



Strategic use of social media in marketing and financial performance: The B2B SME context

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ABSTRACT

While the strategic use of social media (SM) for enhancing firm performance has attracted much attention, little is known about it through the lens of business-to-business (B2B) small and medium-sized enterprises (SMEs). Building on the market-driven view and the dynamic capabilities view of competitive strategy, we examine SM use in a framework of market-sensing and customer-linking capabilities that influence firm performance. Our research model posits that market orientation stimulates SM use to enhance market-sensing capability thereby facilitating two customer-linking capabilities, namely customer relationship management and brand management, which collectively contribute to greater marketing performance and financial performance. Our research model is empirically tested using a survey of 143 UK B2B SMEs. The findings broadly support our theorization in which the strategic use of SM, an essential part of market-sensing capability, enhances customer-linking capabilities. Interestingly, although SM use influences brand management capability, its suggested influences on both customer relationship management capability and marketing performance occur only through the mediation of brand management capability. Both customer-linking capabilities positively influence marketing performance and in turn financial performance. Our findings provide novel conceptual and empirical advancement of how market-centric B2B SMEs strategically use SM to enhance their market-sensing and in turn customer-linking capabilities, and hence firm performance.

1. Introduction

With the increased digitalization of marketing activities, marketing professionals are increasingly adopting social media (SM) as a strategic tool to effectively engage with customers and broader stakeholders (e.g. Chaker, Nowlin, Pivonka, Itani, and Agnihotri, 2022; Pardo, Pagani, and Savinien, 2022); develop new products (Du, Yalcinkaya, and Bstieler, 2016); increase brand awareness (Deng, Wang, Rod, and Ji, 2021); co-create value (Itani, Krush, Agnihotri, and Trainor, 2020); and improve firm performance (Cheng, Liu, Qi, and Wan, 2021). More and more researchers suggest that firms must have an SM presence since the strategic use of SM is increasingly seen to enhance firm competitiveness (e.g. Cartwright, Liu, and Raddats, 2021; Tiwary, Kumar, Sarraf, Kumar, and Rana, 2021).

The likely gains from SM technologies are particularly evident in business markets where customers are more informed and less dependent on interactions with salespeople (Ancillai, Terho, Cardinali, and Pascucci, 2019). For example, leading large firms such as Adobe, IBM,

and Maersk Line are increasingly using digital channels and SM to facilitate effective dialogue with customers (Ancillai et al., 2019). The growing evidence suggests that SM can be strategically used to facilitate an effective dialogue with customers (Kovac, 2016), create brand awareness, or differentiate the focal brand from the competition (e.g. Deng et al., 2021; Swani, Brown, and Mudambi, 2020), provide customer care, and/or improve firm performance, among others (e.g. Salo, 2017; Tiwary et al., 2021).

The benefits of the strategic use of SM are particularly relevant to small and medium-sized enterprises (SMEs) that often struggle to compete effectively as they lack financial, human, and organizational resources and expertise (e.g. Candi, Roberts, Marion, and Barczak, 2018; Eggers, 2020; Muller et al., 2021). As Eid, Abdelmoety, and Agag (2020) found that business-to-business (B2B) exporting SMEs in the UK use SM extensively to achieve greater export marketing performance by gaining a deeper understanding of competition in different markets and customers' views, building brand awareness, and enhancing the quality and quantity of international business contacts. While this growing evidence

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is promising there is still greater scope for increased adoption of SM by B2B SMEs for greater performance. For example, according to the 2021 annual report on European SMEs (Muller et al., 2021), European SMEs are significantly lagging behind larger firms in integrating digital technologies including SM into their businesses. However, SMEs' smallness may enable them to be generally flexible, agile, and fast to use customer insights (Eggers, Hatak, Kraus, and Niemand, 2017; Seethamraju, 2015), and/or highly market-centric (Raju, Lonial, and Crum, 2011).

Although SM use and its impacts on business-to-customer (B2C) performance have attracted much attention, this focus has received limited scrutiny in a B2B setting (e.g. Chaker et al., 2022; Drummond, O'Toole, and McGrath, 2020; Luo, Tóth, Liu, and Yuan, 2021). As Herhausen, Miočević, Morgan, and Kleijnen (2020) observe that "no study so far has quantified a potential organizational performance effect (of SM use) for B2B firms" (p. 280). Considering that B2C and B2B firms have remarkable differences regarding their operational and contextual characteristics (e.g. Baabdullah, Alalwan, Slade, Raman, and Khatatneh, 2021; Iankova, Davies, Archer-Brown, Marder, and Yau, 2019), scholars call for more studies into SM use in B2B (e.g. Cawsey and Rowley, 2016; Luo et al., 2021; Tiwary et al., 2021). In response, there has been greater interest in understanding the strategic use of SM and developing alternative theories that are relevant to B2B (e.g. Cartwright et al., 2021; Iankova et al., 2019; Tiwary et al., 2021).

While extant research mostly investigates SM use in large firms (e.g. Eggers et al., 2017; Habibi, Hamilton, Valos, and Callaghan, 2015), which may not apply to SMEs (Yoon, Yoon, Nam, and Choi, 2021), SMEs are increasingly using SM (Brink, 2017; Karampela, Lacka, and McLean, 2020) for example to communicate and attract customers (Fraccastoro, Gabrielsson, and Pullins, 2021; Michaelidou, Siamagka, and Christodoulides, 2011; Wang, Pauleen, and Zhang, 2016). Evidence in the literature suggests that a firm's SM use shows its market information processing (e.g. Ye, Yu, Zheng, and Zheng, 2022) and its use of competitive intelligence (Itani, Agnihotri, and Dingus, 2017), which are a core activity of market orientation (Kohli and Jaworski, 1990). Market-centric firms tend to continuously create and utilize market intelligence (Kohli and Jaworski, 1990) and to develop their market-sensing capabilities (MSC) and customer-linking capabilities (CLC), thereby meeting customer needs (Day, 1994) and achieving superior firm performance (e.g. Fang, Chang, Chueh-Chu, and Chia-Hui, 2014; Rapp, Trainor, and Agnihotri, 2010). Yet, there is little published research on how SM use is affected by the firm's market orientation, affecting CRM such as customer relationship management (CRM) and brand management, and eventually firm performance directly or indirectly. Overall, we know little about SM use through the lens of B2B SMEs (e.g. Brink, 2017; Iankova et al., 2019; Tiwary et al., 2021).

