come up with a strategy to communicate with consumers of the Amazon store through successful marketing mix.

## *2.2 Brand Loyalty of Amazon as a retail brand store*

Brand loyalty is a pivotal success factor for retailers operating in a dynamic and competitive business context, as such, being able to establish a strong positive brand position and maintain its brand loyalty in the long run is a strategic goal for business owners that look for long-term prosperity. Brand loyalty is an aspect of customer ship where customers develop frequent and uninterrupted links with a specific brand which the customer demonstrates through their purchase of the brand's product, recommends the brand to others and stick to the brand despite competition from another brand (Ismaeel et al., 2023). The retail sub sector has faced some challenges since undergoing a year of decent changes and modifications triggered mostly by factors including the increase in income levels, the creep of urbanization and the arrival of the international brands (Aburumman, & Nieto, 2019). Nevertheless, continuous competition among retailers emerged, requiring all brands to have the same strategies – differentiate themselves and share mutual loyalty with the customer base. Gaining loyalty for a brand in a retail setting is difficult due to the fact that consumers tend to be diverse, at the same time they are significantly influenced by culture and subsequently are mostly affected by rapidly changing market trends. have always been very choosy and value-aware trying to find not only the products and services of high quality but also the brands delivering the experiences and feelings that can be considered unique and even emotional (Shaqrah, et al., 2023). Traditional marketing tactics, therefore, no longer suffice for retail brands in Amazon stores, which should instead establish a new innovative marketing approach which is engaging enough to reach (and attract) their target customer's base. Social media marketing has become a way by means in this direction, allowing retailers to interact with customers, build the emotional links and develop brand loyalty which could lead to customer's pursuing the retailer's brand. According to earlier studies, high-level customer engagement is a major player in brand loyalty formation in retail (Samarah, et al., 2022). Through the process of enriching customer's cognitive, emotional, behavioral, social and transactional engagement with the brand, retailers can create a sense of belonging and in turn build an emotional relationship and loyalty. Undeniably, social media marketing effectiveness is the missing link between customer engagement dimensions and brand fondness for retail brands in Amazon stores; this topic needs to be further researched. This research is aimed to fill in the gap and give readers with important observations that will highlight how retailers can benefit from social media marketing to harvest strong end-of-the-day customer engagement to maintain brand loyalty among the numerous and increasingly competitive trading players.

## *2.3 Customer Engagement*

Customer engagement exists in multiple dimensions, from the narrow ones that describe how clients deal and connect with the brand, to the wide ones that accommodate all the interactions in which the customer management encounters. Thus, building this comprehensive model takes into consideration the fact that the target audience can interact with a business on different levels of engagement as well as through a variety of communication channels. The intellectual and rational level of the cognitive engagement dimension consists of the mental investments and comprehension of the customer as related to the brand activities, presenting customers' intellectual and rational ties to the brand. It is run through different actions like considerations, acquisitions, pricing and branding. Psychology is the customer involvement that provides the connection between brand and on the other hand emotional engagement involves feelings, affective reactions and emotional relations with the brand (Lim, et al., 2022; Zraqat, 2019). The emotional dimension of the brand aggravates the emotions like joy, excitement, pride, disappointment or irritation based on the in-brand experience depth of the emotional ties formed. In the behavioral involvement dimension, consumers are taking part in the brand interactions, co-creating value I added to the brand, and finally the engagement. It serves as a link between the brand, consciously or unconsciously, to be a companion through their physical and tangible involvement such as purchasing, commenting, sharing, and even collaborating in creation of content or experiences of the brand. The engagement of users with the brand is developed by their connections, interactions, and experiences in social groups and business communities (de Oliveira Santini, et al., 2020; Barari, et al., 2021). This dimension directly serves the spread of social relations and interactions of customers with each other or brand advocates, which enables the sense of belonging and social identity to exist. To complete, the cross-border engagement dimension will be the one which subsumes customers' purchases (alimentering the economy), resource distribution, financial obligations attached to the good (Prentice, et al., 2019). There stands for the income customers get for their involvement as they buy, or subscribe, attend the event, or enroll in loyalty programs. Because of this holistic approach to the research and practice, the

stakeholders can get an overall perspective about the multiple channels in which the customers engage with brands, therefore the development of some effective plans can be realized. Also, recognizing multiple sides of customer engagement enables analysis of the impact of this construct on dimensions like brand loyalty as well as investigation of the potential of social media marketing effectiveness as a mediating factor between the relationship of the customer engagement with brand loyalty (Ismail, 2017; Islam, et al., 2019).

#### *2.4 Social Media Marketing Effectiveness*

In the era of digital transformation, social media has emerged as a powerful marketing channel, enabling businesses to connect with their target audiences, build brand awareness, and foster customer engagement. Though the facts are solid that social media is the center stage of buyers' purchase, it is not sufficient to be on these platforms but having effective social media marketing strategies is important. Social media marketing effectiveness refers to the opportunity to acquire brand goals through social media marketing activities like brand awareness improvement, customer engagement increase, website traffic drive and ultimately, achieve sales and revenue generation targets (Maria, et al., 2019). Excellent social media marketing approaches focus on such traits as creation of catchy and relevant content, interaction with the audiences with care, and the power-making use of the social networks and influencers. Assessing social media marketing success is a complex process that involves many ways of measuring it by considering metrics and indicators such as the number of likes or shares and beyond (Aydin, 2020; Matalaka et al., 2024). Here is an illustrative list which may include social media reach and impressions, posts engagement (likes, shares, comments), website traffic from social media channels, classified leads generation, sales conversion rates, and the return investment (ROI) from social media marketing. On the other hand, social media impact assessment also deals with non-quantitative factors such as brand sentiment, customer advocacy and the capacity to develop true customer's relationships through genuine engagement between clients and the firm (Shareef, et al., 2019). Even social media marketing, if well-coordinated, can bring together the customers, create emotions and loyalty in them. As social media marketing effectiveness is expected to play out as the mediator role in the association between the behavioral dimensions of customer engagement and brand loyalty (Social media marketing effectiveness has been posited as the mediator factor in the relationship between customer engagement dimensions and brand loyalty (Ebrahim, 2020), the purpose of the research study has been determined. Through targeted social media marketing, retail organizations can stimulate customer thinking, feeling, as well as responses, encouraging the consumer to be socially connected with the brand leading to the organic build-up of consumer loyalty. Thus, with social media marketing being an important instrument for improving e-commerce retailing, using it in a right manner increases several effective ways in which customers can be engaged and brand loyalty developed in the current competitive retail market environment (Moustakas, et al., 2020).

### **3. Hypothesis Development**

#### *3.1 Customer Engagement and Brand Loyalty*

The influence of consumer engagement on the development of brand loyalty has become a prominent topic of interest in business literature with many studies spotlighting a positive impact of the former on the latter (Ting, et al., 2021; Tuti, & Sulistia, 2022). However, this investigation is relevant since the complexity of consumer engagement is multifactorial and all sub factors (dimensions) should be considered for the purpose of the research. Cognitive engagement, referring to the comfortable process, which a customer experiences while striving to identify them with a brand, is the key factor in the process of the formation of favorable opinions and ideas about a brand. (Li, et al., 2020). Those customers whose interaction is cognitively stimulating are more likely to develop a more profound comprehension and affinity towards the brand, increasing the brand loyalty. Therefore, it is hypothesized that:

**H<sub>1a</sub>:** *Cognitive engagement significantly influences brand loyalty.*

Further, the emotional bonding with the brand such as balancing customer's feelings, interests, and preference contributes to brand loyalty (Helme-Guizon, & Magnoni, 2019; Shin, & Back, 2020). If a customer develops an impassioned attachment to a specific brand, he or she is likely to be long-term, loyal, and less vulnerable to switching to competitors. Hence, it is hypothesized that:

