

E-commerce Dynamics: Digital Marketing Trends Redefining Chinese Consumer Engagement

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Abstract

Chinese cosmetics industry has made a major contribution to the Asian beauty and personal care market growth through e-commerce, digitalization and online interaction to maximize customer engagement. The online media have become a part of the daily life of every individual in society and it offers high coverage across the boundaries for customer interaction. Inspired by this vast dispersion of the effectiveness of digital technology, this study aimed to investigate the impact of the use of e-commerce on customer engagement. In this domain, the study designed the conceptual framework in which digital marketing was designated a mediating role and customer relationship management and customer purchase intentions were used as the moderators on the mediation impact. In the SEM results, the study encountered significant results for the direct and indirect effects, meanwhile, the moderators were insignificant. In the implications and contributions, the study revealed that the use of e-commerce is a robust strategy that has incumbent outcomes for organizations. In this myriad, companies that are using the radical idea of digital marketing are enjoying maximum customer engagement.

Keyword

Digital Marketing, Customer Engagement, Customer Purchase Intentions, Customer Relationship Management, E-commerce, Customers.

1. Introduction

Artificial Intelligence (AI), social media, and mobile commerce have introduced a new level of competition where e-retailing platforms strive to implement new strategies (Zhou *et al.*, 2023). This development has not only impacted consumer perception of products and services but has also altered the very dynamics of the relationship between brands and their audiences, with engagement and commitment being key drivers in the era of digital competition (Wilson *et al.*, 2024). Additionally, since e-commerce has rapidly grown, the focus on customer experience and engagement has also evolved (Upasani *et al.*, 2023). Therefore, as different digital marketing tools are created over time, companies attempt to employ new technologies for better consumer profiling (Ijomah *et al.*, 2024).

Nowadays, delivering, analyzing, and personalizing messages and interactions have been imperative in enhancing overall client satisfaction (Tran, 2024). Figure 1 exhibits the sale figures of E-commerce in top 10 countries in 2022. It



shows the popularity and dominance of China in e-commerce sales.

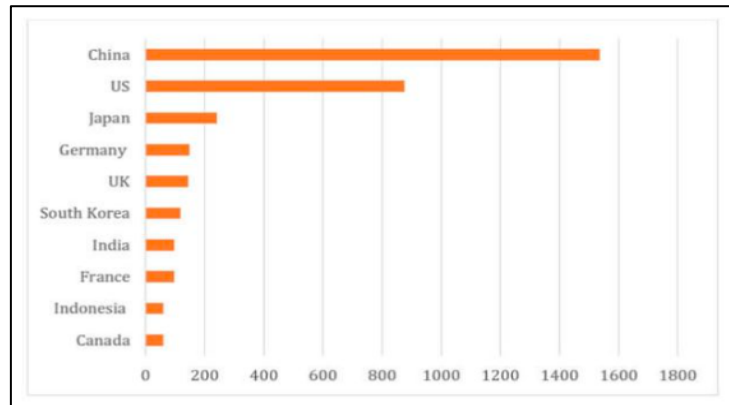


Figure 1: E-Commerce Sales in Top 10 Countries in 2022 (in Billion USD).

Belhadi et al. (2023) and **Gujar** (2024) have highlighted the inadequacy of current literature to capture the nature of uberization and call for a deeper understanding of its impacts such as describing how localized strategies and emerging technologies influence consumers and their interactions with brands. The academic literature has established information on the factors that influence consumers engagement in e-commerce, especially in the context of Western countries (**Ye et al.**, 2023). There are also many scholarly articles on digital marketing and customer interaction (**Purnomo**, 2023; **Asante et al.**, 2023); nevertheless, there are fewer studies addressing the Chinese market. There is a dearth in the literature concerning the relevance of these topics to Chinese consumers. Thus, this study aims to fill this gap by exploring how these new trends in digital marketing are restructuring consumer relations in China.

The first objective of the study was to understand the impact of e-commerce usage on consumer involvement in China, an area that has been understudied. In previous literature, some studies have been conducted on the mediating role between e-commerce use and consumer engagement (**Hasibuan; Najmudin**, 2024); however, the Chinese market context has been explored very rarely. The second objective was to examine the mediating role of digital marketing to understand how digital initiatives enhance customer engagement in this context, since new digital marketing practices are adopted fast in China (**Zhang et al.**, 2023). Additionally, there are studies on Customer Relationship Management (CRM) in literature (**Magatet et al.**, 2023), but its role in moderating the relationship between digital marketing and consumer participation has not been extensively explored. The third objective, therefore, seeks to address this gap by examining how CRM practices can improve the impact of the online marketing on engagement.