Addressing this research gap, we intend to examine how the strategic use of SM affects B2B SMEs' marketing performance and in turn financial performance. We focus on SMEs for several reasons. First, B2B SMEs constitute the bulk of industrial firms and are vital to economic development (Baabdullah et al., 2021; Michaelidou et al., 2011). Second, the notable contribution of SMEs makes to the economy (Bocconcelli et al., 2018; WorldBank, 2021) with SMEs representing about 90% of firms and above 50% of employment globally (WorldBank, 2021). Third, SMEs are considerably lagging behind larger firms in respect of integrating digital technologies including SM into their businesses (Muller et al., 2021). Fourth, little is known about how the strategic use of SM may help B2B SMEs perform better. Accordingly, we are guided by two research questions: *To what extent does market orientation facilitate SM use? To what extent does SM use influence CRM and brand management capabilities, and consecutively marketing performance and financial performance?*

We build on the market-driven view of competitive strategy (Baker and Sinkula, 2007; Jaworski, Kohli, and Sahay, 2000; Lambin, Chumpitaz, and Schuilung, 2007) to argue that market-centric firms with their greater understanding of the market needs are positioned to compete better (Kohli and Jaworski, 1990; Morgan, Vorhies, and Mason, 2009).

Market-driven SMEs tend to be more successful because they emphasize interacting with the market to meet customer requirements continuously (Reijonen, Laukkanen, Komppula, and Tuominen, 2012; Sundström, Hyder, and Chowdhury, 2021) and identify capabilities such as MSC and CLC (Day, 1994), to fulfill the customers' needs (Hossain, Akter, and Yanamandram, 2021). Employing the dynamic capabilities view (Eisenhardt and Martin, 2000; Teece, 2007, 2012), we postulate that market-centric SMEs are stimulated to use SM to better sense market opportunities, which in turn allow them to facilitate two strategic CLC, namely CRM and brand management, to seize the opportunities, which collectively contribute to greater marketing performance and financial performance. As argued by Day (1994), MSC and CLC are too idiosyncratic to be imitable; they are liable to improve firm competitiveness (Hooley, Greenley, Cadogan, and Fahy, 2005; Rapp et al., 2010). While research on market orientation has often focused on larger firms; there has been scant interest in SMEs (Bodlaj and Čater, 2022; Raju et al., 2011; Sundström et al., 2021). The collective effect of these strategic capabilities has received limited research attention in B2B SME context.

Our article thus contributes new work on the under-researched phenomenon of strategic use of SM through the lens of B2B SMEs (e.g. Luo et al., 2021; Tiwary et al., 2021). First, our research contributes to the strategic marketing literature within the B2B context by being the first to conceptualize and examine SM use as an integral part of MSC meaningfully enhancing two CLC, namely, CRM and brand management, to explain and predict how B2B SMEs could use SM strategically for increasing marketing performance and in turn financial performance.

Second, as an extension to Day's (1994) framework of capabilities of market-driven firms, we examine the mechanisms through which market-centric B2B SMEs use SM strategically to enhance their MSC and CLC, and the effect of such capabilities for improving marketing performance and in turn financial performance. This is facilitated by the dynamic capabilities framework adopted for this study where B2B SMEs sense market opportunities and seize such opportunities through two CLC and reconfigure and deploy such knowledge resources for greater marketing performance and in turn financial performance (Teece, 2007).

Third, our research contributes to marketing performance literature (e.g. Merrilees, Rundle-Thiele, and Lye, 2011; O'sullivan and Abela, 2007; Vorhies and Morgan, 2005). As viewed by O'sullivan and Abela (2007) "Marketing practitioners are under increasing pressure to demonstrate their contribution to firm performance" (p. 79). As Morgan, Clark, and Gooner (2002) noticed, "both academics and managers currently lack a comprehensive understanding of the marketing performance process and the factors that affect the design and use of marketing performance assessment systems within corporations" (p. 363). By adopting the strategic use of SM coupled with MSC and two CLC, namely, CRM and brand management, our research advances our understanding of the link between marketing capabilities and firm performance, which is underexplored (Morgan, Slotegraaf, and Vorhies, 2009).

The remainder of this article is organized as follows. Section 2 will provide a review of the theoretical background. Section 3 will develop the research hypotheses. Sections 4 and 5 will describe the research method and findings, respectively. Section 6 will discuss the study results, implications, limitations, and future investigation.

2. Theoretical foundations

2.1. Strategic use of SM and B2B SMEs

While SM is described as "the technological component of the communication, transaction, and relationship building functions of a business which leverages the network of customers and prospects to promote value co-creation" (Andzulis, Panagopoulos, and Rapp, 2012, p. 308), SM use has been increasingly examined through a capability

lens, including SM strategic capability (Nguyen, Yu, Melewar, and Chen, 2015), SM capability (Wang et al., 2016), reflexivity capability (Baptista, Wilson, Galliers, and Bynghall, 2017), SM capabilities for innovation (Muninger, Hammedi, and Mahr, 2019), and strategic communication capacity (Pekkala and van Zoonen, 2022). Built upon these studies and in the present research, we define SM use as an organizational capability that constitutes the firm's overall MSC to perceive market opportunities and threats, one dimension of the dynamic capability (Endres, Helm, and Dowling, 2020). It is based on information processing (Day, 2011; Kohli and Jaworski, 1990), using SM platforms (Luo et al., 2021) such as Facebook, YouTube, Twitter, LinkedIn, Instagram, and so forth. Several recent literature reviews (e.g. Cartwright et al., 2021; Herhausen et al., 2020; Tiwary et al., 2021) suggest that SM use in B2B has attracted considerable academic attention while more and more B2B firms are using SM for various business purposes.

Although SM use in B2C is well-researched, the research findings may not be germane to B2B since B2B firms have distinct characteristics (e.g. Cartwright et al., 2021; Iankova et al., 2019; Tiwary et al., 2021). Compared with B2C, B2B firms usually have more complex products, fewer but larger customers, lasting business relationships, and high-value exchange, among other things (Cawsey and Rowley, 2016; Habibi et al., 2015). As such, B2B firms often have already developed close relationships with existing customers and understand customers' needs (Iankova et al., 2019; Koponen and Rytty, 2020); thus, they sometimes find SM use lacking perceived benefits (Michaelidou et al., 2011). Given that B2B firms have unique characteristics, it would be pertinent to develop alternative theories that are relevant to SM use in B2B (Cartwright et al., 2021; Salo, 2017; Tiwary et al., 2021). Yet, SM use in B2B is insufficiently studied (e.g. Chaker et al., 2022; Iankova et al., 2019; Luo et al., 2021). Several scholars call for investigating how B2B firms can use SM strategically to improve firm competitiveness (e.g. Chaker et al., 2022; Pardo et al., 2022; Salo, 2017), particularly in B2B SME context.