**H<sub>1b</sub>:** *Emotional engagement significantly influences brand loyalty.*

Behavioural engagement, that is a customers' active advance and interactions with the brand, is one of the vital ones in driving brand loyalty (Quoquab, et al., 2021; Mostafa, & Kasamani, 2021). Brand experience and brand loyalty: is it a matter of emotions?). The customer base often stays loyal to a brand that can actively engage with it by buying, sharing or even contributing to content, and develops a feeling of belongingness which makes them more committed. Therefore, it is hypothesized that:

**H<sub>1c</sub>:** *Behavioral engagement significantly influences brand loyalty.*

Social engagement via social media and brand communities or any other networks make a critical contribution to consumer relations. Social networking platforms socially engage with clients and influence brand loyalty by creating a community for the brand (Helme-Guizon, & Magnoni, 2019). Those consumers who perceive their involvement with other brand fans as companionship and identify with a brand community have a higher tendency to remain loyal and to bring their friends to it. Hence, it is hypothesized that:

**H<sub>1d</sub>:** *Social engagement significantly influences brand loyalty.*

Finally, transactional engagement, in which customers interact with brands on the economic basis and tangible assets exchange, is mentioned as a part of brand loyalty (Jayasingh, 2019; Ting, et al., 2021). Those customers who already have invested finances in the brand will often stay committed to the brand in order to regain their initial investments or to double all the profit gained from remaining connected with the brand. Therefore, it is hypothesized that:

**H<sub>1e</sub>:** *Transactional engagement significantly influences brand loyalty.*

### 3.2 Customer Engagement and Social Media Marketing Effectiveness

This ultimately means that the extent of customer engagement brands can get determines the effectiveness of their social media marketing strategies (Ismail, 2017; Hollebeek, 2019). The fact that nowadays, the customers interact with brands across different platforms brings about the chance for the marketing campaigns on social media to reach the target audience and hence, achieve the desired result. Therefore, the issue of whether there are some core dimensions of customer engagement needed to achieve the optimum effects of the social media marketing campaigns should be explored. Interactive media causes the consumer to engage mentally with brands' activities, making the impact of social media marketing stronger (Shawky, et al., 2019). When a customer is engaged with a brand, then he can process and internalize brand messages, which in turn will lead to customers' brand awareness and engagement metrics on platforms such as social media and so on. Therefore, it is hypothesized that:

**H<sub>2a</sub>:** *Cognitive engagement significantly influences social media marketing effectiveness.*

Emotional engagement has also proved to be one of the most important factors that contribute highly to the success of these campaigns (Dolan, et al., 2019; Schreiner, et al., 2021). In most cases, people who are emotionally interested in the brand content are prone to respond with other people on social media sites to participate actively in discussions and also share the brand content. This implies that social media marketing efforts will be much more effective than they would be without the active participation of emotionally engaged customers. Hence, it is hypothesized that:

**H<sub>2b</sub>:** *Emotional engagement significantly influences social media marketing effectiveness.*

Behavioral engagement characterizing customer's involvement and intercourse with the brand is one of the key elements in making the social media advertising work effectively (Dwivedi, 2015; Hollebeek et al., 2019) Consumers that are behaviorally engaged are more likely to interact with brand content, promote experiences, and become co-creators which can be paid off through indexes of social media and in the end, conversions and sales. Therefore, it is hypothesized that:

**H<sub>2c</sub>:** *Behavioral engagement significantly influences social media marketing effectiveness.*

This social engagement reveals customers' network, communities or brand interactions that can help the impacts of brands in social media marketing as social media can be amplified (Cao, et al., 2021; Schreiner, et al., 2021). Social media creates a buzz when customers become socially activated and share content and personal experiences within their private circles. This paves the way for wider reach and enhancement of the credibility of the company through the activities of their customers. Hence, it is hypothesized that:

**H<sub>2d</sub>:** *Social engagement significantly influences social media marketing effectiveness.*

Lastly, transactional engagement, which includes customers' economic investments and other forms of resources exchanges with the brand may also be a very significant element of effective social media marketing strategies (Moliner-Tena, et al., 2019). Transactionally linked customers will likely answer to promotional messages, take part in incentive programs and make purchases through social media channels, and so on, and this will lead to achieving the measurable outcome numbers of social marketing campaigns. Therefore, it is hypothesized that:

**H<sub>2e</sub>:** *Transactional engagement significantly influences social media marketing effectiveness.*

### 3.3 Social Media Marketing Effectiveness and Brand Loyalty

In the contemporary era, social media has been developing as a major advertising tool that can help brands to connect with customers, create bonding and show reciprocity (Almohaimmed, 2019; Ebrahim, 2020). Nevertheless, it is the efficacy of the social media marketing campaigns that decides the marketing impact of the social media marketing practices on brand

loyalty. With the employing of effective social media marketing strategies, organizations can strongly boost customer engagement, conceive the brand experience which is compelling and in turn develop the lasting brand loyalty through the customer base. Successful social media marketing campaigns bring a considerable rise in brand awareness and visibility to the level that consumers' allegiance to the brand is achieved based on this precursor (Puspaningrum, 2020). As a user becomes enlightened and fills in with a brand through social media platforms, he is also likely to get positive attitudes and preferences that would in the end build customer loyalty. Therefore, it is hypothesized that:

**H3:** *Social media marketing effectiveness significantly influences brand loyalty.*

### *3.4 Social Media Marketing Effectiveness as a Mediator*

On the one hand, previous studies have focused on the links between customer engagement dimensions and brand loyalty, as well as the role played by social media marketing effectiveness on brand loyalty in such relationships. However, the contribution of social media marketing effectiveness to the relationship between customer engagement and brand loyalty is still unclear. Prior research has shown that customer engagement components such as involvement, perceived value, brand associations, and brand meaning are among the important determinants of brand loyalty (Ardiansyah, & Sarwoko, 2020; Koay, et al., 2020). But on the other hand, it is argued that marketing effectiveness through social media may be a synergy that can strengthen the impact on customer engagement on loyalty. Captivating social media campaigns spearheaded by businesses allow them to reinforce and maintain the cognitive, emotional, behavioral, and social dimensions of a customer's brand, ultimately propelling brand loyalty. Therefore, it is hypothesized that: It is brought forward again that the communication effectiveness of social media could be considered an intermediary which attains the conversion of the customer engagement into brand loyalty (Chen, & Lin, 2019). Through social media promotion, brands would come to hold control over public opinion and transform the sentiment of loyal buyers into making their loyalty last. On the other hand, cognitive engagement can be enhanced by interesting social media content as well as interactive campaigns and hence it helps in building brand commitment (Ibrahim, et al., 2021). Emotional touchpoints also can be created in social media channels by emotional social message which builds emotional connection (Garg, et al., 2020) which in turn drives attachment and loyalty of the brand. Social media marketing, which is an effective tool for behavioral engagement can also be employed to provide interactive platforms for discussions, co-creation, and exchange of values which, in turn, promote creation of loyalty (Hanaysha, 2022). Additionally, companies can boost social interactions via establishing brand sharing and using social networks like Facebook that in turn will lead to retention and brand advocacy (Almohaimmed, 2019). Therefore, it is hypothesized that:

**H4a:** *Social media marketing effectiveness mediates the relationship between cognitive engagement and brand loyalty.*

**H4b:** *Social media marketing effectiveness mediates the relationship between emotional engagement and brand loyalty.*

**H4c:** *Social media marketing effectiveness mediates the relationship between behavioral engagement and brand loyalty.*

**H14d:** *Social media marketing effectiveness mediates the relationship between social engagement and brand loyalty.*

**H4e:** *Social media marketing effectiveness mediates the relationship between transactional engagement and brand loyalty.*

## **4. Research Model**

The model proposed for research represented in Figure 1 is drawn on these concepts as it incorporates both Customer Engagement Theory and the Stimulus-Organism-Response (S-O-R) Model. The customer Engagement Theory suggests that the customer Engagement is a compound concept comprising cognitive, emotional, behavioral, social and transactional dimensions. These are the assumed dimensions that motivate consumers to be brand loyal to the S-O-R Model to take effect. Thus, the model is S-O-R Extended Customer Engagement model, where the social media marketing effectiveness appears as a mediating variable that stands for the obligatory organism. Now, the reason behind this is that dimensions of customer engagement (stimulus) were thought of as the factors increasing effectiveness of social media marketing (organism), which ultimately has an impact on brand loyalty (response). The building of the hypothesis may be done on a trial-and-error basis exploring the direct effects of the dimensions of customer engagement on brand loyalty (H1a-H1e) and the efficacy of social media marketing (H2a-H2e). Moreover, the model tests the direct link of social media marketing effectiveness on the followers' brand loyalty (H3) and the model is also mediation in relations between dimensions of client engagement and brand loyalty (H4a-H4e).