Furthermore, although online purchase intention is a strong driver of consumers' actions (**De et al.**, 2023), its effect as a moderating variable between digital marketing and consumer interaction is not well investigated. The fourth objective aims to address this gap by examining the moderating role of purchase intention in digital marketing targeting consumers in China. This study is relevant in uncovering how the new trends in digital advertisement affect e-commerce in China. Therefore, by shedding some light on the consumer engagement shift, the study provides firms with practical guidance on how to address the Chinese digital market environment and enhance the efficiency of communication with customers.

2. Literature Review

2.1. Digital Marketing Trends in China

- *Social Media Marketing (SMM) in China.* According to the research of **Yang and Wang** (2021) and **Shih** (2020), currently, China's social media market is different from the rest of the world mainly due to its popular platforms such as WeChat and Weibo. WeChat has more than 1 billion active users and it goes beyond the messaging service, having aspects of social networking, online shopping, and payment. Sina Weibo, China's twitter, boast of over 400 million active users, making it perfect for real-time marketing and featuring key opinion leaders. Thus, for Chinese consumers, social media is a key source of information about products, recommendations and even for buying products, hence making SMM a key strategy for organisations.
- *Influencer Marketing in China.* The two trends noticed in influencer marketing in China include Key Opinion Leaders (KOL) and Wanghong (Internet celebrities). According to **Comendulli** (2020), KOLs are specialists that endorse products to their extensive networks, while Wanghong are personalities who have large audiences. **Comendulli** (2020) describes that Chinese consumers rely on KOLs and Wanghong for their recommendation and thus proved to be efficient tool for marketing. This way, brands collaborate with people who have a large audience to target a particular category of customers, make them aware of products, and encourage them to purchase the products.
- *Live Streaming E-commerce in China.* Social media live streaming e-commerce is quite new and has changed the buying and selling of goods through the internet in China (**Wongsunopparat; Deng**, 2021; **Almoussawi et al.**, 2022).

Wongsunopparat and Deng (2021) indicate applications as Taobao Live enable the influencers and companies to present the products they offer, communicate with customers, and enable the customers to make purchases on the go. Thus, livestreaming has emerged as an effective strategy in this regard, with the level of engagement high while using this method leading to higher sales.

- *Mobile Commerce (M-commerce) in China*. According to **Ertz et al. (2022)**, M-commerce is on the rise in China, where mobile purchases constitute a good portion of overall web purchases. As WeChat Pay and Alipay are indicated in the research, the mobile-first nature of the Chinese consumer means that the buying and selling experience is now primarily through mobile. Hence, it is paramount for firms to adopt mobile optimisation and effectively capture this opportunity.

2.2. Digital Marketing and Customer Engagement

A study by **Herhausen et al. (2020)** highlighted that digital marketing acts as an intermediary between the companies and customers, whereby companies are able to create relationships and have the ability to maintain consumers' loyalty. Through communicating effectively with target audiences, digital marketing techniques such as social media marketing, influencer marketing, and live streaming e-commerce can help firms establish and maintain two-way communication with the target market. This social interaction makes it easy for customers to communicate with brands, express an opinion and even be involved in brand related discussions (**Oncioiu et al., 2021; Ali et al., 2023**). Hence, customers are more involved in the brand building, thus, satisfaction, trust and brand loyalty consequently increase.

At the same time, such consumers ensure business development. As depicted by **Meilatinova (2021)**, satisfied customers promote the company's positions and contribute to its expansion due to effective word-of-mouth marketing and repeat purchase intentions. This shows that digital marketing and customer relations are crucial for companies. The companies can generate customer loyalty that will be beneficial in the future growth and profitability for the business.

As it is shown in the study by **Kennedy et al. (2022)**, the digital marketing trends have been greatly influenced the Chinese e-commerce customer engagement. These trends have increased customers' expectations which has compelled companies to pay careful attention to digital marketing and other customer related activities if they want to be competitive in the Chinese e-commerce market. This can be seen that the customer experience driven by the latest digital marketing trends in China's e-commerce has certainly shifted the power in the hands of the consumers. Customers are able to engage with brands, and can get access to content and recommendations that are target to their needs.