Past research on the strategic use of SM in B2B SME context is limited, particularly on the empirical front (e.g. Iankova et al., 2019; Tiwary et al., 2021), with a growing number of researchers moving in that direction. For example, Michaelidou et al. (2011) were one of the first to conduct a descriptive analysis of SM use among B2B SMEs. They found that while SM can be used to attract new customers, it lacks perceived relevance. Wang et al. (2016), based on five case studies, showed that SM use allows B2B SMEs to improve their communication and business performance. Hsiao, Wang, Wang, and Kao (2020) found that including national brands in SM positively affects the popularity of private labels, thereby increasing the sales of private label products. Karampela et al. (2020) showed that a supplier's presence on SM positively affects B2B brand relationship strength. Fraccastoro et al. (2021), based on a qualitative analysis, showed how international SMEs can use SM and other digital communication tools to facilitate B2B sales process.

Overall, as the above review shows while the limited research on SM use in B2B SME context tentatively suggested that SM use is broadly related to attracting and communicating with customers, branding, and firm performance, which alludes to the possibility that SM use could be strategically associated with CRM and brand management capabilities to improve firm performance, such research is still in its infancy with the absence of conceptual and empirical research examining the strategic use of SM in an integrated market driven framework and its impact on B2B SME firm performance.

2.2. Market driven view, customer-linking capabilities, and B2B SMEs

Market orientation is often considered a vital element of the market driven view (Raju et al., 2011; Smirnova, Naudé, Henneberg, Mouzas, and Kouchtch, 2011), which is important for firm success (Fang et al., 2014; Luxton, Reid, and Mavondo, 2017). Market orientation relates to "the organization-wide generation of market intelligence about current and future customer needs, dissemination of intelligence across departments and organization-wide responsiveness to it" (Kohli and

Jaworski, 1990, p. 6). By its very nature, market orientation is a company-level intangible resource (Armario, Ruiz, and Armario, 2008; Day, 1994); it can be transformed into dynamic capability (e.g. Hunt and Madhavaram, 2020; Wilden, Gudergan, and Lings, 2019) when complemented by transformational constructs (Menguc and Auh, 2006) to enable the firm to gain superior performance (Slater and Narver, 1999) and/or competitive advantage (Hunt and Madhavaram, 2020).

Market information processing that constitutes a core process of market orientation provides the foundation for Day's (1994) market-driven capability framework. As suggested by Day (1994), for a firm intending to become market-centric, it should develop MSC and CLC. Compared with less market-centric firms, market-centric firms tend to process more market information (Armario et al., 2008) and are more likely to use information technologies (IT) such as SM to enhance their MSC.

CLC pertain to the firm's skills, capacities, and processes required to effectively establish and maintain close customer relationships after the firm has identified its customers' needs (Day, 1994), which can be manifested by CRM and brand management capabilities (Cao and Tian, 2020). In the digital age, CLC become more important because customers expect not only fast deliveries but also near-instant responses to queries (Wang, 2020). As noted earlier, although the performance effect of market orientation has been the focus of many studies (e.g. Fang et al., 2014; Hossain et al., 2021; Rapp et al., 2010), it is unclear whether a company's market orientation constitutes a strategic capability (Wilden et al., 2019) and stimulates other strategic resource building choices and in turn affects performance (Smirnova et al., 2011); even less relevant research exists in the context of SMEs (Bodlaj and Čater, 2022; Raju et al., 2011).

2.3. Marketing performance and financial performance

Marketing practitioners have been anxious to show how marketing contributes to firm performance (O'sullivan and Abela, 2007). Meanwhile, prior research has assessed firm performance as a single one-dimensional construct (Weerawardena, 2003), two distinct aspects of overall performance (Vorhies and Morgan, 2005), or two separate constructs: marketing performance and financial performance (Merrilees et al., 2011). As Gök and Peker (2017) argue, an "aggregated approach to performance is problematic since the business performance construct potentially consists of more than a single performance dimension" (p. 607). Through the lens of B2B SMEs, Merrilees et al. (2011) argued that marketing capabilities relate firstly to marketing performance, which then affects financial performance. Relating to this view, there is substantial evidence supporting the contribution of CRM and brand management on performance (e.g. Lindgreen, Beverland, and Farrelly, 2010; Lynch and De Chernatony, 2004). It is argued that a good B2B brand brings about superior quality perceptions (Cretu and Brodie, 2007) and raises entry barriers to competitive brands (Low and Blois, 2002; Ohnemus, 2009). However, the brand management literature has primarily and almost exclusively focused on large, multi-national brands overlooking SMEs (Berthon, Ewing, and Napoli, 2008).

3. Research model and hypothesis development

Our research model (Fig. 1) is built on both the market driven view of competitive strategy (Baker and Sinkula, 2007; Jaworski et al., 2000; Lambin et al., 2007) and the dynamic capabilities view (Eisenhardt and Martin, 2000; Teece, 2007, 2012). Accordingly, we theorize that market orientation triggers B2B SMEs to strategically use SM to enhance market sensing, which facilitates market seizing through reconfiguring two CLC, namely, CRM and brand management. Collectively these strategic tools facilitate marketing performance and financial performance.

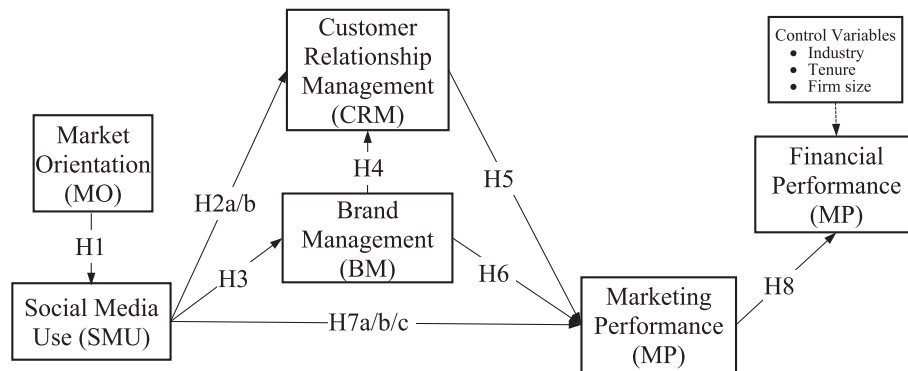


Fig. 1. Research model.

3.1. The impact of market orientation on SM use

We theorize that SMEs' market orientation will influence their SM use for several reasons. First, market-centric firms tend to continuously create, distribute and use market intelligence (Kohli and Jaworski, 1990) to understand and satisfy customers (Day, 1994). SMEs could therefore sense market opportunities from SM use for connecting with and understanding their customers for example, thereby responding to market demands (e.g. Fraccastoro et al., 2021; Karampela et al., 2020). Second, SMEs with their resource constraints (organizational resources, skills, and knowledge) will be able to use SM as a means for enhancing business and overcoming resource limitations (Brink, 2017) because SM use is characterized by low resource requirement, easiness of implementation (Candi et al., 2018; Chahine and Malhotra, 2018; Drummond et al., 2020) and cost-efficiency (Karampela et al., 2020). Third, SMEs are increasingly leveraging SM to gain economic benefit, among others (Brink, 2017; Karampela et al., 2020). For instance, B2B SMEs use SM as a channel to communicate with their customers (Fraccastoro et al., 2021; Wang et al., 2016). Thus, we hypothesize:

H1. B2B SMEs' market orientation positively affects their SM use.