## **5. Research Methodology**

The study is a quantitative research design, an experiment where a questionnaire is utilized to identify social media marketing mediation effects on customer engagement and brand loyalty within Amazon as a retail brand store. The quantitative study prefers the testing of hypotheses and the analysis of the relationship between the variables. for singular variables under study (Algharabat et al. 2020; Köfterlioğlu & Öztürk 2020). The target consumers here for this study are those consumers who

follow and engage with Amazon stores over social media platforms. There will be a mixture of thresholding and snowball techniques to take where used to choose the participants. Purposive sampling is the method to be employed in data collection on the condition that the participants should be fitting the criteria of purchasing and communicating with retail brands on social media, while snowball sampling makes use of personal networks and word-of-mouth to broaden the sample (Jesuthasan, et al., 2020). In the calculation of the sample size, based on the recommended guidelines for Partial Least Squares Structural Equation Modeling (PLS-SEM) analysis, was used. (Hair et al., 2019).

### Customer Engagement

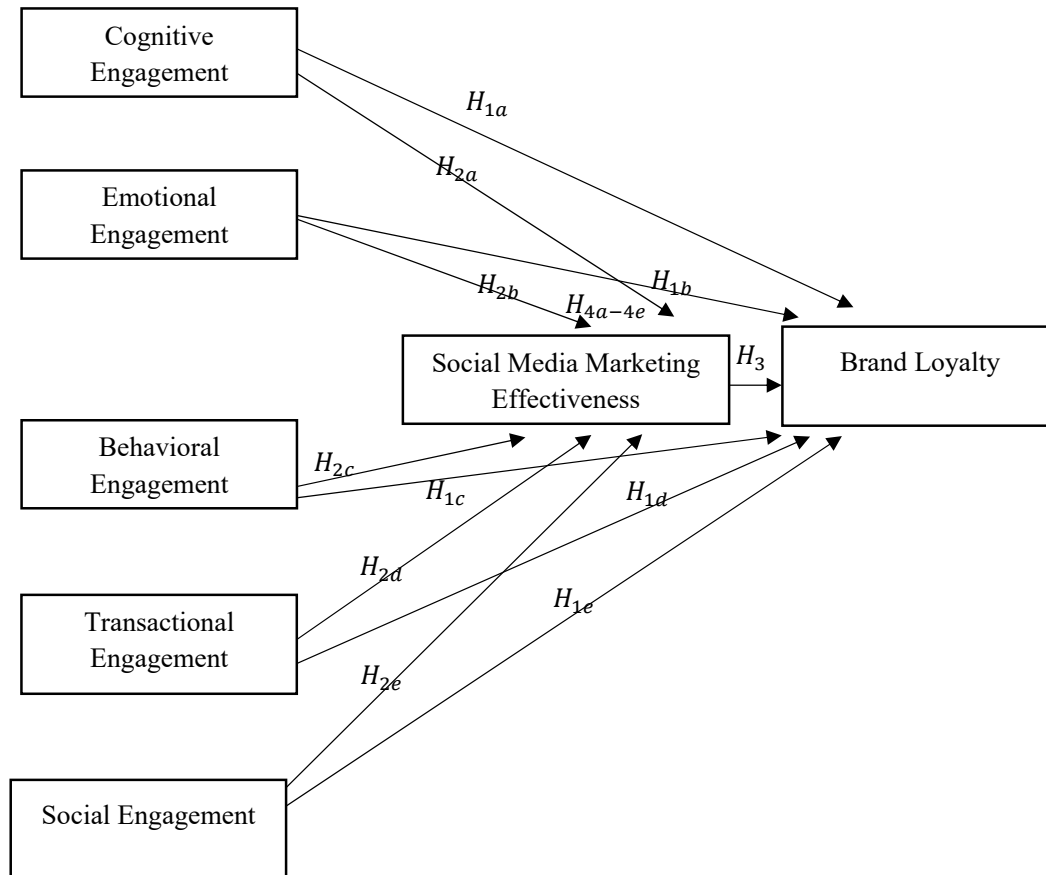


Fig. 1. Research Model

Based on 320 consumers who follow and interact regularly with shopping brands on social networks, which is 10 times higher than the number of formative indicators or structural paths that are leading to a construct, a minimum sample size is recommended, but the number is better increased to guarantee statistical power and to increase generalizability of the study findings (Clayson et al., 2019). The survey adopted a multi-items scale adapted from previous studies, however, modified to fit Amazon stores for retail brands. The customer engagement dimensions (behavioral engagement (BE), social engagement (SE), emotional engagement (EE), cognitive, and behavioral engagement (CE)) were measured using scales from Hollebeek et al. (2019) and Vivek et al. (2012), which have been widely used and validated in the current research area. Brand loyalty (BL) as demonstrated by customers' agreement with the items of Ismail (2017) and Islam and Rahman (2017) and social media marketing (SME) as measured by the scales from Köfterlioğlu and Öztürk (2020) and Godey et al. (2016). Questionnaire was devised in both English and Arabic to increase an accessibility level and to have a better understanding for participants. Survey answers derived from the use of the online surveys sent out on social media platforms, January 2024-February 2024. Social media is now the most preferred communication means as reflected in stated literature. Thus, these channels are suitable given the social media engagement aim along with the high penetration levels (Ismail, 2017; Yeboah, et al., 2023). Respondents were given a brief overview of the study goals, they were reassured of the confidentiality of the data collected, and to be fully informed that all their participation was on a voluntary basis. Raw data was processed by a method known as the Partial Least Squares Structural Equation Modeling (PLS-SEM) with the help of the SmartPLS software. PLS-SEM is a technique that is regarded as a very powerful one and is well suited for analyzing models that are not simple with just one construct and with mediated relationships (Hair et al., 2019; Hollebeek et al., 2019). These investigations start with the determination of the construct validity and reliability. Then, they proceed with the structural model evaluation and the hypothesis testing.

## 6. Results and Discussion

### 6.1 Measurement Model: Validity and Reliability

Table 1 illustrates establishing the model assessment outcomes, which validates and certifies the measurements used in this study. Cronbach's alpha values range from 0.779 to 0.897, exceeding the recommended threshold of 0.7, indicating good internal consistency reliability (Hair et al., 2019). Composite reliability values ( $\rho_a$  and  $\rho_c$ ) also exceed the 0.7 threshold, further confirming the reliability of the constructs (Algharabat et al., 2020; Ismail, 2017). The level of acceptable average partial variance extracted (AVE) is deemed adequate ranging from 0.554 to 0.735 and most types of constructs exceed the 0.5 level, while only a few underperform showing adequate convergent validity (Hair et al., 2019). Yet, the AVE (brand sentiment) still lies below the threshold of attention (emotional engagement), a topic that could be expanded on in further studies. The factor loading, which is the entity of correlation degree between every item and its relevant construct, should be usually over 0.7, noting that this very level evidence that measurement item reliability (Islam & Rahman 2017). To a small extent (BE4, EE2 and EE4) lower their loading but is still within the threshold above 0.6 (Hollebeek et al., 2019). These findings indicate that the latent constructs in the measurement model show good validity and reliability, which is needed for the next step of the input structural model analysis and hypothesis testing.