Moreover, the customer experience is enhanced by advancements in live streaming, easy payment options, and easy delivery systems. Further, the customer feedback and opinion are directly given to brands which also act as a way of developing a community of customers pushing the brands to improve their products (**Hong et al., 2024; Calvera-Isabal et al., 2023**). This improved customer perspective has helped in increased customer satisfaction, customer loyalty and repeated purchases which has promoted business success in the growing Chinese e-commerce.

2.3. Chinese Consumer Engagement

Consumers in China have taken to e-commerce to promote the online shopping market in the country to such a level it has never been before. Availability, affordable prices, and a wide choice of products are among the reasons they consider the internet shopping as an essential aspect of their lives (**Zhu et al., 2020**). **Japutra et al. (2022)** indicate that mobile commerce is highly developed in China, since consumers are proactive in using technology to find new products, interact with brands, and provide personal experiences through social media and online sites. The research also depicts that the Chinese consumers are very selective when choosing products and services to buy because they always consider quality, price and the company image. They also want to shop conveniently, focusing on factors such as speedy delivery, easy product returns and safe payment methods (**Japutra et al., 2022; Abas et al., 2023**). This combination of a technologically and convenience-oriented consumer attitude has shaped a vibrant, competitive, and constantly evolving e-commerce environment in China, to which brands must rise and adjust.

2.4. Customer Relationship Management

Customer Relationship Management (CRM) is a system that involves the management of customer's contact information, communication, transactions as well as connections between the buyer and the seller (**Itani et al., 2020**). According to **Kopra (2022)**, specifically, with reference to e-commerce, CRM acts as the cornerstone for the enhancement of sound and enduring customer relationships, driving business sales and creating a proven competitive edge. When used properly, CRM allows businesses to delve into the needs, wants, and actions of customers. It lets the organisations be the architects of the experiences that create deep emotional connections with the customer base. This leads to effectively designed marketing campaigns with appeals that resonate with specific groups of customers, resulting in improved service delivery beyond customers' expectations (**Kopra, 2022; Muthuswamy; Esakki, 2023**).

Consequently, e-commerce enterprises can assure the formation of customers' trust and consequent loyalty as well as long-term cooperation. This, in turn, creates the basis for the companies' commercial success in the context of continuous growth of competition in the framework of the contemporary digital economy (**Al-Ayed, 2022; López-Calatayud, 2023**). Thus, CRM

allows businesses to achieve the customer-oriented organisational changes in meeting the needs and preferences of the customers. From the above studies, it can be concluded that CRM has the potential of revolutionising e-commerce firms by helping the companies to improve customers' satisfaction, loyalty and retention, thereby, expanding the business.

2.4.1. CRM Strategies and Technologies Used in Chinese E-commerce

The CRM strategies and technologies are central to the Chinese e-commerce systems to win and retain customers. According to **Lv** (2021), it is best illustrated by customer data analytics where an organisation can identify customers' behaviour, their needs, age, and their purchase patterns in order to create better marketing campaigns and develop a tailored customers' experience. Another useful approach suggested by **Chandra et al.** (2022) is the technique of personalised marketing, where all the data regarding the customer is used to adapt the offer, products, and content to the customer.

Chinese e-commerce firms also employ applications like artificial intelligence-powered chatbots, social media listening, mobile CRM, to enrich customer interactions and experiences. For example, companies such as Alibaba have incorporated chat bots in their firms to offer customer support at all times, and social media analysis so that firms can monitor their customers' interactions and feelings (**Nyongesa et al.**, 2020). Moreover, mobile CRM is a powerful platform to communicate with customers, to offer special discounts and services which can be used on the move (**Kumar; Mittal**, 2020). These strategies and technologies assist business practicing in the competitive environment of China's e-commerce market to establish the key customer relations, and to increase the sales and revenues.

2.5. Online Purchase Intention

Online purchase intention is a central concept in e-commerce, defined as the consumer's readiness to make purchases on the internet (**Yunus et al.**, 2022). Several factors affect the online purchase intention such as trust, perceived value, convenience and website quality. Price, quality and brand reputation are also other factors that have considerable influence over internet purchase intentions of consumers (**Qalati et al.**, 2021). Other aspects such as the usability of the website, the acceptability of the payment method and the delivery time also play a role in the decision-making of the consumer. Additionally, site quality factors such as website design, website usability, and website responsiveness to mobile devices also influence purchasing intention for products online (**Miao et al.**, 2022; **Malik**, 2023).