3.2. SM use and customer-linking capabilities

As indicated earlier we focus on two CLC, namely, CRM and brand management. The potential of using SM to attract new customers, develop relationships, build brand awareness, inter alia, has been recognized through the lens of B2B (Tiwary et al., 2021; Trainor, Andzulis, Rapp, and Agnihotri, 2014) and by B2B SMEs (Michaelidou et al., 2011). For the current study, CRM capability is described as "the firm's capacity to identify attractive customers and prospects, initiate and maintain relationships with attractive customers, and leverage these relationships into customer level profits" (Morgan, Slotegraaf, et al., 2009, p. 286). SMEs using digital technologies including SM could develop their capabilities so they might compete more effectively (e.g. Boconcelli et al., 2018; Fraccastoro et al., 2021). This is echoed by the 2021 annual report on European SMEs, which indicates that SMEs place the greatest importance on developing IT and intangible assets (Muller et al., 2021).

While there is no published evidence on the link between SM use and CRM in the context of B2B SMEs, this link has been empirically demonstrated by several studies in other settings (Foltean, Trif, and Tuleu, 2019; Trainor et al., 2014; Wang and Kim, 2017). Trainor et al. (2014), based on a mixed B2B and B2C sample of 308 respondents, showed that SM technology use is directly related to social CRM capabilities and the integration of CRM and SM applications. Foltean et al. (2019) also used a mixed B2B and B2C sample of 149 respondents to show that SM technology use is positively related to CRM capabilities. While both these studies conducted several ad hoc analyses, neither Trainor et al. (2014) nor Foltean et al. (2019) specifically examined the

relationship between SM use and CRM in the context of B2B. On the other hand, Wang and Kim (2017) examined the impact of social CRM capabilities in the context of B2C and demonstrated that SM use moderates the link between social CRM capabilities and firm performance. Additionally, prior B2B research suggests that SM use positively affects salesperson responsiveness, customer satisfaction (Agnihotri, Dingus, Hu, and Krush, 2016), and the strength of customer-firm relationships (Chuang, 2020); and that SMEs are using SM to appeal to new customers and to nurture relationships with their audience (Michaelidou et al., 2011). However, Iankova et al. (2019) suggested that B2B firms view SM marketing as less important than their B2C counterparts for relationally oriented usage. Furthermore, prior studies suggested that developing CRM related capabilities is complex (Powell, Noble, Noble, and Han, 2018); SM related marketing capability is not innate; it takes time to build and requires new thinking (Day, 2011; Drummond et al., 2020). Related to this, scholars call for understanding how B2B firms can use SM strategically to meet customer needs (e.g. Cartwright et al., 2021; Iankova et al., 2019; Tiwary et al., 2021) or digitally engage customer meaningfully (Chaker et al., 2022). Taken together, B2B SMEs can be expected to use SM to enhance their CRM capabilities.

H2a. SM use in B2B SMEs positively affects their CRM capabilities directly.

Brand management capability is defined as B2B SME's "ability not only to create and maintain high levels of brand equity but also to deploy this resource in ways that are aligned with the market environment" (Morgan, Slotegraaf, et al., 2009, p. 286). While B2C research suggested that SM marketing affects consumer-based brand equity (Zollo, Filieri, Rialti, and Yoon, 2020) and/or brand experience and attitude toward the brand (Khan, 2022), relatively little academic attention has been paid to B2B advertising where SM plays an important role (Deng et al., 2021; Swani et al., 2020); B2B firms are yet to decide how to use SM to buttress their marketing efforts (Deng et al., 2021). Research suggests that B2B viewers are more interested in viewing content containing corporate brand names (Swani, Milne, Brown, Assaf, and Donthu, 2017). Similarly, Cawsey and Rowley (2016) suggested that using SM for brand building enables B2B companies to gain a better brand reputation, and assurance of product quality; and charge a price premium. Through the lens of B2B SMEs, the work of Michaelidou et al. (2011) was one of the first to describe that firms could use SM to communicate their brands online. Hsiao et al. (2020) studied how fashion B2B SMEs use SM branding and found that including large national brands in SM positively affects the popularity of private labels, thereby increasing the sales of SMEs' products. Karampela et al. (2020), using a sample of 200 UK B2B SMEs, found that including suppliers on SM positively affects B2B brand relationship strength. Thus, it seems credible to assume the following:

H3. SM use in B2B SMEs positively affects their brand management capabilities.

3.3. The interplay of customer-linking capabilities

As viewed by [Aurier and de Lanauze \(2012\)](#), a brand is a relational and exchange partner facilitating healthier customer relationships. Brands exert a strong influence on both customer attraction and customer retention ([Moretta Tartaglione, Cavacece, Russo, and Granata, 2019](#)). Marketing literature suggests that consumer loyalty follows consumer perception of product quality, which represents the cumulated history of satisfactory exchanges (e.g. [Zeithaml, 2000](#)) and is captured by brand equity. Customer loyalty is also built on emotions developed toward trustable brands ([Aurier and de Lanauze, 2012](#)). The perceived brand relationship can be interpersonal and affect the consumer's perception of, and the relationship with, the brand ([Fritz, Schoenmueller, and Bruhn, 2017](#)). Additionally, [Sweeney and Swait \(2008\)](#) showed that brand credibility positively influences customer satisfaction and loyalty commitment; and [Nyadzayo and Khajehzadeh \(2016\)](#) found that the connection between the perceived brand image and customer satisfaction is affected indirectly via CRM quality. Therefore, we propose that.

H4. Brand management capabilities positively affect CRM capabilities.

Based on the above, we believe that it is conceivable to assume the role of brand management capabilities in mediating the connection between SM use and CRM capabilities:

H2b. SM use in B2B SMEs positively affects their CRM capabilities indirectly through their brand management capabilities.

3.4. Customer-linking capabilities and marketing performance

We identify marketing performance as the contribution of strategic marketing activities to the overall marketing performance captured through sales performance, acquisition of new customers, and improved market share ([Merrilees et al., 2011](#)). While some researchers have examined a range of marketing activities in marketing performance ([O'Sullivan, Abela, and Hutchinson, 2009](#)), in the current study we focus on CRM and brand management capabilities.