**Table 1**  
Measurement Model

|                                 | Factor Loadings | Cronbach's alpha | Composite reliability ( $\rho_a$ ) | Composite reliability ( $\rho_c$ ) | Average variance extracted (AVE) |
|---------------------------------|-----------------|------------------|------------------------------------|------------------------------------|----------------------------------|
| <b>Behavioral Engagement</b>    |                 | <b>0.896</b>     | <b>0.910</b>                       | <b>0.921</b>                       | <b>0.662</b>                     |
| BE1                             | 0.838           |                  |                                    |                                    |                                  |
| BE2                             | 0.843           |                  |                                    |                                    |                                  |
| BE3                             | 0.886           |                  |                                    |                                    |                                  |
| BE4                             | 0.627           |                  |                                    |                                    |                                  |
| BE5                             | 0.825           |                  |                                    |                                    |                                  |
| BE6                             | 0.838           |                  |                                    |                                    |                                  |
| <b>Brand Loyalty</b>            |                 | <b>0.891</b>     | <b>0.896</b>                       | <b>0.920</b>                       | <b>0.698</b>                     |
| BL1                             | 0.771           |                  |                                    |                                    |                                  |
| BL2                             | 0.892           |                  |                                    |                                    |                                  |
| BL3                             | 0.876           |                  |                                    |                                    |                                  |
| BL4                             | 0.834           |                  |                                    |                                    |                                  |
| BL5                             | 0.797           |                  |                                    |                                    |                                  |
| <b>Cognitive Engagement</b>     |                 | <b>0.820</b>     | <b>0.833</b>                       | <b>0.893</b>                       | <b>0.735</b>                     |
| CE1                             | 0.816           |                  |                                    |                                    |                                  |
| CE2                             | 0.875           |                  |                                    |                                    |                                  |
| CE3                             | 0.880           |                  |                                    |                                    |                                  |
| <b>Emotional Engagement</b>     |                 | <b>0.779</b>     | <b>0.857</b>                       | <b>0.832</b>                       | <b>0.554</b>                     |
| EE1                             | 0.756           |                  |                                    |                                    |                                  |
| EE2                             | 0.721           |                  |                                    |                                    |                                  |
| EE3                             | 0.789           |                  |                                    |                                    |                                  |
| EE4                             | 0.707           |                  |                                    |                                    |                                  |
| <b>Social Engagement</b>        |                 | <b>0.832</b>     | <b>0.851</b>                       | <b>0.885</b>                       | <b>0.658</b>                     |
| SE1                             | 0.744           |                  |                                    |                                    |                                  |
| SE2                             | 0.837           |                  |                                    |                                    |                                  |
| SE3                             | 0.861           |                  |                                    |                                    |                                  |
| SE4                             | 0.797           |                  |                                    |                                    |                                  |
| <b>Social Media Marketing</b>   |                 | <b>0.897</b>     | <b>0.910</b>                       | <b>0.922</b>                       | <b>0.664</b>                     |
| SME1                            | 0.833           |                  |                                    |                                    |                                  |
| SME2                            | 0.868           |                  |                                    |                                    |                                  |
| SME3                            | 0.886           |                  |                                    |                                    |                                  |
| SME4                            | 0.833           |                  |                                    |                                    |                                  |
| SME5                            | 0.770           |                  |                                    |                                    |                                  |
| SME6                            | 0.782           |                  |                                    |                                    |                                  |
| <b>Transactional Engagement</b> |                 | <b>0.797</b>     | <b>0.999</b>                       | <b>0.841</b>                       | <b>0.571</b>                     |
| TE1                             | 0.836           |                  |                                    |                                    |                                  |
| TE2                             | 0.824           |                  |                                    |                                    |                                  |
| TE3                             | 0.791           |                  |                                    |                                    |                                  |
| TE4                             | 0.756           |                  |                                    |                                    |                                  |

### 6.2 Discriminant Validity

Table 2 and Table 3 present the results of discriminant validity, confirming that the constructs of a model are different and measure distinct concepts (Hair et al., 2019). Table 2. establishes the thresholds for the Heterotrait-Monotrait Ratio (HTMT) values. This ratio should be less than 0.85 and 0.90 to obtain the discriminant validity. (Henseler et al., 2015; Ismail, 2017). The number in all rows is under 0.85 which tells us that the factors are different and tap different concepts. As Table 3 (the Fornell-Larcker criterion) suggests, the square root of AVE (values in the diagonal) should be greater than the correlations



among factors (off-diagonal values) (Islam, & Rahman, 2017). The finding shows that this requirement is five for the C plus D, to be exact, thus it is also further evidence of discrimination validity. The results point out that the constructs in the measurement model are different and measure a particular area of the empirical premise, which is vital for drawing meaningful conclusions from the structural model analysis. (Here we should be accustomed to the assessment made by Hollebeek et al., (2019). Through establishing a control evidence, researchers can be assured that the relationships inside the standard model are not because of the reasons to live off any of such constructs beside of the dominant ones but rather reflect different model-based relation (Vivek et al., 2012; Hair et al., 2019).

**Table 2**  
Heterotrait-Monotrait Ratio Discriminant Validity

|     | BE    | BL    | CE    | EE    | SE    | SME   | TE |
|-----|-------|-------|-------|-------|-------|-------|----|
| BE  |       |       |       |       |       |       |    |
| BL  | 0.649 |       |       |       |       |       |    |
| CE  | 0.679 | 0.739 |       |       |       |       |    |
| EE  | 0.709 | 0.704 | 0.613 |       |       |       |    |
| SE  | 0.635 | 0.811 | 0.774 | 0.706 |       |       |    |
| SME | 0.530 | 0.846 | 0.658 | 0.580 | 0.786 |       |    |
| TE  | 0.617 | 0.722 | 0.507 | 0.786 | 0.584 | 0.502 |    |

**Table 3**  
Fornell-Lacker Criterion Discriminant Validity

|     | BE           | BL           | CE           | EE           | SE           | SME          | TE           |
|-----|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| BE  | <b>0.814</b> |              |              |              |              |              |              |
| BL  | 0.583        | <b>0.835</b> |              |              |              |              |              |
| CE  | 0.580        | 0.634        | <b>0.857</b> |              |              |              |              |
| EE  | 0.614        | 0.638        | 0.538        | <b>0.744</b> |              |              |              |
| SE  | 0.692        | 0.523        | 0.645        | 0.638        | <b>0.811</b> |              |              |
| SME | 0.489        | 0.563        | 0.577        | 0.582        | 0.651        | <b>0.815</b> |              |
| TE  | 0.563        | 0.579        | 0.489        | 0.610        | 0.567        | 0.550        | <b>0.756</b> |

### 6.3 Common Method Bias

As is illustrated in Table 4, the table below shows the results from Common Method Bias (CMB) assessment, which helps evaluate the degree to which the data might be affected because of measurement error that is systematic and generated through a single data collection method (Kock, 2015). The table contains the results of an exploratory factor analysis. The first factor, which carries 49.331% of the total variance, is below the threshold recommended by some researchers (Fuller et al., 2016; Hollebeek et al., 2019). This implies that questionnaire bias is the major one in the presented research and that common method bias is not an issue. Moreover, no main common element shows that is responsible for the variance among the measures, instead it indicates the lack of any significant country marketing basis (Hair et al., 2019). As these findings strengthen the trustworthiness of the results and the validity of the interpretations of the structural model, it points to the reliability of the structural model analysis.

