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Exploring the impact of electronic marketing on firm e-sales performance: empirical evidence from B2C vs. B2B perspectives and future challenges

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Abstract: Electronic marketing (eM) is a vital component of a successful sales strategy having the ability to reach a global audience, offer targeted marketing, provide data-driven insights, and foster customer engagement makes it a more powerful tool for driving sales performance and achieving business growth. This study attempts to examine the nexus among electronic marketing tools, i.e., mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing on organisational e-sales performance (ESP) from the perspectives business to consumer (B2C) and business-to-business (B2B). A total of 648 questionnaires for B2C and a total of 625 for B2B perspective were eventually considered for data analysis using SEM and SmartPLS. First, the study affirmed a positive connection between eM on e-sales performance from a B2C perspective. Second, the study confirmed a positive connection between eM on e-sales performance from the B2B domain. This study endows with insights into electronic marketing on how they may optimise the e-sales performance of the companies by utilising various technologies both B2C and B2B.

Keywords: electronic marketing; e-sales performance; business-to-consumer perspective; business-to-business perspective; empirical analysis; innovation diffusion theory.

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1 Introduction

Electronic marketing (eM) research emerged as a systematic approach to understanding customer or consumer behaviour, preferences, and trends in the online landscape (El-Gohary, 2012). It encompasses data-driven analysis of digital marketing strategies, social media impact, website analytics, and customer insights (Clarke and Flaherty, 2005; Gratzner et al., 2004). The research on eM is vital in guiding businesses to optimise their

electronic marketing efforts, improve sales performance, and stay competitive in the rapidly changing digital landscape. However, eM also known as digital marketing utilises online platforms and tools to promote products or services, connect with target audiences, and drive sales. It encompasses various channels such as social media, email, SEO, PPC, and content marketing (Taherdoost and Jalaliyoon, 2014; Wen and Chen, 2010). Through data-driven insights and personalised approaches, businesses can reach a global audience, optimise marketing efforts, and build lasting customer relationships. Electronic marketing's cost-effectiveness, adaptability, and measurable results make it a vital component of modern sales strategies, enabling businesses to thrive in the digital age (Eid and El-Gohary, 2013; Taherdoost and Jalaliyoon, 2014).

It is asserted that conducting eM research is essential for businesses to stay competitive, measure ROI, optimise campaigns, reduce risks, adjust to changes, foster customer loyalty, and test new ideas, (Eid and El-Gohary, 2013). It lays the foundation for successful and effective marketing strategies in the digital age both from B2B and B2C perspectives. EM is vital from a B2C perspective as it enables direct and personalised communication with consumers (Eid and El-Gohary, 2013; El-Gohary, 2012). It offers a global reach, targeting specific demographics and interests. B2C businesses can engage with customers through social media, email, and targeted advertising, building brand loyalty and customer relationships. EM's data-driven insights can optimise campaigns, can improve ROI, and can adapt to changing consumer preferences swiftly. With e-commerce and online transactions, B2C companies can offer convenience and accessibility to customers all the time. This digital strategy creates a competitive edge in the quick-changing consumer market, improves customer satisfaction, and increases sales performance – particularly e-sales. But eM is also important from a business-to-business (B2B) standpoint because it facilitates effective and focused communication with other companies (El-Gohary and Eid, 2012). It provides a venue for showcasing goods, services, and business know-how via email marketing, content marketing, and websites. Social media and search engine optimisation are valuable tools that B2B companies can use to connect with their target market and produce quality leads. EM makes it easier to network and establish connections with possible customers and business partners. B2B eM can improve competitive positioning, brand visibility and credibility in the digital age, which will ultimately spur business growth and success (Sheth and Sharma, 2005).

It is claimed that research on electronic marketing from various angles, including B2B, B2C, and electronic sales perspectives is being done for a number of reasons. For instance, firms need to conduct eM research to measure ROI, find high-performing channels, comprehend customer behaviour, optimise their strategies, obtain a competitive edge, and enhance long-term sales performance (Eid and El-Gohary, 2013; El-Gohary, 2012). Electronic marketing research that is data-driven improves decision-making and guarantees that companies survive in the digital era (N'Da et al., 2008; Waheed and Jianhua, 2018). The most effective eM channels that currently drive the highest conversion rates may be found via EM research (Eid and El-Gohary, 2013; Waheed and Jianhua, 2018). Understanding consumer preferences, problems, and purchase behaviour are all aided by EM research. From a B2C and B2B standpoint, EM research helps with more efficient budget allocation for marketing. Companies can put their money into campaigns and channels that yield the best returns, help them maximise their expenditures, and increase sales performance. Instead of depending on reactive, short-term strategies, businesses can plan for long-term success by using the valuable

data that eM research can provide. As a result, we are currently looking for the relationship between eM channels like social media marketing, chatbots, email marketing, mobile marketing, and SEO and their impact on the e-sales performance of businesses operating in the Chinese market from both B2C and B2B perspectives.

E-sales performance (ESP) refers to the measurement and evaluation of the effectiveness of online sales activities and strategies in achieving desired business outcomes (Ayanso et al., 2010; Barling and Beattie, 1983). ESP involves analysing various metrics such as website traffic, conversion rates, average order value, customer acquisition cost, and overall revenue generated through electronic channels (Ayanso et al., 2010). ESP assessment helps businesses understand the impact of their online marketing efforts, identify strengths and weaknesses in their e-commerce processes, optimise sales funnels, and make data-driven decisions to enhance online sales and maximise profitability. The goal is to achieve sustainable growth and success in the digital marketplace of China. China is a populous country in the regions of East Asia (Zhou and Hu, 2008). Having a rich history spanning thousands of years, it boasts a diverse culture, traditions, and landscapes (Zhou and Hu, 2008). As the world's most populous nation, China plays a significant role in global economics, politics, and trade (Shi et al., 2023). It has experienced quick industrialisation and urbanisation in recent decades, becoming a major player in manufacturing and technology. It is worth mentioning to discover the empirical nexus between electronic marketing tools and e-sales performance. Therefore, we attempt to meet certain objectives, as follows.