Studies on perceived risk on internet purchase, in the context of Chinese e-commerce market, have discovered specific antecedents of consumer behaviour pattern. There is evidence that social influence is deeper within the Chinese e-commerce market where consumers are more likely to be influenced by friends and families' recommendation. Secondly, trust is a highly valued antecedent in Chinese situations, to the extent that consumers report valuing trust over everything else (**Phamthi et al.**, 2024; **Rosillo-Díaz et al.**, 2020; **Bangsawan**, 2022). This proves how important it is for new e-commerce businesses to cement their credibility as reliable, truthful and genuine.

Pricing and perceived quality are also shown to have a significant influence on general purchase intentions to purchase online in China. In addition, convenience comes out as another factor, where the Chinese consumers tend to prefer not only the fast, reliable, and convenient shipping, but it shows how significant role logistics and delivery play (**Sajid et al.**, 2021). From the analysis of these factors, e-commerce businesses may be able to enhance their strategies in order to fit the Chinese consumers' pattern and increase the online purchasing intentions as well as sales.

3. Research Methods

This study followed a quantitative methods style with primary data collection from the target population. As per the research objectives, this study used the customers as the target population and the cosmetics sector industries were used as the targeted sector of the study.

3.1. Sampling and Data Collection Process

The study used survey questionnaires to gather data from the customers of various industrial organizations. The sampling frame included various cosmetics organizations that dealt with digital marketing and e-commerce sites. The data collection procedure of this study took place in a single phase where the cross-sectional horizon was followed and data was collected within a single phase. The researchers chose a sample size of 300 respondents and received total 268 responses out of which 241 were identified as valid.

3.2. Procedure and Measurement

A Google Forms-based questionnaire comprising 38 items was prepared reflecting each relevant construct. According to the conceptual framework of the study, e-commerce (5 items) were adapted from a very recent study (**Salah; Ayyash**, 2024), followed by digital marketing (6 items), adapted from **Alwan and Alshurideh** (2022). In the same manner, customer relationship management (14 items) were adapted from **Demo and Rozzett** (2013), customer purchase intentions from **Liu et al.** (2021) and customer engagement from **Roy et al.** (2023). This is also in line with the previous studies that have successfully implemented a 5-point Likert scale to rank the variables' measurements (**Alwan; Alshurideh**, 2022; **Etienne Fabian et al.**, 2024). Table 1 summarizes the items used in the measurement scales.

Table 1: Measurement Scales.

Variable	No of Items	Source
Customer Engagement (CE)	9	(Roy et al., 2023)
Customer Relationship Management (CRM)	14	(Demo; Rozzett, 2013)
Digital Marketing (DM)	6	(Alwan; Alshurideh, 2022)
Customer Purchase Intentions (CPN)	4	(Liu et al., 2021)
Use of E-commerce (UECM)	5	(Salah; Ayyash, 2024)

3.3. Data Analysis Methods

The study performed simple descriptive statistics in SPSS 20 for missing values identification, relevant outliers and to check data normality. In this myriad, the descriptive statistics revealed normal trends in the data with skewness values within -1 to +1. Moreover, a descriptive statistics test was used to trace the range, frequency and mean average of the constructs. Next, to assess the measurement model and to analyze the psychometric properties of the scales. Subsequently, the study applied the SEM Structural Equational Modelling test to check whether the use in e-commerce, digital marketing, customer relationship management and purchase intentions have a significant impact on customer engagement.

4. Data Analysis

4.1. Measurement Model Validation

Table 2: Goodness-of-fit Measures for CFA Analysis.

Name of Fit Measures	Assessment Criteria	Minimum Threshold Value Applied	Values Obtained	Remarks
Absolute Fit	CMIN/DF	≤ 5	2.508	Meet threshold level (Byrne, 2001; Mia et al., 2019)
	RMSEA	≤ 0.08	.079	
Incremental Fit	RFI	≥ 0.90	.867	Meet threshold level (Byrne, 2001; Mia et al., 2019)
	TLI	≥ 0.90	.916	
	NFI	≥ 0.90	.879	
	CFI	≥ 0.90	.923	
Parsimonious Fit	PGFI	≥ 0.70	.913	Meet threshold level (Byrne, 2001; Mia et al., 2019)
	PNFI	≥ 0.70	.802	
	PCFI	≥ 0.70	.842	

Table 3: Assessment of the Measurement Model.