**Table 4**  
Common Method Bias

| Component | Initial Eigenvalues |               |              | Extraction Sums of Squared Loadings |               |              | Rotation Sums of Squared Loadings |               |              |
|-----------|---------------------|---------------|--------------|-------------------------------------|---------------|--------------|-----------------------------------|---------------|--------------|
|           | Total               | % of Variance | Cumulative % | Total                               | % of Variance | Cumulative % | Total                             | % of Variance | Cumulative % |
| 1         | 17.266              | 49.331        | 49.331       | 17.266                              | 49.331        | 49.331       | 6.402                             | 18.292        | 18.292       |
| 2         | 3.111               | 8.889         | 58.220       | 3.111                               | 8.889         | 58.220       | 5.450                             | 15.571        | 33.863       |
| 3         | 1.481               | 4.231         | 62.452       | 1.481                               | 4.231         | 62.452       | 4.951                             | 14.144        | 48.008       |
| 4         | 1.247               | 3.563         | 66.015       | 1.247                               | 3.563         | 66.015       | 2.951                             | 8.431         | 56.439       |
| 5         | 1.033               | 2.951         | 68.966       | 1.033                               | 2.951         | 68.966       | 2.929                             | 8.369         | 64.808       |
| 6         | .769                | 2.198         | 71.163       | .769                                | 2.198         | 71.163       | 1.856                             | 5.303         | 70.110       |
| 7         | .741                | 2.116         | 73.279       | .741                                | 2.116         | 73.279       | 1.109                             | 3.169         | 73.279       |

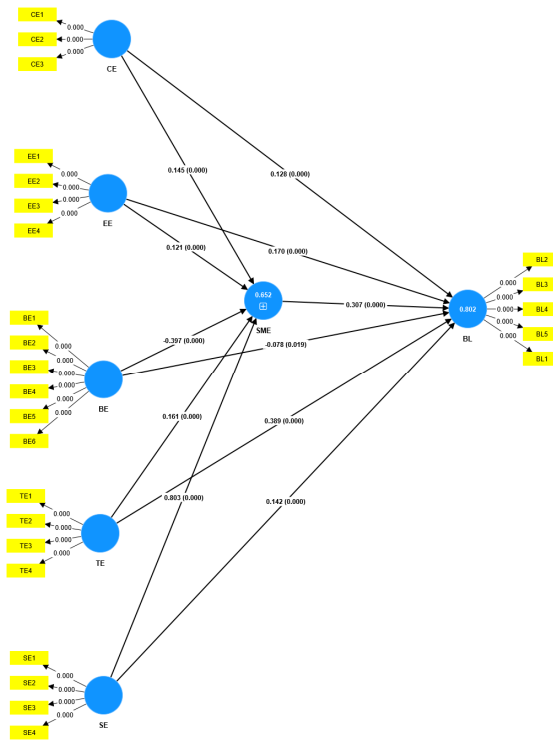
### 6.4 Structural Model and Hypotheses Testing

Table 5 and Fig. 2 present the results of the structural model analysis and hypothesis testing. These results provide insights into the relationships between customer engagement dimensions, social media marketing effectiveness, and brand loyalty. Hypotheses H1a to H1e examine the direct effects of customer engagement dimensions on brand loyalty. The results show that cognitive engagement ( $\beta = 0.128$ ,  $p < 0.001$ ), emotional engagement ( $\beta = 0.170$ ,  $p < 0.001$ ), transactional engagement ( $\beta = 0.389$ ,  $p < 0.001$ ), and social engagement ( $\beta = 0.142$ ,  $p < 0.001$ ) have significant positive effects on brand loyalty, supporting H1a, H1b, H1d, and H1e. However, behavioral engagement ( $\beta = -0.078$ ,  $p < 0.05$ ) has a significant negative effect on brand loyalty, which supports H1c but contradicts the expected positive relationship (Islam & Rahman, 2017; Vivek et al., 2012). Hypotheses H2a to H2e examine the effects of customer engagement dimensions on social media marketing effectiveness. The results indicate that cognitive engagement ( $\beta = 0.145$ ,  $p < 0.001$ ), emotional engagement ( $\beta = 0.121$ ,  $p < 0.001$ ),

transactional engagement ( $\beta = 0.161, p < 0.001$ ), and social engagement ( $\beta = 0.803, p < 0.001$ ) have significant positive effects on social media marketing effectiveness, supporting H2a, H2b, H2d, and H2e. Interestingly, behavioral engagement ( $\beta = -0.397, p < 0.001$ ) has a significant negative effect on social media marketing effectiveness, contradicting the expected positive relationship and supporting H2c (Hollebeek et al., 2019). Hypothesis H3 examines the direct effect of social media marketing effectiveness on brand loyalty. The results show a significant positive effect ( $\beta = 0.307, p < 0.001$ ), supporting H3 and indicating that effective social media marketing strategies can enhance brand loyalty (Ismail, 2017).

**Table 5**  
Structural Path Coefficient Results

| Hypothesis | Path Analysis | Beta Value | STDEV | T statistics | P-values | Conclusion |
|------------|---------------|------------|-------|--------------|----------|------------|
| H1a        | CE → BL       | 0.128      | 0.027 | 4.731        | 0.000    | Supported  |
| H1b        | EE → BL       | 0.170      | 0.028 | 6.176        | 0.000    | Supported  |
| H1c        | BE → BL       | -0.078     | 0.033 | 2.341        | 0.019    | Supported  |
| H1d        | TE → BL       | 0.389      | 0.024 | 16.058       | 0.000    | Supported  |
| H1e        | SE → BL       | 0.142      | 0.041 | 3.495        | 0.000    | Supported  |
| H2a        | CE → SME      | 0.145      | 0.032 | 4.48         | 0.000    | Supported  |
| H2b        | EE → SME      | 0.121      | 0.032 | 3.805        | 0.000    | Supported  |
| H2c        | BE → SME      | -0.397     | 0.047 | 8.488        | 0.000    | Supported  |
| H2d        | TE → SME      | 0.161      | 0.035 | 4.623        | 0.000    | Supported  |
| H2e        | SE → SME      | 0.803      | 0.041 | 19.741       | 0.000    | Supported  |
| H3         | SME → BL      | 0.307      | 0.029 | 10.699       | 0.000    | Supported  |



**Fig. 2.** Graphical Structural Path Coefficient Results

Table 6 presented the mediation indirect results. The Hypothesis H4a (Cognitive Engagement → Social Media Marketing Effectiveness → Brand Loyalty) addresses the connection of the consumer with the brand and the engagement of them with the brand. Indirect influence ( $\beta = 0.045$ ) is positive and significant ( $p < 0.001$ ). It signifies that intermediary between cognitive engagement and brand loyalty relies on social media marketing effectiveness. Therefore, it has been found out that social media marketing helps marketers to develop a loyal consumer base when they brainstorm over their strategies while engaging cognitive ability, which proves our hypothesis. This is in strategic accordance with past studies (Hollebeek et al., 2019) which contend on the significance of cognition and social marketing for better brand loyalty. H4b (Emotional Engagement: Social Media Marketing Effectiveness → Brand Loyalty). The indirect effect ( $\beta = 0.037$ ) is a significant one, ( $p < 0.001$ ) combined with a positive sign, thus signifying that a social media marketing campaign mediates the relationship between emotional engagement and brand loyalty. This result shows that the consumers who are emotionally engaged with the brand also display higher levels of loyalty to the brand and can view this as a mediating role of marketing strategy in effect via social media marketing, which supports the hypothesis. This follows the trend in the previous studies that acknowledge the importance of customer’s emotional connection and digital marketing in brand loyalty building. Hypothesis H4c (this per se encourages the

efficiency of social media marketing and consequently persuades brand loyalty) is the 4th hypothesis. The mediating effect ( $\beta = -0.122$ ) is negative and statistically meaningful, which suggests that between consumer behavior and brand loyalty the effectiveness of social media marketing lies. Nevertheless, the value of the effectiveness of social media marketing is in the opposite way with the expected positive relationship, indicating that the behavioral engagement is negatively influenced to the brand loyalty through the mediator function of the social media marketing effectiveness. These findings should be followed up with more concerted efforts in subsequent research endeavors. Hypothesis H4d (Transactional Engagement  $\rightarrow$  Social Media Marketing Effectiveness  $\rightarrow$  Brand loyalty). Indirect ( $\beta = 0.05$ ) values turn out to be positive and significant ( $p < 0.001$ ) showing mediated influence between social media marketing effects and transactional engagement. In this way, transactional engagement plays a role, through a mediating effect of effective social media marketing strategies, that finds in this hypothesis that this indicates that the brand loyalty is influenced positively. This observation conforms to the studies done by experts (Islam & Rahman, 2017) which stresses the central role of conversational interface and social media marketing in the cultivation of brand loyalty. Hypothesis H4e (Engagement in Social Communication  $\rightarrow$  Marketing Effectiveness in Social Media  $\rightarrow$  Brand Loyalty). Social media marketing effectiveness (indirect effect,  $\beta = 0.247$ ) is positive and significantly significant ( $t < 0.001$ ), which means social engagement indirectly influences brand loyalty by social media marketing effectiveness. The result suggests social communication has a role in building customer loyalty via the moderating mechanism of social media marketing and validating the hypothesis. Besides, the preceding studies (Hollebeek et al 2019, Vivek et al 2012) revealed the role of social networking and social media marketing in the development of customer loyalty.