Primarily, this research talks about the influence of advanced electronic marketing devices such as (search engine optimisation, email marketing, mobile marketing, chatbot, and social media marketing) on e-sale performance within the B2C Chinese market. Secondly, this analysis unfolds the impact of electronic marketing on electronic sales performance from B2B marketplace of China. Further, this research has been arranged according to the succeeding framework. First, this survey delves into the hypothetical structure and hypothesis related to electronic marketing (eM) and electronic sales performance (ESP). In the second place, the study creeps into the sampling process, collection procedure, and analysis method. It discusses certain implications too which are stated consequently. The decisive section contains limitations that may provide opportunities to scholars globally for further research and investigation.

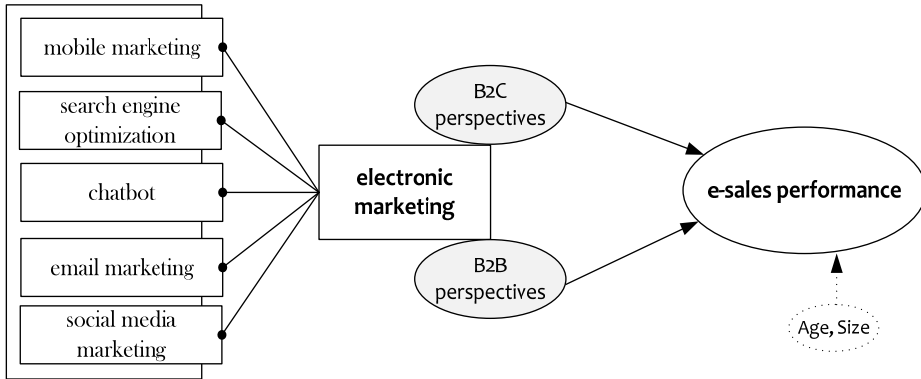
2 Literature review

The innovation diffusion theory (IDT) explains how new ideas, products, or technologies spread through a social system (Shaikh et al., 2023; Wani and Ali, 2015). It categorises adopters into innovators, early adopters, early majority, late majority, and laggards, each adopting at different stages (Wani and Ali, 2015). IDT theory highlights factors that influence adoption such as perceived advantages, compatibility, complexity, observability and trialability (Lee et al., 2011). It is advocated that a successful diffusion depends on effective communication and the presence of opinion leaders. IDT is frequently utilised in campaigns for social change, technology adoption, and marketing (Ho, 2022). IDT theory facilitates the strategic implementation of new concepts and technologies, which aids in understanding and forecasting the patterns of innovation adoption within a population (Ho, 2022). It is suggested that using IDT theory, businesses

and organisations can develop targeted strategies to promote adoption (Wani and Ali, 2015). It emphasises how important it is to understand consumer attitudes, convictions, and behaviours in order to create marketing campaigns and initiatives that are compelling. Because of its practical insights, IDT theory is a useful tool for encouraging successful innovation implementation and societal change (Ahire and Ravichandran, 2001). IDT encourages more study because of its important ramifications across numerous fields (Ahire and Ravichandran, 2001; Ho, 2022; Wani and Ali, 2015). Businesses, whether B2C or B2B, must comprehend consumer adoption patterns in order to properly launch and promote new products.

As such, academics recognise its importance in shaping creative strategies and accelerating economic growth (Ho, 2022). IDT theory's application extends to public health campaigns, policy-making, and social initiatives, urging further research to address pressing societal challenges. As technology evolves, studying the theory helps uncover new insights into innovation adoption trends, fostering a continuous cycle of research, improvement, and innovation implementation to better meet the needs of a dynamic and ever-changing world (Ahire and Ravichandran, 2001; de Reuver et al., 2009; Feder and O'Mara, 1982; Ho, 2022). Hence, based on theoretical support, we proposed certain hypotheses as mentioned in Figure 1, and explained thereafter to develop the hypothesised relationship to ensure the connections between EM and e-sales performance from both B2C and B2B perspectives.

Figure 1 Research model



2.1 Electronic marketing and e-sales performance: B2C perspective

Electronic marketing or e-marketing states to the strategic use of digital technologies and online channels, such as social media, email, search engines, and websites, to promote products or services, build brand awareness, engage with customers, and drive sales in the digital marketplace (Eid and El-Gohary, 2013; El-Gohary, 2012; Taherdoost and Jalaliyoon, 2014). In the past, eM has been widely discussed by academic scholars in various ways across the globe (Ayanso et al., 2010). However, how eM influences the e-sales performance of the organisation is a novel and interesting domain that needs to be explored in the present instant by developing hypothesised relationships, especially the B2C perspective (Mort and Drennan, 2002; Waheed and Jianhua, 2018). For example, B2C relationships between eM and online sales performance can be derived from various

theories and empirical studies (Ayanso et al., 2010). According to experts, higher investment in eM leads to higher sales performance and e-sales performance (Ayanso et al., 2010). Delivering personalised eMs' content to consumers can enhance engagement and purchase intent (Li et al., 2016). It is stated that tailoring messages, product recommendations, and offers to individual preferences and behaviours can create a more meaningful connection, leading to a higher likelihood of making a purchase (Li et al., 2016). We are currently discussing five major tools of eM, i.e., mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing which are most evolving and accepted in the perspective of B2C (El-Gohary and Eid, 2012). Effective social media engagement helps in optimising the e-sales performance of organisations (Dwivedi et al., 2015). Likewise, mobile optimisation also enhances the e-sales performance of the organisations which supports better participating the consumers (Eid and El-Gohary, 2013; Waheed and Jianhua, 2018). Integrating tools such as websites, social media, email, and mobile apps, can lead to improved e-sales performance (El-Gohary, 2012). It is important to note that these hypotheses need to be tested and validated through empirical research to establish their validity and significance (Eid and El-Gohary, 2013; El-Gohary, 2012; Salloum and Al-Emran, 2018; Waheed and Jianhua, 2018). In addition, the effectiveness of eM strategies can vary based on the industry, target audience, and other contextual factors (Bolos et al., 2016).