While there is no information available on the impacts of CRM and brand management capabilities on firm performance in the context of SM use, the effect of either CRM or brand management capabilities on firm performance has been widely confirmed in other research contexts. For example, [Orr, Bush, and Vorhies \(2011\)](#) showed that both CRM and brand management capabilities positively influence marketing and financial performance; [Santos-Vijande, del Río-Lanza, Suárez-Álvarez, and Díaz-Martín \(2013\)](#) showed that brand management system has a positive effect on firm competitiveness; and [Rahman, Rodríguez-Serrano, and Lambkin \(2018\)](#) proved the beneficial effect of brand management efficiency on firm value. Similarly, CRM positively affects firm performance in the hotel business ([Wu and Lu, 2012](#)), in the winery sector ([Guerola-Navarro, Oltra-Badenes, Gil-Gomez, and Iturricha Fernández, 2021](#)), and with cross-industry data ([Wang and Kim, 2017](#)).

Similarly, the strategic importance of brand management has been established in the marketing literature (e.g. [Keller, Heckler, and Houston, 1998](#); [Low and Fullerton, 1994](#)). Brand management capability drives customer knowledge and expectations ([Orr et al., 2011](#)), allowing B2B firms to create unique and consistent identities to differentiate their products ([Michell, King, and Reast, 2001](#)). As [Wise and Zednickova \(2009\)](#) found in competitive environments, a branded product is likely to be favored. Overall, brands enhance firm performance in several ways (e.g. [Beverland, Wilner, and Micheli, 2015](#); [Iyer, Davari, Srivastava, and Paswan, 2020](#)). Built on the premise that marketing capabilities firstly influence marketing performance ([Merrilees et al., 2011](#)), we argue that CLC do not contribute to firm performance directly but operates through marketing performance. Therefore, we propose the following two hypotheses:

H5. CRM capabilities positively affect marketing performance.

H6. Brand management capabilities positively affect marketing performance.

3.5. SM use and marketing performance

Through the lens of B2B, prior research examined the indirect effect of SM use on firm performance. [Itani et al. \(2017\)](#) showed that SM use affects salespeople's performance by affecting their information gathering and adaptive selling. [Ogilvie, Agnihotri, Rapp, and Trainor \(2018\)](#) confirmed that SM use enhances salesperson's communication and adaptability behaviors, which improve firm performance. [Bowen, Lai-Bennejean, Haas, and Rangarajan \(2021\)](#) showed that salespersons' SM use improves their performance indirectly by supporting their selling activities. [Cheng et al. \(2021\)](#) indicated that in the movie industry consumer digital engagement intervenes the link between firm SM messages and firm performance. [Wang et al. \(2016\)](#), based on five case studies of B2B SMEs, suggested that SM related capabilities improve communication, then business marketing and performance. However, [Tajvidi and Karami \(2021\)](#) showed that SM use has both a direct effect and an indirect effect through branding on firm performance in the B2C context of UK hotels, while [Foltean et al. \(2019\)](#) showed that SM use has no direct effect but an indirect effect through CRM on firm performance based on mixed B2C and B2B data. Thus, it seems plausible to posit that.

H7. SM use positively affects marketing performance directly (H7a) and indirectly through CRM capability (H7b) or brand management capability (H7c).

3.6. Marketing performance to financial performance

While research on the evaluation of marketing results is scarce ([Ambler, 2000](#)), [Eusebio, Andreu, and Belbeze \(2006\)](#) argued that "given that a firm's survival depends on its capacity to create value, and value is defined by customers ([Day, 1990](#)), marketing makes a fundamental contribution to long-term business success" (p. 145). Similarly, [O'Sullivan and Abela \(2007\)](#) found that marketing performance positively affects firm performance in a high-tech firm context. Furthermore, [Gök and Peker \(2017\)](#) argued that an "aggregated approach to performance is problematic since the business performance construct potentially consists of more than a single performance dimension" (p. 607). Consistent with this view and through the lens of B2B SMEs, [Merrilees et al. \(2011\)](#) suggested that marketing capabilities relate firstly to marketing performance, which then affects financial performance. Therefore, in the present research, we conjecture the following to understand the connection between marketing performance and financial performance.

H8. Market performance positively affects financial performance.

4. Research methodology

4.1. Measures

We measured the constructs contained within our research model using indicators validated by prior studies. We used five indicators to measure brand management and another five indicators to measure CRM based on [Morgan, Slotegraaf, and Vorhies \(2009\)](#). Based on [Merrilees et al. \(2011\)](#), seven indicators were adopted to measure market orientation; four to measure marketing performance; and three to measure financial performance. Both marketing performance and financial performance were measured relative to key competitors and for the last three financial years. SM use was measured formatively using six indicators modified from [Siamagka, Christodoulides, Michaelidou, and Valvi \(2015\)](#). [Table 1](#) summarizes the constructs and the associated indicators of this study. In addition, firm size, industry type, and job tenure were used as control variables and were measured as dummy variables. They were included because prior studies (e.g. [Chowdhury,](#)

Table 1
Constructs and indicators of the study.

Constructs	Indicators (based on a Likert scale from 1- strongly disagree to 7- strongly agree)	Mean	S-D
Brand Management (BM) (Morgan, Slotegraaf, et al., 2009)	• BM1-Routinely uses customer insight to identify valuable brand positioning	5.82	1.11
		5.78	1.05
		6.00	1.04
	• BM2-Consistently establishes desired brand associations in consumers' minds	5.71	1.16
		5.64	1.25
Customer Relationship Management (CRM) (Morgan, Slotegraaf, et al., 2009)	• BM3-Maintains a positive brand image relative to competitors		
	• BM4-Achieves high levels of brand awareness in the market on a regular basis		
	• BM5-Regularly uses customer-based brand equity into preferential channel positions		
	• CRM1-Routinely establishes a "dialogue" with target customers	5.71	1.21
		5.73	1.17
Financial Performance (FP) (Merrilees et al., 2011)	• CRM2-Gets target customers to try our products/services on a consistent basis	5.83	1.08
		5.79	1.16
	• CRM3-Focuses on meeting customers' long term needs to ensure repeat business	5.81	1.16
	• CRM4-Regularly maintains loyalty among attractive customers		
	• CRM5-Routinely enhances the quality of relationships with attractive customers		
Market Orientation (MO) (Merrilees et al., 2011)	Relative to our key competitors and for the last three financial years, our company	5.46	1.22
		5.45	1.22
		5.62	1.18
	• Is more profitable		
	• Has a better return on investment		
Marketing Performance (MP) (Merrilees et al., 2011)	• Is better able to reach financial goals		
	• MO1-Is more likely to plan ahead to satisfy customers in the future	5.86	1.19
		5.74	1.04
		5.78	1.15
	• MO2-Responds more quickly to changing customer requirements	5.62	1.23
Marketing Performance (MP) (Merrilees et al., 2011)	• MO3-Places a priority on making changes to improve customer satisfaction	5.48	1.33
		5.72	1.14
	• MO4-Is more likely to involve employees in planning and decision making	5.63	1.17
	• MO5-Has better market intelligence		
	• MO6-Is more likely to target customers where we have a competitive advantage		
Marketing Performance (MP) (Merrilees et al., 2011)	• MO7-Undertakes market research to measure satisfaction		
	Relative to our key competitors and for the last three financial years, our company	5.50	1.16
		5.48	1.17
		5.31	1.37
	• MP1-Has stronger growth in sales revenue	5.62	1.16
Marketing Performance (MP) (Merrilees et al., 2011)	• MP2-Is better able to acquire new customers		
	• MP3-Has a greater market share		
	• MP4-Is able to increase sales to existing customers		