**Table 6**  
Mediation Using Indirect Results

| Hypothesis | Path Analysis                         | Beta Value | STDEV | T statistics | P-values | Conclusion |
|------------|---------------------------------------|------------|-------|--------------|----------|------------|
| H4a        | CE $\rightarrow$ SME $\rightarrow$ BL | 0.045      | 0.011 | 4.139        | 0.000    | Supported  |
| H4b        | EE $\rightarrow$ SME $\rightarrow$ BL | 0.037      | 0.011 | 3.356        | 0.001    | Supported  |
| H4c        | BE $\rightarrow$ SME $\rightarrow$ BL | -0.122     | 0.018 | 6.619        | 0.000    | Supported  |
| H4d        | TE $\rightarrow$ SME $\rightarrow$ BL | 0.05       | 0.012 | 4.291        | 0.000    | Supported  |
| H4e        | SE $\rightarrow$ SME $\rightarrow$ BL | 0.247      | 0.025 | 9.773        | 0.000    | Supported  |

## 7. Discussion

Considering the outcomes summarized in Table 5 highlighted the intertwined nature of customer engagement dimensions and social media marketing efficacy to brand loyalty enhancement. These outcomes are helpful towards the larger existing knowledge base and become relevant in the areas of theoretical and practical perspectives also. Engagement of cognitive and emotional sides, transactional relations, and social connections that were found by Hollebeek et al. (2019) and Vivek et al. (2012) match with the previous research (Hollebeek et al., 2019; Vivek et al., 2012). This evidence is additional agitation to the need of engaging multiple dimensions of customers in a bid to improve brand loyalty and customer fulfillment in the long run. To be able to realize all that cognitive-emotional, transactional and social bonding with a customer, brands can build strong customer loyalty and these same may differentiate themselves. On the contrary, cognitive involvement, which is the opposite of behavioral engagement, was found to lower brand loyalty that conflicts with the speculated positive relationship. Surprisingly, it seems that the showing of repeating the behavior and communicating with branders do not necessarily result in being loyal to the brand, but the better way involves how you or your brand act toward customers (Islam & Rahman, 2017). It shows where the risks of engaging the audience just for behavioral occurrence by using engagement metrics lie and identifies more genuine brand loyalty to be built by considering the role of behavioral engagement. Concerning the impact of engagement dimensions on social media marketing effectiveness, we also observed positive relations at the end of our study between cognitive engagement, emotional engagement, transactional engagement, and social engagement separately. That is rational to be in line with the existing studies. This again points to the fact that all possible means of customer engagement need to be exploited that in turn will increase the efficiency of the social media marketing strategies. Building cognitive, social, transactional, and social alignment with customers of all social media platforms will give rise to more positive influence and business performance of social media marketing initiatives. The reality that the association between behavioral involvement and social media marketing effectiveness walks hand in hand to the study about the link between brand loyalty and behavioral involvement comes to mind. These findings imply that stimulating mental, emotional and social processes in social media does not appear to be simple behavioral activities by themselves are not responsible for the effectiveness of the marketing influence of social media platforms. Integration offers the way for a more complete perspective that investigates the interrelations between the several social media engagement types for the highest impact social media marketing (Hollebeek et al., 2019). The meta research shows that brand loyalty achieved through social media marketing remains relevant to the studies previously carried out (Ismail, 2017). This outcome shows the significance of building and executing successful social media marketing strategies to manage long-term brand loyalty. The brands that utilize social platforms the right way can really build a relationship with their customers and can increase their brand perception through this relationship. The mediating effect found regarding the customer cognitive engagement (H4a) suggests that this co-creating route may enhance brand loyalty among consumers by improving the efficacy of the social media marketing strategies as mediator (Hollebeek et al., 2019). This learning uncovers the necessity of the audience involving them mentally in the information campaign whereby they are informed about the trending issues, the discussions are made around the topic and knowledge is transferred among them through active social media platforms. Moreover; the mediating function of social media marketing effectiveness in the

interlink of emotional engagement and brand loyalty (H4b) represents the great value of social media in building emotional link between customers and a brand. Social media, acting as a platform that accentuates the emotional connections between brands and consumers, becomes a tool of strategic importance to the brand, amplifying the impact of their marketing initiatives, and consequently, loyalty to the brand. The fact that H4c mediated it negatively comes to the level of previous data regarding the direct effects on brand loyalty and social media marketing effectiveness. These results hence indicate that just the behavioral interactions on social media networks on their own without the emotional engagement, cognitive development or mental experience will not be viable and hence not helpful in strategic social media campaigns and advancement of brand loyalty (Islam & Rahman, 2017). This discovery brought to question the rigid concentration on behavioral metrics and required managers to explore the adoption of an integrated approach that would consider customer engagement more comprehensively. The domain of social media, where transactional engagement is concerned (H4d), stands out as a conduit connecting customers and brands. Therefore, the efficiency of creating brand loyalty via the social media marketing processes may be indirectly welcome via the effectiveness of transactional interactions between the customers and brands. This finding precisely demonstrates the significance of incorporating such capabilities as e-commerce and customer service into social media platforms that in turn brings in business customer retention. Also, the powerful mediating effects (H4e) which were seen for the social engagement close the need for the promoters which link consumers' interactions and connections on the social media platforms with them (Hollebeek et al., 2019, Vivek et al., 2012). Such brands can motivate steady social engagement that enables to increase the online popularity of market communications, which therefore will improve the level of brand loyalty.

## **8. Implication of the Study**

The results of this research are designed for the managers of the retail sector and marketing practitioners. Knowing how to deal with the complex ties between customer engagement dimensions, social media marketing efficiency, and brand loyalty is basic for designing powerful marketing endeavors. Managers need to stress cognitive, emotional, transactional as well as social involvement of users by the means of individually customized campaigns on social media. On the other hand, they must pay extra attention to not exaggerate the importance of behavioral engagement with the use of metrics, because in this case only frequent and repetitive behaviors may not produce good enough quality of brand loyalty or successful social networks marketing. This study aims at filling the gap in the existing literature by investigating the mediation channel of social media marketing effectiveness between customer engagement and brand loyalty. The study findings demonstrate the need to amend theories and provide the basis for more research and theory construction. The inverted curve is the case in point here when the negative relationship between behavioral engagement and brand loyalty and the effectiveness of social media marketing disproves the anticipated linear dependence, thus calling for a more complicated conceptualization of the position of behavioral engagement in relationship-building with the consumer. The research work is very comprehensive and offers real-time insights for brands across retail businesses of the digital platform. Formulating successful social networking marketing approaches, which make use of several ways of client's involvement, can be invaluable in building up loyal fans of your brand. To this end, brands ought to invest in the production of content that is engaging and enlightening, forge emotional ties by involving customers in the brand, allow users to purchase and transact through the platform as well as encourage them to be social by interacting with one another on the social media platform. With the knowledge of customer engagement features and their contribution to the marketers' effectiveness on social media channels, the brands can manage their resources in a goal-oriented way and develop the strategies for improving customer loyalty through focused social media objectives. A society should acknowledge the results of this research to extend the healthcare provision coverage to a wider population. Social media marketing, that is through knowing social engagement plays a big role in better brand loyalty, will help brands build stronger online communities and promote more positive interracial interactions. This can lead to increased customer satisfaction, loyalty, and overall well-being. Additionally, effective social media marketing strategies that resonate with customers can promote responsible consumption patterns and facilitate the dissemination of valuable information, contributing to societal benefits.