It is intensely believed by several researchers that eM utilises various digital platforms and technologies to connect businesses with their target audience, enabling real-time interactions and personalised experiences (Taherdoost and Jalaliyoon, 2014). It encompasses online advertising, content marketing, social media campaigns, email marketing, and other tactics to enhance brand visibility, customer engagement, and ultimately boost sales and conversions (Ha, 2008). Although many studies have shown the significance of eM concerning the distinct performance of the organisations including sales performance (Eid and El-Gohary, 2013; El-Gohary, 2012; El-Gohary and Eid, 2012; Waheed and Jianhua, 2018). How eM could be a productive tool in terms of e-sales performance is a key concern of this study (Gao et al., 2021). Hence, based on the enormous worth of electronic marketing in the existing literature and supporting arguments of IDT theory concerning organisational performance, we now assume the following propositions to empirically validate the outcomes from China.

H1 Electronic marketing is positively correlated with the e-sales performance of the organisations from a B2C perspective.

2.2 Electronic marketing and e-sales performance: B2B perspective

Electronic marketing also plays a major role in the business-to-business (B2B) perspective to attract distinct customers more productively (El-Gohary, 2012; Gao et al., 2021). EM and ESP assume that effective digital marketing strategies can positively impact B2B sales outcomes. B2B companies invest more in eM efforts such as content marketing, social media advertising, and email campaigns for optimising their ESP (El-Gohary, 2012; Ingram et al., 1991). EM content positively influences B2B ESP and supports improving organisational sales performance, including ESP (Ingram et al., 1991; Li et al., 2016; Waheed and Jianhua, 2018). Each tool of eM such as e-marketing analytics as well as data-driven strategies boost B2B e-sales performance or online sales (Li et al., 2016). By analysing customer behaviour and engagement data, businesses can

make informed decisions, optimise their marketing efforts, and enhance their overall ESP (Alavi and Habel, 2021). According to researchers, companies can create a cohesive and seamless customer experience that ultimately leads to increased conversions and sales by integrating eM efforts (Taherdoost and Jalaliyoon, 2014). B2B relationships between eM and ESP suggest that increased investment in eM, targeted content, trust-building activities, lead nurturing, data-driven strategies, integration with sales efforts, and social media engagement can positively influence B2B outcomes of sales (Henderson, 1984).

Moreover, researchers feel that empirical research is necessary to confirm the impact of eM on B2B e-sales performance, despite its significant contribution to eM (El-Gohary, 2012; El-Gohary and Eid, 2012). Companies can gain valuable insights into which eM strategies work best for their specific industry and target audience (Eid and El-Gohary, 2013). This data-driven approach will help optimise e-marketing efforts, leading to more effective B2B customer engagement and improved ESP (Eid and El-Gohary, 2013; El-Gohary, 2012; Ingram et al., 1991). IDT theory also supports conducting more studies on B2B electronic marketing by providing a theoretical framework to understand how innovations, in this case, e-marketing strategies, spread and are adopted within the B2B context (Ahire and Ravichandran, 2001; Wani and Ali, 2015). Hence, based on the massive significance of electronic marketing from B2B perspective in the existing literature and supporting arguments of IDT theory about organisational performance, we currently assume the following hypothesis to empirically validate the outcomes from China.

H2 Electronic marketing is positively correlated with the e-sales performance of the organisations from B2B perspective.

3 Methodologies

In this survey, with the help of SEM and SmartPLS, about 648 questionnaires for B2C (N = 648) and 625 for B2B respondents (N = 625) were considered for data analysis. A total of 2,000 questionnaires were distributed individually for B2C and B2B domains where 1,000 questionnaires were dedicated for each perspective like B2B and B2C. To this end, customers and industrial respondents were pinpointed for B2C and B2B respectively. In the Chinese market, during data collection, a small number of methods were taken into the process like online transmission, emails, WeChat, and personal visits with the cooperation of Chinese fellows. In order to get experimental proof in the future, the Chinese market is under the keen observation of researchers who are consuming their energies to probe how online platforms can play a crucial role in the Chinese market. A seven-point Likert scale was utilised. Nonetheless, the primary analysis involved the evaluation of a comprehensive set of questions and the profiles of respondents based on five characteristics as stated in Table 1.

3.1 Pilot analysis

Moreover, before analysing on a commercial scale to judge and gain more suitable outcomes (Thabane et al., 2010), it is quite important to tackle pilot testing. For this aim, about 45 documents (n = 45) were utilised. These given results were evaluated on the described method by statisticians (Black and Babin, 2019; Hair, 2011). The current ratio

was normal where ST stood at 0.7511, VR stood at 0.7410, and SCP stood at 0.801, respectively (Hair, 2011).