CN	Mean	SD	L	α	CR	AVE	MSV	CRMT	CEN	DMT	CPN	UECMR
CRMT	3.7963	1.04985		.977	0.977	0.783	0.019	0.885				
CRM1			.796									
CRM2			.938									
CRM3			.939									
CRM5			.886									
CRM7			.919									
CRM8			.939									
CRM9			.866									
CRM10			.948									
CRM11			.828									
CRM12			.909									
CRM13			.971									
CRM14			.814									
CEN	3.4873	1.22380		.929	0.929	0.593	0.270	0.084	0.770			
CE1			.780									
CE2			.767									
CE3			.786									
CE4			.754									
CE5			.829									
CE6			.756									
CE7			.773									
CE8			.749									
CE9			.758									
DMT	4.0880	.98669		.962	0.958	0.820	0.331	0.016	0.441***	0.906		
DM1			.892									
DM2			.870									
DM3			.866									
DM4			.889									
DM5			.897									
CPN	3.9627	1.21370		.953	0.953	0.836	0.048	-0.137*	0.219**	0.068	0.915	
CPN1			.926									
CPN2			.927									
CPN3			.921									
CPN4			.923									
UECMR	4.0726	1.00877		.887	0.893	0.677	0.331	0.080	0.520***	0.575***	0.073	0.823
UECM1			.795									
UECM2			.866									
UECM3			.815									
UECM4			.670									

Notes: CN: Construct's Name, SD: Standard Deviation, L: Loadings, α: Cronbach's Alpha, CR: Composite Reliability, AVE: Average Variance Extracted, MSV: Maximum Shared Variance, ASV: Average Squared Shared Variance. CE: Customer Engagement; CRM: Customer Relationship Management; DM: Digital Marketing; CPN: Customer Purchase Intentions; UECM: Use of E-commerce

The Confirmatory Factor Analysis (CFA) was used to assess the measurement model with an analysis of the psychometric competence of the data underlying each construct. The CFA result also showed the fit measures of the model including absolute fit, incremental fit and parsimonious fit. All of the fit measures' indices were close and above to their recommended threshold and considered satisfactory. Next, the reliability scores of the individual constructs and their respective factor loading against each variable have been reported in Table 2. The resulting CFA analysis demonstrates an excellent fit for reliability statistics with values greater than the recommended value >0.7 for factor loadings and composite reliability (Hair Jr et al., 2021b). Moreover, the goodness of fit measures were measured with the Fornell and Larcker criterion (Fornell; Larcker, 1981) and AVE values. Based on Fornell and Larcker (1981), the data confirmed convergent validity with AVE values exceeding 0.5 and their square root higher than their inter-correlation (Hair et al., 2011; Hair et al., 2019). Thus, the requirements for the measurement model have been met. Table 2 and Table 3 summarize all the measures used for CFA analysis.

4.2. Structural Model Analysis

The study applied the SEM analysis to estimate the associations. All the association paths have been evaluated at a significance level >0.01 (Hair Jr et al., 2021a), and the standardized estimate has shown that use in e-commerce gained a significant effect on customer engagement. Moreover, digital marketing casts a significant mediating effect between use in e-commerce and customer engagement. In contrast, the moderating variables of customer relation management and purchase intentions were insignificant. In statistical terms, the use of e-commerce showed a significant impact on customer engagement ($B = .369$, $p = 0.000$). Digital marketing showed a positive impact between use in e-commerce and customer engagement ($B = .124$, $p = 0.02$). Next, the interaction term for the moderation effect of customer relationship management showed an insignificant impact on customer engagement with digital marketing ($B = .059$, $p = 0.393$). Next, the interaction terms of digital marketing and purchase intentions of customers showed an insignificant impact on customer engagement ($B = -.098$, $p = .178$). Table 4, Table 5 and Table 6 reveal these results.

Table 4: Standardized Regression Weights.

Hypothesis	Path	Estimate	P-value
H1	UECM → CE	.369	***

Notes: *** = 0.01 or less.

Table 5: Test of Mediation.

Construct Relationship	Estimate (β indirect)	LP	UP	P-value
UECM → DM → CE	.124	0.075	0.233	.002

Notes: LP: Lower Percentile; UP: Upper Percentile; and Sig: Significance.

Table 6: Test of Moderation.