## **9. Limitations of the Study and Recommendation for Future Studies**

While this study provides valuable insights of the relationships between engagement dimensions of a customer, social media marketing effectiveness, and customer commitment to the brand, it is necessary to acknowledge its limit. A major drawback can be seen in the limited scope of the research that concentrates on the retail sector, which may have limited transfer of the findings to other sectors or to different countries' contexts. A remaining task for future researchers is to examine the correlation between the results within diverse product categories, business sectors, and geographic locations to intensify the translation process. That also is the aspect that we are looking at is the cross-sectional-ness of the data gathering because it is like we capture a snapshot. To get a complex view of the temporal subsidy and causality, future research can be reached with the help of the hidden way or experimental methods. These methods, however, would enable the observation of how relationships between interpretations change with time and would introduce stronger evidence of the factor of causality. Moreover, the work mainly uses quantitative data that is gathered from the surveys; therefore, there is a lack of qualitative data that could be used for the analysis of the issue. Notwithstanding this approach suits well for testing of hypotheses and exploration of the correlations between the attributes, it doesn't capture the details and motivations that make customers engage and build relationships; so, it won't paint the whole picture. Further research feasibility could be achieved by using a mix of

research methods including qualitative research such as in-depth interviews and focus groups to deepen the understanding of the customer's subjective perception and perspectives which are the opposite of theoretical predictions. On top of that, the analysis concerned the direct and mediated impact of the customer engagement dimensions and the use of social media as a marketing tool on brand loyalty. In the next step of research, it may be of interest to investigate the moderating factors that govern brand relationships and customer engagement volume. For instance, brand description, product involvement, and customer demographics could do this. Identifying and assessing the underlying moderators are required for getting a deeper insight of the boundary conditions and the full scope of the phenomenon's contingencies that play crucial roles in the relationships being observed.

## 10. Conclusion

The primary objective of this study was to investigate the mediating role of social media marketing effectiveness in the relationship between customer engagement dimensions (cognitive, emotional, behavioral, transactional, and social) and brand loyalty in the context of Amazon as a retail brand store. Adopting a quantitative approach, the study employed Partial Least Squares Structural Equation Modeling (PLS-SEM) to analyze the data collected from consumers who engage with Amazon as a retail brand store on social media platforms. The results revealed that cognitive engagement, emotional engagement, transactional engagement, and social engagement positively influence brand loyalty and social media marketing effectiveness. However, behavioral engagement exhibited a negative effect on both brand loyalty and social media marketing effectiveness, contradicting the expected positive relationships. Furthermore, social media marketing effectiveness was found to positively influence brand loyalty and mediate the relationships between customer engagement dimensions and brand loyalty. Hence, this study highlights the complex interplay between customer engagement dimensions, social media marketing effectiveness, and brand loyalty. While cognitive, emotional, transactional, and social engagement contribute positively to brand loyalty and effective social media marketing strategies, the role of behavioral engagement warrants further investigation. The findings underscore the importance of developing holistic social media marketing strategies that leverage various forms of customer engagement to enhance brand loyalty in the digital age. By understanding the nuances of customer engagement dimensions and their impact on social media marketing effectiveness, Amazon as a retail brand store can develop more targeted and effective strategies to foster customer relationships and loyalty.

## References

- Aburumman, N. M. A., & Nieto, A. (2019). The Effect of products attributes customer satisfaction on brand loyalty in the electronic appliances industry: Case of Jordan.
- Almohaimmed, B. M. (2019). The effects of social media marketing antecedents on social media marketing, brand loyalty and purchase intention: A customer perspective. *Journal of Business and Retail Management Research*, 13(4).
- Almomani, S. N., Shehab, M., Al Ebbini, M. M., & Shami, A. A. (2021). The efficiency and effectiveness of the cyber security in maintaining the cloud accounting information. *Academy of Strategic Management Journal*, 20, 1-11.
- Alsahli, M. S. (2021). *Customer Engagement Behaviour: A Case Study of Antecedents, Outcomes and the Moderating Role of Susceptibility to Informational Influences in Saudi Arabia's on Twittersphere* (Doctoral dissertation, Victoria University).
- Al-Shakri, K., Alzubaidi, R., Altaany, F., Al-Taani, E., Ayasrah, F., Fraihat, B., & Ahmad, A. (2024). Exploring the influence of management information systems on strategic planning: The mediating role of business intelligence. *International Journal of Data and Network Science*, 8(3), 1741-1750. <http://dx.doi.org/10.5267/j.ijdns.2024.2.014>
- Ardiansyah, F., & Sarwoko, E. (2020). How social media marketing influences consumers purchase decision: A mediation analysis of brand awareness. *JEMA: Jurnal Ilmiah Bidang Akuntansi Dan Manajemen*, 17(2), 156-168.
- Aydin, G. (2020). Social media engagement and organic post effectiveness: A roadmap for increasing the effectiveness of social media use in hospitality industry. *Journal of Hospitality Marketing & Management*, 29(1), 1-21.
- Barari, M., Ross, M., Thaichon, S., & Surachartkumtonkun, J. (2021). A meta-analysis of customer engagement behaviour. *International Journal of Consumer Studies*, 45(4), 457-477.
- Barlow, A., Brown, S., Lutz, B., Pitterson, N., Hunsu, N., & Adesope, O. (2020). Development of the student course cognitive engagement instrument (SCCEI) for college engineering courses. *International Journal of STEM Education*, 7, 1-20.
- Cao, D., Meadows, M., Wong, D., & Xia, S. (2021). Understanding consumers' social media engagement behaviour: An examination of the moderation effect of social media context. *Journal of Business Research*, 122, 835-846.
- Ceyhan, A. (2019). The impact of perception related social media marketing applications on consumers' brand loyalty and purchase intention. *EMAJ: Emerging Markets Journal*, 9(1), 88-100.
- Chen, S. C., & Lin, C. P. (2019). Understanding the effect of social media marketing activities: The mediation of social identification, perceived value, and satisfaction. *Technological forecasting and social change*, 140, 22-32.
- Clayson, P. E., Carbine, K. A., Baldwin, S. A., & Larson, M. J. (2019). Methodological reporting behavior, sample sizes, and statistical power in studies of event-related potentials: Barriers to reproducibility and replicability. *Psychophysiology*, 56(11), e13437.
- de Oliveira Santini, F., Ladeira, W. J., Pinto, D. C., Herter, M. M., Sampaio, C. H., & Babin, B. J. (2020). Customer engagement in social media: a framework and meta-analysis. *Journal of the Academy of Marketing Science*, 48, 1211-1228.