Table 1 Descriptive findings

	<i>B2C (N = 648)</i>		<i>B2B (N = 625)</i>	
	<i>Freq.</i>	<i>%</i>	<i>Freq.</i>	<i>%</i>
Qualification				
Bachelor	105	16.20	106	16.96
Master	163	25.15	141	22.56
PhD	192	29.63	193	30.88
Others	188	29.01	185	29.60
Age in years				
17–20	101	15.59	110	17.60
21–23	175	27.01	151	24.16
24–27	195	30.09	185	29.60
>28	177	27.31	179	28.64
Income level (monthly)				
<5K RMB	110	16.98	102	16.32
6–10K RMB	170	26.23	160	25.60
11–15K RMB	180	27.78	175	28.00
>16K RMB	188	29.01	188	30.08

3.2 Measures

Electronic marketing (eM) is considered an independent measure, while e-sales performance (ESP) is employed as a dependent variable. First, eM was accessed using 5-items such as mobile marketing, search engine optimisation (SEO), chatbot, email marketing, and social media marketing as adopted from the past study (Dwivedi et al., 2015; El-Gohary, 2012; Luo et al., 2022). Second, scales for sales performance were adopted from past studies in which the author used six items (Ingram et al., 1991). We used similar scales and modified them in terms of e-sales performance to examine the relationship concerning electronic marketing in the present instant.

3.3 Analysis tools and techniques

Initially, a descriptive tool was applied to determine the core information regarding the profiles of contestants. Secondly, in order to assimilate the interconnections within the variables of the survey, a correlation analysis was carried out. Thirdly, discriminant validity was computed and gauged on behalf of two techniques like Fornell and Larcker along with HTMT process (Fornell and Larcker, 1981). Similarly, the convergent validity analysis was done according to the prescribed method of AVEs, loading, and reliability judgment. In order to confirm the directional connection in variables (Ramayah et al., 2018), SEM using SmartPLS software was ultimately utilised. It might be considered to judge the values of NFI and SRMR to verify the genuineness of the model (Hu and

Bentler, 1999; Kusuma et al., 2022; Sohaib and Kang, 2015). The planned method for all sorts of surveys and techniques is illustrated subsequently. For example, values must within -1 to $+1$ in Pearson testing (Cohen et al., 2009; Hair, 2011), loading and AVEs ought to be lesser than 0.5 (Hu and Bentler, 1999), reliability values must greater than 0.7 (Hair, 2011), values must lesser than 0.9 in HTMT (Henseler et al., 2015), the results of square roots of AVEs must be greater than the subsequent interconnections in discriminant validity (Henseler et al., 2015), values of NFI ought to be greater than 0.9 (Hu and Bentler, 1999), and ultimately the products of SRMR must be smaller than 0.08 (Hair, 2011; Hu and Bentler, 1999). By acquiring inspiration from already published works of researchers, we carried out these methods (Mehmood et al., 2019; Shahid et al., 2022; Younas et al., 2017).

4 Results

4.1 Validity and reliability

Table 2 proves the validity and reliability ratios along with the rest of the details about means and standard deviations. According to the aforementioned report, loadings and AVEs values must be less than 0.5, and values of reliability should be superior to 0.7 (Hair, 2011). The values and outcomes of these analyses are reported below.

Table 2 Validity process

<i>Constructs</i>	<i>Items</i>	<i>Mean</i>	<i>Loadings</i>	<i>AVEs</i>	<i>Reliability (composite)</i>
eM: B2C*	eM-B2C			0.741	0.814
	eM-B2C1	4.225	0.658		
	eM-B2C2	5.351	0.715		
	eM-B2C3	5.547	0.555		
	eM-B2C4	5.982	0.689		
	eM-B2C5	5.236	0.635		
eM: B2B*	eM-B2B			0.686	0.789
	eM-B2B1	4.223	0.778		
	eM-B2B2	5.351	0.615		
	eM-B2B3	5.547	0.550		
	eM-B2B4	5.982	0.629		
	eM-B2B5	5.236	0.634		

Notes: eM – electronic marketing; B2C – business to consumer; B2B – business to business; ESP – electronic sales performance; items removed having <0.5 AVEs and loadings.

*Independent variables once with B2C and once with B2B perspective.

**Dependent variable once with B2C and once with B2B perspective.

Table 2 Validity process (continued)

<i>Constructs</i>	<i>Items</i>	<i>Mean</i>	<i>Loadings</i>	<i>AVEs</i>	<i>Reliability (composite)</i>
ESP: B2C**	ESP-B2C			0.788	0.802
	ESP-B2C1	4.228	0.689		
	ESP-B2C2	5.381	0.635		
	ESP-B2C3	5.567	0.685		
	ESP-B2C4	5.980	0.778		
	ESP-B2C5	5.236	0.615		
ESP: B2B**	ESP-B2B			0.684	0.786
	ESP-B2B1	4.125	0.658		
	ESP-B2B2	5.351	0.715		
	ESP-B2B3	5.247	0.555		
	ESP-B2B4	5.982	0.689		
	ESP-B2B5	5.236	0.635		

Notes: eM – electronic marketing; B2C – business to consumer; B2B – business to business; ESP – electronic sales performance; items removed having < 0.5 AVEs and loadings.

*Independent variables once with B2C and once with B2B perspective.

**Dependent variable once with B2C and once with B2B perspective.

4.2 Pearson's correlation

Table 3 illustrates the concluded values of correlation analysis to confirm the connection within the proposed variables of this analysis. The decision should be within –1 to +1 where negative values prove a negative link, lesser values verify a lesser relation and greater values affirm a greater bond (e.g., Fornell and Larcker, 1981; Hair et al., 2019; Kline, 2005). The values and outcomes of these analyses are reported below.

Table 3 Analysis of Pearson correlation

<i>Items</i>	<i>B2C</i>		<i>B2B</i>	
	<i>eM</i>	<i>ESP</i>	<i>eM</i>	<i>ESP</i>
eM	1.00		1.00	
ESP	0.358	1.00	0.235	1.00

Note: Values should be between –1 to +1 in Pearson testing.