Construct Relationship	Estimate (β indirect)	LP	UP	P-value
DM*CRM → CE	.059	-.050	.170	.393
DM*CPN → CE	-.098	-.210	.019	.178

5. Conclusion

The dynamics of e-commerce and other digital marketing trends towards redefining Chinese consumer perception are discussed in this paper. The findings from the analysis shows that there is significant association between the use of e-commerce and the level of consumer engagement, thus meaning e-commerce directly results in higher consumer engagement. Moreover, digital marketing intermediates the effect of e-commerce on consumer engagement. Nonetheless, there are no significant moderating effects of customer relationship management and online purchase intention on the relationship of digital marketing and consumer engagement, which implies that these factors are not very influential.

According to Prasad and Mangipudi (2021), with the employment of e-commerce the engagement levels of customers are increased. They described that due to the convenience and ease that e-commerce offers, the customers feel more connected to the brands they are buying from. Consumers have an opportunity to browse products, read reviews and make purchase which enhances interaction. In addition, Felix and Rembulan (2023) indicate that the e-commerce platforms continue to provide recommendations, discounts, and loyalty program, which also increases the engagement of consumers. Thus, it creates more brand equity, consumer engagement, retention, and results in the growth of the business. The study by Yunus et al. (2022) captures how digital marketing (DM) contributes to increase the influence of e-commerce towards consumers. Through implementing DM techniques like the social media marketing, e-mail marketing and search engine marketing, different businesses would be in a position to get to their targeted clients.

Digital marketing helps an e-business to, not only deliver offers, but also create long-lasting bonds with the client base (Fedorova, 2023). In addition, Urdea et al. (2021) indicate that DM is also useful in developing brand knowledge, favour, and commitment from consumers, thus increasing the customers' commitment. Therefore, the combination of DM with e-commerce will allow businesses to offer consumers a coordinated and continuous experience while interacting with the company and its products online.

Many research scholars have studied the strong correlation between e-commerce, digital marketing, purchase intention through internet and consumer engagement. For instance, Furthermore, Purnomo (2023) confirmed that proper approaches

to digital marketing can boost the role of e-commerce for consumers. **Fan et al.** (2022) indicated the quality of e-commerce platforms enhanced consumers' involvement. Equally, **Dastane** (2020) found that digital marketing initiatives for instance social media marketing impact on the purchase intention online by considering mediating effect of consumer relationship management. This study's findings are in contrast with the findings of current study which indicates that although consumer relationship management and online purchase intention are antecedent variables that affect the online shopping experience, they are not really significant in determining the effect of digital marketing on consumer engagement.

The study's findings are significant for marketers and businesses venturing in the Chinese market indicating that they should capitalise on the e-commerce platforms to advance consumer engagement through digital marketing. Moreover, the study also points out the fact that there might be other factors that need to be considered other than customer relationship management and online purchase intention so as to support the relation between e-commerce, digital marketing and consumer engagement.

5.2. Implications

The conclusion drawn from this study has practical and theoretical implications that are vital to companies involved in e-commerce businesses. First of all, the direct association between e-commerce and consumer engagement indicates that organisations need to invest more in their e-commerce to build stronger relationships with the consumers. Secondly, the mediating role of the digital marketing in targeting consumer engagement means that firms should employ need digital marketing to complement e-commerce platforms. They should, therefore, aim at delivering a well-structured and customer-centric e-commerce environment of the new generation. In this way, it is possible to attract more attention and, therefore, maintain a higher users' loyalty and, thus, the desired business development (**Lövstrand; Sätmark**, 2024). Also, the implication for resource allocation is another contribution of the study since businesses require to determine the extent of investment in e-commerce platforms, digital marketing, and other determinants of consumer engagement (**Azeem et al.**, 2020). Thus, the findings of the study are beneficial for businesses that plan to thrive in the digital world and look for the ways to influence consumers.

5.3. Limitations and Future Research

There are some limitations to this study which can point to the directions for future research. First of all, the subject of the study that is Chinese consumers, may not be transferable to other cultures, which is a good call for conducting cross cultural research. Second, using self-measures of consumer engagement may have brought in biases, therefore, in future, engaging objective measures is recommended (**Sanchez et al.**, 2024). Moreover, it lacks information about the offline factors that influence the consumers to engage with the e-commerce firms, like the traditional marketing techniques (**Rosário; Raimundo**, 2021). Furthermore, future research can examine the influence of novel technological advancements, including artificial intelligence and virtual reality, on consumer involvement in e-commerce. Future research should aim to address these limitations, thus expanding the knowledge of the complex associations between e-commerce and digital marketing, as well as their impact on consumer engagement.

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