Table 1 (continued)

Constructs	Indicators (based on a Likert scale from 1- strongly disagree to 7- strongly agree)	Mean	S-D
Social Media Use (SMU) (Siamagka et al., 2015)	To what extent does your company use (1 = not at all; 7 = very extensively)	5.45	1.65
		5.11	1.69
		4.91	1.90
	• SMU1-Facebook	4.46	1.89
	• SMU2-Linkedin	3.52	2.06
	• SMU3-Twitter	4.80	2.02
	• SMU4-YouTube ^a		
	• SMU5-Snapchat ^a		
	• SMU6-Instagram		

^a Dropped after the measurement evaluation.

Lau, and Pittayachawan, 2019; de Menezes and Escrig, 2019; Sahaym, Datta, and Brooks, 2021) suggested they may account for firm performance differences.

4.2. Key informants

Data were collected from UK B2B SMEs using a questionnaire survey from marketing and/or c-level managers. A sample of managers was drawn from SMEs included in the FAME (Financial Analysis Made Easy) database that includes companies in the UK and Ireland. A non-probability sampling approach was used because FAME does not have a complete list of e-mail addresses of all companies or managers. In order to build and test the research model adequately when a non-probability sample is used (Couper, 2000), the number of responses required can be decided in terms of the anticipated R^2 at a given significant level. According to Hair, Hult, Ringle, and Sarstedt (2014), when there are only three arrows connected to a construct in the research model and the expected R^2 is at least 0.10 at $p < 0.05$, the required minimum sample size is 124. We received 143 usable responses; thus, we met this minimum sample size requirement.

Overall, the sample included 38.4% of small firms (having fewer than 50 employees) and 61.6% of medium-sized firms (having >50 but fewer than 250 employees). Of all responding B2B SMEs, 44% were from the service sector; 18% were from manufacturing; and the remaining 38% were from both service and manufacturing. Of all respondents, 54.8% were senior managers and the remaining 45.2% were middle marketing managers. 90% of respondents had over five years of working experience. Based on the respondents' managerial positions and experiences, they were knowledgeable to answer the questions effectively.

4.3. Non-response bias and common method bias

We conducted a *t*-test to evaluate non-response bias by contrasting early and late respondents (Armstrong and Overton, 1977). We discovered no noteworthy variances between the two groups, suggesting that there was no serious non-response bias.

We used two different types of remedies to tackle common method bias. Before data collection, we implemented several procedural remedies to reduce common method bias: assuring complete anonymity to reduce the tendency of respondents to make socially desirable responses, defining questions clearly to reduce ambiguity, and separating questions without either labeling constructs or grouping them by construct to reduce the possibility of respondents deliberately linking variables (Parkhe, 1993; Podsakoff, MacKenzie, Lee, and Podsakoff, 2003). After data collection, we used two statistical methods to address common method bias. First, following the suggestions made by Babin, Griffin, and Hair (2016), we examined the eigenvalues and the first eigenvalue was 30.1%, <40%, indicating that common method bias was not a major concern. Second, we implemented the partial correlation procedure (Lindell and Whitney, 2001) and used managers' tenure as a marker variable because it is not associated with the research constructs

theoretically. The result of the correlation matrix condensed in Table 3 proved that tenure was not significantly correlated to any of the constructs; thus, the analysis indicated common method bias was not a serious concern (Simmering, Fuller, Richardson, Ocal, and Atinc, 2015).

5. Analysis and results

5.1. Analysis and results

We used SmartPLS 4 software to test our hypotheses, which uses the partial least squares (PLS) path modeling method. This approach is suitable for research where theoretical ideas are underdeveloped and the research model includes formative constructs (Hair, Ringle, and Sarstedt, 2013; Wetzels, Odekerken-Schröder, and van Oppen, 2009). In our research, we measured SM use as a formative construct while research on SM use is insufficient in the B2B context (Cawsey and Rowley, 2016; Luo et al., 2021; Tiwary et al., 2021).

To evaluate the reflective measurement model, we assessed indicator reliability, internal consistency (composite reliability), convergent validity, and discriminant validity (Hair et al., 2014). The analysis results were satisfactory. We also checked the heterotrait-monotrait ratio of correlations (HTMT) to assess discriminant validity. HTMT is seen to be more suitable in variance-based structural equation modeling (Henseler, Ringle, and Sarstedt, 2015). The HTMT scores were below the recommended threshold of 0.85 (Benitez, Henseler, Castillo, and Schuberth, 2020), confirming the discriminant validity of the reflective measurement model. The analysis results were summarized in Table 2 and Table 3.

Based on Hair et al. (2014), we assessed and validated the formative indicator, SM use in terms of its outer loading, outer weight, and the associated significance testing *p*-values. Then we confirmed that the formative measurement model was satisfactory regarding multicollinearity, the indicator weights, the significance of weights, the indicator loadings (Hair et al., 2014), and nomological validity (MacKenzie, Podsakoff, and Podsakoff, 2011).

The research model was then evaluated to test the hypotheses. The empirical results are summarized in Fig. 2 and Table 4. The research model explains 59% of the variance in financial performance (FP), 58% in marketing performance (MP), 55% in CRM, 32% in brand management (BM), and 16% in SM use (SMU).

H1 is supported as market orientation (MO) is positively related to

SMU. H2a is rejected because SMU is not related to CRM. H3 is supported as SMU has a positive effect on BM. H4 is verified since BM positively affects CRM. H5 and H6 are supported since MP is positively affected by both CRM and BM respectively. H7a is rejected because SMU does not affect MP directly. H8 is supported since MP is positively related to FP.

We conducted the mediation analysis by following the suggestions made by methodological studies (Hair et al., 2014; Hayes, 2009; Preacher and Hayes, 2004), based on bootstrapping (5000 samples) using SmartPLS 4. H2b is supported as BM mediates the connection between SMU and CRM. H7b is rejected while H7c is supported since the relationship between SMU and MP is mediated through BM (H7c) but not CRM (H7b). Additionally, the result indicated that the relationship between SMU and MP is also mediated through BM \geq CRM.