4.3 Discriminant validity

Table 4 proves the ratio of discriminant analysis as used for the validation of the dataset. For this survey, scholars have recommended a specific roadmap. For instance, the square roots of AVEs must be greater than the subsequent interrelationship in discriminant validity (Fornell and Larcker, 1981). The values in bold form presented in the initial line of every column express the square root of AVEs and interrelationships are shown in non-bold form.

Table 4 Discriminant validity

<i>Items</i>	<i>B2C</i>		<i>B2B</i>	
	<i>eM</i>	<i>ESP</i>	<i>eM</i>	<i>ESP</i>
eM	0.871		0.889	
ESP	0.235	0.825	0.338	0.782

Note: Bold are square root values while non-bold are interrelationships.

4.4 Heterotrait-monotrait

Besides, Fornell and Larcker (1981) survey, an additional analysis is there in the shape of HTMT that proves the validity of concerned data with judging semblances. According to Henseler et al. (2015) approval values ought to be less than 0.9 in HTMT survey. Hence, the current results validate HTMT validity on behalf of the precision of outcomes as illustrated below in Table 5.

Table 5 HTMT

<i>Items</i>	<i>B2C</i>		<i>B2B</i>	
	<i>eM</i>	<i>ESP</i>	<i>eM</i>	<i>ESP</i>
eM				
ESP	0.235		0.338	

Note: Bold are square root values while non-bold are interrelationships.

4.5 Path relationships

Through the SEM model, the guidelines of the main pathways stood on beta values have been showing in the following Table 6. It is suggested that NFI and SRMR ought to be monitored in order to find out and evaluate the accuracy of the SEM model. For instance, the NFI value must be greater than 0.9 and SRMR must be lesser than 0.08 (Hu and Bentler, 1999). The at-hand values are accurately suitable according to the advised criteria where NFI rested at 0.923 as well as SRMR at 0.0235.

Table 6 SEM model results

<i>Directions</i>	<i>ED</i>	<i>Direct effect</i>	<i>Sig.</i>	<i>SE</i>	<i>Decision</i>
H1: eM → ESP ^a	±	0.242***	0.000	0.044	Supported
H2: eM → ESP ^b	±	0.301***	0.000	0.035	Supported
<i>Model fitness</i>					
	NFI	0.9230			
	SRMR	0.0235			
AGE ^c		--	--		
SIZE ^c		--	--		

Notes: ***Sig. at 0.05. ES – expected signs; SE – standard errors. eM – electronic marketing; B2C – business to consumer; B2B – business to business; ESP – electronic sales performance. NFI must be >0.9; SRMR must <0.08.

^aB2C perspective.

^bB2B perspective.

^cControl variables.

5 Discussion and implications

A total of two hypotheses were proposed to explore the nexus of electronic marketing (eM) and e-sales performance (ESP) from both B2C and B2B perspectives. First, it was implicit in H1 that eM positively linked with ESP. The results after SEM implementation have shown a positive connection between eM and ESP at ($\beta = 0.242$; 0.000; SE = 0.044). Based on such calculations and findings, H1 is accepted. In addition, the outcomes support past studies in which experts suggested a positive connection between electronic marketing and the e-sales performance of corporates from B2C perspectives within various domains and perspectives, worldwide (Clarke and Flaherty, 2005; Dwivedi et al., 2015; Gao et al., 2021; Hawk, 2004; Henderson, 1984; Mort and Drennan, 2002; Taherdoost and Jalaliyoon, 2014; Taylor and Strutton, 2010; Waheed and Jianhua, 2018). Second, it was assumed in H2 that eM is positively linked with ESP. The results after SEM implementation have shown a positive connection between eM and ESP at ($\beta = 0.301$; 0.000; SE = 0.035). Based on such calculations and findings, H2 is accepted. Furthermore, the results are following previous findings where researchers proposed a constructive relationship in terms of electronic marketing from various perspectives such as B2B and B2C (Alrubaiee et al., 2012; Eid and El-Gohary, 2013; El-Gohary, 2012; El-Gohary and Eid, 2012; Habibi et al., 2015; Chong et al., 2010; Lancaster and Lages, 2006; Miller, 2012; Zhao et al., 2008).

5.1 Implications

Theoretically, this study adds to the body of literature by directing empirical outcomes on electronic marketing and e-sales performance. This study contributes to the literature by exploring a positive connection between electronic marketing (i.e., mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing) and sales performance from B2C perspectives. Similarly, this study proves the prominence of electronic marketing and e-sales performance from a B2B perspective. Moreover, this study empirically adds a dual contribution considering two streams such as B2C and B2B together to the literature by showing insights from the perspective of China. The study also enlists several implications for management in terms of electronic marketing and e-sales performance, as follows.

From a managerial perspective, the study offers several managerial contributions to electronic marketing and e-sales marketing both B2C and B2B perspectives. For instance, managers are suggested to embrace electronic marketing tools such as mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing to boost sales by providing a broader reach, enabling personalised customer interactions, and facilitating data-driven decision-making. It is suggested to the management that leveraging social media, email marketing, and search engine optimisation can enhance brand visibility, customer engagement, and loyalty. Therefore, electronic marketing supports consumer behaviour by empowering managers to make real-time adjustments to campaigns, optimising sales outcomes. Furthermore, managers should focus on online management systems to better record the consumers' information because highlighting online customer service and reformation of the purchasing process fosters customer satisfaction and retention. Furthermore, electronic marketing enables managers to target specific customer segments more precisely, tailoring marketing efforts to meet their

unique needs and preferences. Utilising automation tools can streamline marketing workflows, freeing up resources for other business activities. Managers are also suggested to emphasise mobile marketing since mobile experience is also vital, given the increasing prevalence of mobile commerce. Usually, holding electronic marketing can enable management to optimise ESP and thrive in the digital era.