- Dolan, R., Conduit, J., Frethey-Bentham, C., Fahy, J., & Goodman, S. (2019). Social media engagement behavior: A framework for engaging customers through social media content. *European Journal of Marketing*, 53(10), 2213-2243.
- Ebrahim, R. S. (2020). The role of trust in understanding the impact of social media marketing on brand equity and brand loyalty. *Journal of Relationship Marketing*, 19(4), 287-308.
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of business research*, 69(8), 3192-3198.
- Garg, P., Gupta, B., Dzever, S., Sivarajah, U., & Kumar, V. (2020). Examining the relationship between social media analytics practices and business performance in the Indian retail and IT industries: The mediation role of customer engagement. *International journal of information management*, 52, 102069.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European business review*, 31(1), 2-24.
- Hanaysha, J. R. (2022). Impact of social media marketing features on consumer's purchase decision in the fast-food industry: Brand trust as a mediator. *International Journal of Information Management Data Insights*, 2(2), 100102.
- Helme-Guizon, A., & Magnoni, F. (2019). Consumer brand engagement and its social side on brand-hosted social media: how do they contribute to brand loyalty?. *Journal of marketing management*, 35(7-8), 716-741.
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135
- Hollebeek, L. D. (2019). Developing business customer engagement through social media engagement-platforms: An integrative SD logic/RBV-informed model. *Industrial Marketing Management*, 81, 89-98.
- Hollebeek, L. D., Srivastava, R. K., & Chen, T. (2019). SD logic-informed customer engagement: integrative framework, revised fundamental propositions, and application to CRM. *Journal of the Academy of Marketing Science*, 47(1), 161-185.
- Ibrahim, B. (2021). The nexus between social media marketing activities and brand loyalty in hotel facebook pages: A multi-group analysis of hotel ratings. *Tourism: An International Interdisciplinary Journal*, 69(2), 228-245.
- Ibrahim, B., Aljarah, A., & Sawafah, D. (2021). Linking social media marketing activities to revisit intention through brand trust and brand loyalty on the coffee shop facebook pages: Exploring sequential mediation mechanism. *Sustainability*, 13(4), 2277.
- Islam, J. U., & Rahman, Z. (2017). The impact of online brand community characteristics on customer engagement: An application of Stimulus-Organism-Response paradigm. *Telematics and Informatics*, 34(4), 96-109.
- Islam, J. U., Hollebeek, L. D., Rahman, Z., Khan, I., & Rasool, A. (2019). Customer engagement in the service context: An empirical investigation of the construct, its antecedents and consequences. *Journal of Retailing and Consumer Services*, 50, 277-285.
- Ismaeel, B., Alkhalwaldeh, B. Y., & Alafi, K. K. (2023). The role of marketing intelligence in improving the efficiency of the organization: An empirical study on jordanian hypermarkets. *Journal of Intelligence Studies in Business*, 13(2), 32-42. <https://doi.org/10.37380/jisib.v13i2.1082>
- Ismail, A. R. (2017). The influence of perceived social media marketing activities on brand loyalty. *Asia Pacific Journal of Marketing and Logistics*, 29(1), 129-144.
- Jayasingh, S. (2019). Consumer brand engagement in social networking sites and its effect on brand loyalty. *Cogent Business & Management*, 6(1), 1698793.
- Jesuthasan, S., Umakanth, N., & Dineshkumar, S. (2020). The impact of negative E-Wom on consumer purchasing intention through virtual snow ball sampling method: A special reference from northern province at srilanka.
- Koay, K. Y., Ong, D. L. T., Khoo, K. L., & Yeoh, H. J. (2020). Perceived social media marketing activities and consumer-based brand equity: Testing a moderated mediation model. *Asia Pacific journal of marketing and logistics*, 33(1), 53-72.
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration (ijec)*, 11(4), 1-10.
- Li, M. W., Teng, H. Y., & Chen, C. Y. (2020). Unlocking the customer engagement-brand loyalty relationship in tourism social media: The roles of brand attachment and customer trust. *Journal of Hospitality and Tourism Management*, 44, 184-192.
- Lim, W. M., & Rasul, T. (2022). Customer engagement and social media: Revisiting the past to inform the future. *Journal of Business Research*, 148, 325-342.
- Lim, W. M., Rasul, T., Kumar, S., & Ala, M. (2022). Past, present, and future of customer engagement. *Journal of Business Research*, 140, 439-458.
- Ma, L., Ou, W., & Lee, C. S. (2022). Investigating consumers' cognitive, emotional, and behavioral engagement in social media brand pages: A natural language processing approach. *Electronic Commerce Research and Applications*, 54, 101179.
- Magatef, S., Al-Okaily, M., Ashour, L., & Abuhussein, T. (2023). The impact of electronic customer relationship management strategies on customer loyalty: A mediated model. *Journal of Open Innovation: Technology, Market, and Complexity*, 9(4), 100149.
- Maria, S., Pusriadi, T., Hakim, Y. P., & Darma, D. C. (2019). The effect of social media marketing, word of mouth, and effectiveness of advertising on brand awareness and intention to buy. *Jurnal Manajemen Indonesia*, 19(2), 107-122.
- Matalaka, M., Ayasrah, F., Jarrah, H., Jawarneh, M., Alkhalwaldeh, B., Darawsheh, S., & Fadelallah, H. (2024). The importance of effective learning technology utilization, teacher leadership, student engagement, and curriculum in the online learning



- environment. *International Journal of Data and Network Science*, 8(3), 1727-1740. <http://dx.doi.org/10.5267/j.ijdns.2024.2.015>
- Moliner-Tena, M. A., Monferrer-Tirado, D., & Estrada-Guillén, M. (2019). Customer engagement, non-transactional behaviors and experience in services: A study in the bank sector. *International Journal of Bank Marketing*, 37(3), 730-754.
- Mostafa, R. B., & Kasamani, T. (2021). Brand experience and brand loyalty: is it a matter of emotions?. *Asia Pacific Journal of Marketing and Logistics*, 33(4), 1033-1051.
- Moustakas, E., Lamba, N., Mahmoud, D., & Ranganathan, C. (2020, June). Blurring lines between fiction and reality: Perspectives of experts on marketing effectiveness of virtual influencers. In *2020 International Conference on Cyber Security and Protection of Digital Services (Cyber Security)* (pp. 1-6). IEEE.
- Prentice, C., Han, X. Y., Hua, L. L., & Hu, L. (2019). The influence of identity-driven customer engagement on purchase intention. *Journal of Retailing and Consumer Services*, 47, 339-347.
- Puspaningrum, A. (2020). Social media marketing and brand loyalty: The role of brand trust. *The Journal of Asian Finance, Economics and Business*, 7(12), 951-958.
- Quoquab, F., Mohammad, J., & Mohd Sobri, A. M. (2021). Psychological engagement drives brand loyalty: evidence from Malaysian ecotourism destinations. *Journal of Product & Brand Management*, 30(1), 132-147.
- Samarah, T., Bayram, P., Aljuhmani, H. Y., & Elrehail, H. (2022). The role of brand interactivity and involvement in driving social media consumer brand engagement and brand loyalty: the mediating effect of brand trust. *Journal of Research in Interactive Marketing*, 16(4), 648-664.
- Schreiner, M., Fischer, T., & Riedl, R. (2021). Impact of content characteristics and emotion on behavioral engagement in social media: literature review and research agenda. *Electronic Commerce Research*, 21, 329-345.
- Shaqrah, M., Mohammad, A. A. S., Aldaihani, F. M. F., Al-Hawary, S. I. S., Alshurideh, M. T., AlTaweel, I. R. S., ... & Al Kurdi, D. B. (2023). The impact of branded mobile applications on customer loyalty. In *The effect of information technology on business and marketing intelligence systems* (pp. 2215-2229). Cham: Springer International Publishing.
- Shareef, M. A., Mukerji, B., Dwivedi, Y. K., Rana, N. P., & Islam, R. (2019). Social media marketing: Comparative effect of advertisement sources. *Journal of Retailing and Consumer Services*, 46, 58-69.
- Shawky, S., Kubacki, K., Dietrich, T., & Weaven, S. (2019). Using social media to create engagement: A social marketing review. *Journal of Social Marketing*, 9(2), 204-224.
- Shin, M., & Back, K. J. (2020). Effect of cognitive engagement on the development of brand love in a hotel context. *Journal of Hospitality & Tourism Research*, 44(2), 328-350.
- Ting, D. H., Abbasi, A. Z., & Ahmed, S. (2021). Examining the mediating role of social interactivity between customer engagement and brand loyalty. *Asia Pacific Journal of Marketing and Logistics*, 33(5), 1139-1158.
- Tsai, M. C., Merkert, R., & Wang, J. F. (2021). What drives freight transportation customer loyalty? Diverging marketing approaches for the air freight express industry. *Transportation*, 48(3), 1503-1521.
- Tuti, M., & Sulistia, V. (2022). The customer engagement effect on customer satisfaction and brand trust and its impact on brand loyalty. *Jurnal Manajemen Bisnis*, 13(1), 1-15.
- Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *Journal of Marketing Theory and Practice*, 20(2), 122-146
- Yeboah, A., Agyekum, O., Owusu-Prempeh, V., & Prempeh, K. B. (2023). Using social presence theory to predict online consumer engagement in the emerging markets. *Future Business Journal*, 9(1), 69.
- Zraqat, O. M. (2019). Sustainability practices disclosure and value relevance: Evidence from Jordan. *Modern Applied Science*, 13(9), 75-86. <https://doi.org/10.5539/mas.v13n9p75>



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