5.2. Post hoc analysis

5.2.1. Further mediation analysis

To develop a fuller understanding of the complex relationship between SMU and MP mediated through CRM and BM, we further conducted the following four analyses (Fig. 3).

First, (a) indicated that SMU has a statistically significant direct effect on MP. Second, (b) suggested that the effect of SMU on MP is fully mediated through both CRM and BM simultaneously, as the direct relationship between SMU and MP is insignificant. Third, (c) showed that the effect of SMU on MP is only partially mediated through CRM as the direct relationship between SMU and MP is significant. Fourth and finally, (d) demonstrated that the effect of SMU on MP is fully mediated through BM as the direct relationship between SMU and MP is insignificant.

5.2.2. Addressing potential endogeneity issue

Furthermore, a potential problem with our research was the endogeneity of explanatory variables in our research model, “a situation in which the independent variable is correlated with the error term” (Eckert & Hohberger, 2022, p. 2), introducing biased estimates and problematic inferences (Becker, Proksch, and Ringle, 2022; McIntosh, Edwards, and Antonakis, 2014; Rutz and Watson, 2019). To test the robustness of our results (Eckert & Hohberger, 2022), we conducted the Gaussian copula approach, provided by SmartPLS 4 based bootstrapping (5000 samples), to address this potential endogeneity issue. The final

Table 2
Convergent validity and internal consistency reliability.

Construct	Indicator	Loading	Indicator reliability	Composite reliability	Cronbach's α	AVE
Band Management (BM)	BM1	0.77	0.59	0.89	0.84	0.61
	BM2	0.78	0.61			
	BM3	0.72	0.52			
	BM4	0.81	0.66			
	BM5	0.82	0.67			
Customer Relationship Management (CRM)	CRM1	0.67	0.45	0.87	0.81	0.57
	CRM2	0.72	0.52			
	CRM3	0.76	0.58			
	CRM4	0.82	0.67			
	CRM5	0.80	0.64			
Market Orientation (MO)	MO1	0.72	0.52	0.91	0.89	0.60
	MO2	0.81	0.66			
	MO3	0.73	0.53			
	MO4	0.74	0.55			
	MO5	0.77	0.59			
	MO6	0.82	0.67			
Marketing Performance (MP)	MP1	0.85	0.72	0.90	0.85	0.69
	MP2	0.83	0.69			
	MP3	0.86	0.74			
	MP4	0.78	0.61			
Financial Performance (FP)	FP1	0.90	0.81	0.90	0.84	0.76
	FP2	0.85	0.72			
	FP3	0.87	0.76			

Table 3
Descriptive statistics, correlations, and average variance extracted.

	Mean	S.D.	1	2	3	4	5	6
1-BM	5.79	0.88	0.78					
2-CRM	5.78	0.88	0.73**	0.75				
3-FP	5.51	1.06	0.66**	0.67**	0.87			
4-MO	5.70	0.91	0.76**	0.73**	0.76**	0.77		
5-MP	5.48	1.01	0.71**	0.69**	0.74**	0.73**	0.83	
6-SMU	5.18	1.28	0.57**	0.36**	0.38**	0.40**	0.44**	^a
Tenure			-0.04 ^{ns}	0.03 ^{ns}	-0.03 ^{ns}	0.01 ^{ns}	-0.07 ^{ns}	-0.09 ^{ns}

***p* < 0.01 (two-tailed); ^{ns}-insignificant; the diagonal elements (in bold) represent the square root of AVE.

^a Formative.

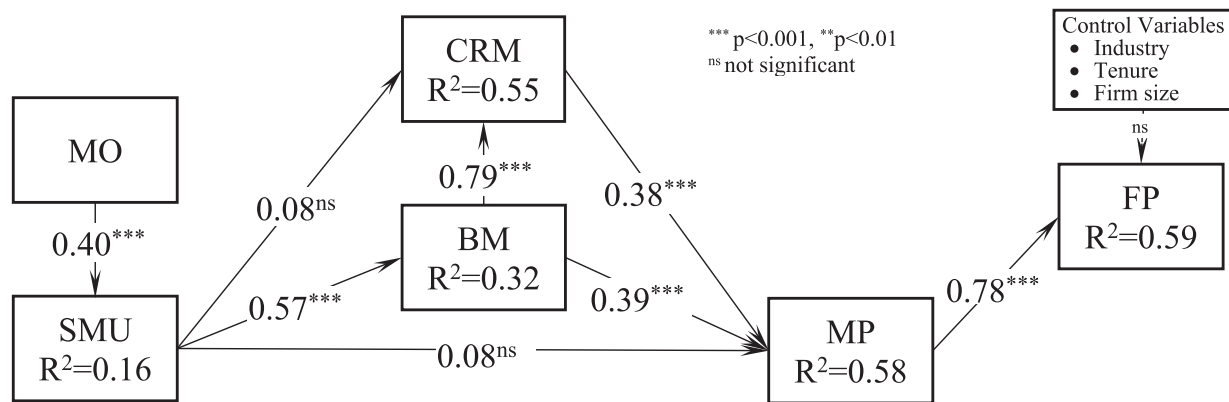


Fig. 2. Empirical results.

Table 4
Summary results of hypotheses testing.

Hypothesis	Path coefficient	Bias-corrected 95% confidence intervals	Supported?
H1: MO -> SM use	0.40***	[0.226, 0.505]	Yes
H2a: SM use -> CRM	0.08 ^{ns}	[-0.234, 0.057]	No
H2b: SM use -> Brand management -> CRM (indirect effect)	0.44**	[0.317, 0.574]	Yes
H3: SM use -> Brand management	0.57***	[0.418, 0.659]	Yes
H4: Brand management -> CRM	0.79***	[0.643, 0.904]	Yes
H5: CRM -> Marketing performance	0.38**	[0.155, 0.588]	Yes
H6: Brand management -> Marketing performance	0.39**	[0.161, 0.631]	Yes
H7a: SM Use -> Marketing performance	0.08 ^{ns}	[-0.089, 0.203]	No
H7b: SM Use -> CRM -> Marketing performance (indirect effect)	0.03 ^{ns}	[-0.095, 0.019]	No
H7c: SM Use -> Brand management -> Marketing performance (indirect effect)	0.22**	[0.082, 0.388]	Yes
H8: Marketing performance -> Financial performance	0.78***	[0.670, 0.875]	Yes

*** *p* < 0.001, ** *p* < 0.05, ns – not significant.

test result (Table 5) showed that the explanatory variables in our model were not significantly endogenous.