Besides, electronic marketing has significant managerial implications for improving e-sales performance from a B2B perspective. Adopting targeted digital marketing strategies could allow the management to reach relevant decision-makers with other companies, increasing lead generation and conversion rates. It is hinted to the managers that employing electronic marketing and thought leadership positions the organisation as an industry authority, fostering trust and credibility among potential clients that eventually may help improve e-sales performance. Data analytics may help identify trends and refine marketing strategies, which leads to more informed decision-making. Additionally, from the B2B domain, a strong online existence and SEO optimisation can enhance visibility, ensuring the company is ascertainable when prospects search for relevant solutions. Therefore, embracing electronic marketing in the B2B space optimises sales opportunities and fosters long-term customer relationships. Finally, email marketing enables B2B managers to nurture leads through the e-sales funnel effectively. It is stated that continuous monitoring of electronic marketing campaigns can help to refine tactics and boost overall e-sales performance. Hence, electronic marketing along with sub-dimensions such as mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing are the unique competencies that help the firm in e-sales performance. Therefore, managers should acknowledge the importance of electronic marketing in both streams like B2C and B2B to trigger consumers and customers in today's business environment in a more productive manner. Despite this, this study has several deficiencies and plans for scholars to handle more studies in the future.

5.2 Future challenges

There are certain challenges that organisations may face in the future and therefore organisations need solid strategies to overcome these challenges and uncertainties to effectively perform B2C and B2B marketing campaigns. Electronic marketing (eM) may face significant challenges in terms of sales performance, especially online sales. With rapid advancements in technology and hastily transforming consumer behaviour, staying relevant and capturing customers' attention will be a key hurdle in the future which should be fixed by incorporating effective digital marketing strategies. The mounting competition in the digital landscape will demand marketers to constantly innovate and create compelling content that resonates with their target audience. Additionally, navigating through the complexities of diverse online platforms, algorithms, and ever-changing SEO dynamics will pose challenges in optimising marketing strategies. Understanding these dynamic conditions will be vital for eM to drive and sustain the e-sales growth of the organisations. In addition, as the digital ecosystem expands marketers will deal with certain challenges of effectively leveraging emerging technologies like electronic marketing along with certain tools such as mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing to optimise sales performance of the organisations. The shift towards sustainable and ethical practices will also influence consumer choices, requiring eM to align with eco-conscious

values. Marketers should build strong analytics capabilities to derive actionable insights from vast data streams that enable them to make informed decisions and drive sales performance such as online sales in the ever-evolving landscape of electronic marketing, worldwide.

6 Conclusions

It is concluded that electronic marketing acts as a fundamental role in augmenting the e-sales/online performance of companies in the digital landscape. Its importance lies in the ability to reach a broader audience both B2C and B2B, personalise interactions, and utilise data-driven insights to make informed decisions. Using electronic marketing tools such as mobile marketing, search engine optimisation, chatbot, email marketing, and social media marketing can facilitate effective targeting and engagement of potential customers, fostering brand loyalty and customer satisfaction. It is concluded that electronic marketing is a valid predictor of e-sales performance that enriches the companies to continuously monitor marketing efforts, ensuring businesses remain competitive and adaptable in an ever-evolving market. It is also summarised that embracing electronic marketing is not only essential for success but also a strategic imperative in driving sustained growth and profitability in the digital age. Finally, this study concluded a positive link between electronic marketing and the e-sales performance of the organisations both from B2C and B2B perspective which enrich managers' knowledge to take appropriate action for effectively engaging the consumers or customers. Besides, the researchers should perform more insightful studies on such themes to yield additional empirical evidence from China or other regions of the world.

6.1 Limitations

This research carries some limitations which may provide guidelines to future scholars in the fields of eM and performance of e-sales (ESP). Indeed, a small sample size hinders generalising these results. Secondly, the focus was laid on only a sole progressing country China. Thirdly, this analysis ignored any moderation variables within the association of eM and e-sale performance. First and the foremost suggestion is to focus on a greater sample size in the premises of China and other marketplaces around the globe.

Moreover, upcoming studies might be enhanced with the meditation of assured meditating factors with moderating factors to confirm the deep-rooted connection between eM and ESP. This analysis considered eM as a cumulative variable with the collection of five basic devices consequently each associated element, i.e., search engine optimisation, email marketing, mobile marketing, chatbot, and social media marketing might be studied individually to provide supplementary proof in literature from B2C, B2B or commerce to government (B2G) outlook in future.

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References

- Ahire, S.L. and Ravichandran, T. (2001) 'An innovation diffusion model of TQM implementation', *IEEE Transactions on Engineering Management*, Vol. 48, No. 4, pp.445–464.
- Alavi, S. and Habel, J. (2021) 'The human side of digital transformation in sales: review & future paths', *Journal of Personal Selling & Sales Management*, Vol. 41, No. 2, pp.83–86.
- Alrubaiee, L., Alshaibi, H. and Al-bayati, Y. (2012) 'Relationship between B2B e-commerce benefits, e-market-place usage and supply chain management', *Global Journal of Management and Business Research*, Vol. 12, No. 9, pp.22–36.
- Ayanso, A., Lertwachara, K. and Thongpapanl, N. (2010) 'Technology-enabled retail services and online sales performance', *Journal of Computer Information Systems*, Vol. 50, No. 3, pp.102–111.
- Barling, J. and Beattie, R. (1983) 'Self-efficacy beliefs and sales performance', *Journal of Organizational Behavior Management*, Vol. 5, No. 1, pp.41–51.
- Black, W. and Babin, B.J. (2019) 'Multivariate data analysis: Its approach, evolution, and impact', *The Great Facilitator: Reflections on the Contributions of Joseph F. Hair, Jr. to Marketing and Business Research*, pp.121–130, Springer, UK.
- Bolos, C., Idemudia, E.C., Mai, P., Rasinghani, M. and Smith, S. (2016) 'Conceptual models on the effectiveness of e-marketing strategies in engaging consumers', *Journal of International Technology and Information Management*, Vol. 25, No. 4, p.3.
- Chong, W.K., Shafaghi, M., Woollaston, C. and Lui, V. (2010) 'B2B e-marketplace: an e-marketing framework for B2B commerce', *Marketing Intelligence & Planning*, Vol. 28, No. 3, pp.310–329.
- Clarke, I. and Flaherty, T. (2005) *Advances in Electronic Marketing*, IGI Global, USA.
- Cohen, I., Huang, Y., Chen, J., Benesty, J., Benesty, J., Chen, J. and Cohen, I. (2009) 'Pearson correlation coefficient', *Noise Reduction in Speech Processing*, pp.1–4, Book Chapter.
- de Reuver, M., Bouwman, H. and MacInnes, I. (2009) 'Business models dynamics for start-ups and innovating e-businesses', *International Journal of Electronic Business*, Vol. 7, No. 3, pp.269–286.
- Dwivedi, Y.K., Kapoor, K.K. and Chen, H. (2015) 'Social media marketing and advertising', *The Marketing Review*, Vol. 15, No. 3, pp.289–309.
- Eid, R. and El-Gohary, H. (2013) 'The impact of E-marketing use on small business enterprises' marketing success', *The Service Industries Journal*, Vol. 33, No. 1, pp.31–50.
- El-Gohary, H. (2012) 'Factors affecting e-marketing adoption and implementation in tourism firms: an empirical investigation of Egyptian small tourism organisations', *Tourism Management*, Vol. 33, No. 5, pp.1256–1269.
- El-Gohary, H. and Eid, R. (2012) 'DMA model: understanding digital marketing adoption and implementation by Islamic tourism organizations', *Tourism Analysis*, Vol. 17, No. 4, pp.523–532.
- Feder, G. and O'Mara, G.T. (1982) 'On information and innovation diffusion: a Bayesian approach', *American Journal of Agricultural Economics*, Vol. 64, No. 1, pp.145–147.
- Fornell, C. and Larcker, D.F. (1981) 'Structural equation models with unobservable variables and measurement error: algebra and statistics', *Journal of Marketing Research*, Vol. 18, pp.382–388, <https://doi.org/10.2307/3150980>.

- Gao, P., Meng, F., Mata, M.N., Martins, J.M., Iqbal, S., Correia, A.B., ... Farrukh, M. (2021) 'Trends and future research in electronic marketing: a bibliometric analysis of twenty years', *Journal of Theoretical and Applied Electronic Commerce Research*, Vol. 16, No. 5, pp.1667–1679.
- Gratzer, M., Werthner, H. and Winiwarter, W. (2004) 'Electronic business in tourism', *International Journal of Electronic Business*, Vol. 2, No. 5, pp.450–459.
- Ha, L. (2008) 'Online advertising research in advertising journals: a review', *Journal of Current Issues & Research in Advertising*, Vol. 30, No. 1, pp.31–48.
- Habibi, F., Hamilton, C.A., Valos, M.J. and Callaghan, M. (2015) 'E-marketing orientation and social media implementation in B2B marketing', *European Business Review*, Vol. 27, No. 6, pp.638–655.
- Hair, J.F. (2011) 'Multivariate data analysis: an overview', *International Encyclopedia of Statistical Science*, pp.904–907, Springer, USA.
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019) 'When to use and how to report the results of PLS-SEM', *European Business Review*, Vol. 31, No. 1, pp.2–24.
- Hawk, S. (2004) 'A comparison of B2C e-commerce in developing countries', *Electronic Commerce Research*, Vol. 4, No. 2, pp.181–199.
- Henderson, D.R. (1984) 'Electronic marketing in principle and practice', *American Journal of Agricultural Economics*, Vol. 66, No. 5, pp.848–853.
- Henseler, J., Ringle, C.M. and Sarstedt, M. (2015) 'A new criterion for assessing discriminant validity in variance-based structural equation modeling', *Journal of the Academy of Marketing Science*, Vol. 43, pp.115–135.
- Ho, J.C. (2022) 'Disruptive innovation from the perspective of innovation diffusion theory', *Technology Analysis & Strategic Management*, Vol. 34, No. 4, pp.363–376.
- Hu, L.T. and Bentler, P.M. (1999) 'Cutoff criteria for fit indexes in covariance structure analysis: conventional criteria versus new alternatives', *Structural Equation Modeling: A Multidisciplinary Journal*, Vol. 6, No. 1, pp.1–55.
- Ingram, T.N., Lee, K.S. and Lucas, G.H. (1991) 'Commitment and involvement: assessing a salesforce typology', *Journal of the Academy of Marketing Science*, Vol. 19, pp.187–197.
- Kline, R.B. (2005) *Principles and Practice of Structural Equation Modeling*, Guilford Press, London.
- Kusuma, A.C., Najib, M. and Hermadi, I. (2022) 'Antecedent and consequences of consumers' satisfaction in online grocery shopping', *International Journal of Electronic Business*, Vol. 17, No. 1, pp.37–60.
- Lancastre, A. and Lages, L.F. (2006) 'The relationship between buyer and a B2B e-marketplace: cooperation determinants in an electronic market context', *Industrial Marketing Management*, Vol. 35, No. 6, pp.774–789.
- Lee, Y-H., Hsieh, Y-C. and Hsu, C-N. (2011) 'Adding innovation diffusion theory to the technology acceptance model: supporting employees' intentions to use e-learning systems', *Journal of Educational Technology & Society*, Vol. 14, No. 4, pp.124–137.
- Li, B., Ch'ng, E., Chong, A.Y-L. and Bao, H. (2016) 'Predicting online e-marketplace sales performances: a big data approach', *Computers & Industrial Engineering*, Vol. 101, pp.565–571.
- Luo, B., Lau, R.Y., Li, C. and Si, Y.W. (2022) 'A critical review of state-of-the-art chatbot designs and applications', *Wiley Interdisciplinary Reviews: Data Mining and Knowledge Discovery*, Vol. 12, No. 1, p.e1434.
- Mehmood, M.S., Jian, Z. and Waheed, A. (2019) 'The influence of entrepreneurial leadership on organisational innovation: mediating role of innovation climate', *International Journal of Information Systems and Change Management*, Vol. 11, No. 1, pp.70–89.
- Miller, M. (2012) *B2B Digital Marketing: Using the Web to Market Directly to Businesses*, Que Publishing, India.

- Mort, G.S. and Drennan, J. (2002) 'M-marketing: new directions in B2C e-business', Paper presented at the *Proceedings of ANZMAC*.
- N'Da, K., Bergeron, F. and Raymond, L. (2008) 'Achieving advantages from business-to-business electronic commerce: an empirical validation of an integrative framework', *International Journal of Electronic Business*, Vol. 6, No. 5, pp.516–549.
- Ramayah, T., Cheah, J., Chuah, F., Ting, H. and Memon, M.A. (2018) 'Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0', *An Updated Guide and Practical Guide to Statistical Analysis* [online] chrome-extension://efaidnbmninnibpcapjpcglclefindmkaj/https://www.researchgate.net/profile/Hiram-Ting/publication/341357609_PLS-SEM_using_SmartPLS_30_Chapter_13_Assessment_of_Moderation_Analysis/links/5ebc2be6a6fdcc90d674eb9c/PLS-SEM-using-SmartPLS-30-Chapter-13-Assessment-of-Moderation-Analysis.pdf.
- Salloum, S.A. and Al-Emran, M. (2018) 'Factors affecting the adoption of e-payment systems by university students: extending the TAM with trust', *International Journal of Electronic Business*, Vol. 14, No. 4, pp.371–390.
- Shahid, K., Yang, Q., Waheed, A. and Arif, F. (2022) 'Insights into consumers: exploring the impact of brand coolness on consumers' brand engagement with intervening role of brand love', *International Journal of Information Systems and Change Management*, Vol. 13, No. 2, pp.131–147.
- Shaikh, I.M., Amin, H., Noordin, K. and Shaikh, J.M. (2023) 'Islamic bank customers' adoption of digital banking services: extending diffusion theory of innovation', *Journal of Islamic Monetary Economics and Finance*, Vol. 9, No. 1, pp.57–70.
- Sheth, J.N. and Sharma, A. (2005) 'International e-marketing: opportunities and issues', *International Marketing Review*, Vol. 22, No. 6, pp.611–622.
- Shi, Y., Chen, S., Xu, K., Zhao, L., Liu, Y., Zou, Q. and Sun, H. (2023) 'Exposure to nitrogenous based flame retardants in Chinese population: evidence from a national-scale study', *Journal of Hazardous Materials*, Vol. 445, p.130653.
- Sohaib, O. and Kang, K. (2015) 'Individual level culture influence on online consumer iTrust aspects towards purchase intention across cultures: a SOR model', *International Journal of Electronic Business*, Vol. 12, No. 2, pp.142–161.
- Taherdoost, H. and Jalaliyoon, N. (2014) 'Marketing vs e-marketing', *International Journal of Academic Research in Management*, Vol. 3, No. 4, pp.335–340.
- Taylor, D.G. and Strutton, D. (2010) 'Has e-marketing come of age? Modeling historical influences on post-adoption era Internet consumer behaviors', *Journal of Business Research*, Vol. 63, Nos. 9–10, pp.950–956.
- Thabane, L., Ma, J., Chu, R., Cheng, J., Ismaila, A., Rios, L.P. and Goldsmith, C.H. (2010) 'A tutorial on pilot studies: the what, why and how', *BMC Medical Research Methodology*, Vol. 10, No. 1, pp.1–10.
- Waheed, A. and Jianhua, Y. (2018) 'Achieving consumers' attention through emerging technologies: the linkage between e-marketing and consumers' exploratory buying behavior tendencies', *Baltic Journal of Management*, Vol. 13, No. 2, pp.209–235.
- Wani, T.A. and Ali, S. (2015) 'Innovation diffusion theory', *Journal of General Management Research*, Vol. 3, No. 2, pp.101–118.
- Wen, K-W. and Chen, Y. (2010) 'E-business value creation in small and medium enterprises: a US study using the TOE framework', *International Journal of Electronic Business*, Vol. 8, No. 1, pp.80–100.
- Younas, A., Wang, D. and Waheed, A. (2017) 'Fostering work outcomes: the interactive effects of organisational justice and Islamic work ethics', *International Journal of Information Systems and Change Management*, Vol. 9, No. 3, pp.238–257.
- Zhao, J., Wang, S. and Huang, W.V. (2008) 'A study of B2B e-market in China: e-commerce process perspective', *Information & Management*, Vol. 45, No. 4, pp.242–248.
- Zhou, Z. and Hu, D. (2008) 'An epidemiological study on the prevalence of atrial fibrillation in the Chinese population of mainland China', *Journal of Epidemiology*, Vol. 18, No. 5, pp.209–216.