5.2.3. Identifying and treating unobserved heterogeneity

The validity of our research results may also be threatened by unobserved heterogeneity, which occurs when data is not homogeneous (Hair Jr, Sarstedt, Matthews, and Ringle, 2016). To explore if our research had subgroups, we employed FIMIX-PLS by following the steps

suggested by Hair Jr et al. (2016) and Matthews, Sarstedt, Hair, and Ringle (2016). After running the FIMIX-PLS procedure on the data, the analysis (Table 6) did not suggest a consistent segment number. The AIC3 and CAIC indicated four and one respectively, while AIC4 and BIC suggested two, with an entropy criterion larger than 0.5. Even if we decided to have two segments, one would have 89 samples and the other would have 54 samples. Both sample sizes would be too small to meet the model-specific minimum sample size required to reliably estimate our model (Hair Jr et al., 2016). In our research model, the maximum number of arrows pointing at any construct was three, with a minimum R² of 0.16 at the significant level of *p* < 0.01, and the required minimum sample size is >100 (Hair et al., 2014). Thus, unfortunately, we were unable to evaluate if our results were affected by unobserved heterogeneity.

6. Discussion

6.1. Theoretical contribution

Our study was motivated by the increasingly evident benefits of the strategic use of SM for greater B2B firm performance that has received limited researcher attention in a B2B SME context (Cartwright et al., 2021; Salo, 2017; Tiwary et al., 2021). Given that SMEs are operating in a resource-constrained environment (e.g. Candi et al., 2018; Eggers, 2020; Muller et al., 2021) and significantly lagging behind larger firms concerning integrating digital technologies into their businesses, the strategic use of SM is particularly beneficial for SMEs because of its low resource requirement, easiness of use, and cost-efficiency (Candi et al., 2018; Drummond et al., 2020; Karampela et al., 2020). To advance our understanding of this phenomenon, we developed a research model that explains and predicts the role of market orientation and SM use in enhancing MSC, MSC's effect on CLC, and in turn financial performance through marketing performance. The findings of our study based on a survey of 143 B2B SMEs in the UK broadly support our research model. We make several important contributions to B2B strategic marketing

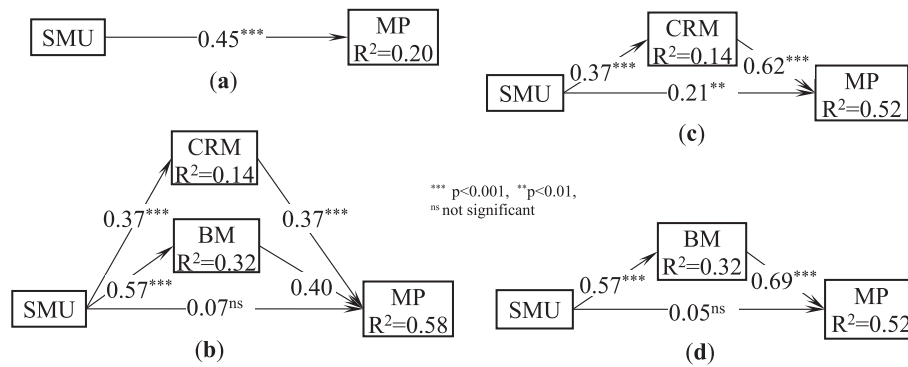


Fig. 3. Mediation analysis.

Table 5
Summary results of Gaussian copula.

Path coefficients	Original sample (O)	p-values
GC (MO) - > SMU	-0.062	0.788
GC (SMU) - > BM	0.083	0.737
GC (SMU) - > CRM	0.209	0.254
GC (SMU) - > MP	-0.099	0.694
GC (BM) - > CRM	0.158	0.235
GC (BM) - > MP	-0.245	0.292
GC (CRM) - > MP	0.169	0.532
GC (MP) - > FP	0.094	0.646

literature.

6.1.1. Market orientation and SM use

Building on Day’s (1994) framework of capabilities of market-driven firms, our research model theorizes that market-oriented B2B SMEs use SM to facilitate the sensing of market opportunities. As indicated by Day (1994), MSC refer to the firm’s ability to engage in market information processing to sense changes affecting its customers and competitors continuously and systematically, and then to spot market opportunities and threats accurately. Although there is evidence in the literature to indicate that a firm’s SM use is related to its market information processing (e.g. Ye et al., 2022) and its use of competitive intelligence (Itani et al., 2017), which are core activities of market orientation (Kohli and Jaworski, 1990), thereby alluding to the possibility of the firm might be market-centric, the relationship between market orientation and SM use is yet to be examined. Our study is among the first to extend market orientation to explain and predict SM use conceptually and empirically. While market orientation has been deeply examined for decades as an important driver of performance through market information processing (Raju et al., 2011; Smirnova et al., 2011), little relevant research exists in the context of B2B SMEs (Bodlaj and Čater, 2022; Raju et al., 2011; Sundström et al., 2021). Similarly, as noted earlier, there is scant research on SM use through the lens of B2B SMEs (e.g. Iankova et al.,

2019; Tiwary et al., 2021; Wang et al., 2016). Overall, despite the exponential growth and increased adoption of SM platforms by industrial firms, there is no scholarly inquiry into the potential benefits of SM use to strengthen MSC activity. Based on the dynamic capabilities view (Teece, 2007, 2012), we conceptualize market orientation and SM use as organizational capabilities. Our study findings support the hypothesized relationship that market orientation drives SM use, which facilitates greater sensing of market opportunities and enhanced engagement with B2B SME customers.

6.1.2. Market-sensing and customer-linking capabilities

Building upon several relevant studies in the B2B domain (Agnihotri et al., 2016; Chuang, 2020; Michaelidou et al., 2011) and research in other settings that demonstrate the positive link between SM use and (social) CRM capability (e.g. Foltean et al., 2019; Trainor et al., 2014; Wang and Kim, 2017), we conjectured that SM use positively affects CRM capability directly in the context of B2B SMEs. Contrary to our expectations, this direct effect is not supported in this study. This may appear to be inconsistent with the findings of prior studies and may be explained to some extent as our finding used data gathered from B2B SMEs only, while the findings of prior studies (e.g. Foltean et al., 2019; Trainor et al., 2014; Wang and Kim, 2017) were based on B2C or mixed data from both B2C and B2B. Fundamentally, we believe that this seeming inconsistency could be explained methodologically. Our study and those prior studies mentioned above have tested our hypotheses using different nomological networks, which may lead to different results (Petter, Straub, and Rai, 2007; Sarstedt, Hair Jr, Nitzl, Ringle, and Howard, 2020). This is confirmed by our mediation analysis summarized in Fig. 3: without including the direct link between brand management and CRM capabilities, SM use would have a direct and positive effect on CRM, which could be seen to provide new evidence in the context of B2B SMEs in support of prior studies (e.g. Foltean et al., 2019; Trainor et al., 2014; Wang and Kim, 2017). More substantially, our mediation analysis and findings advance existing understanding by suggesting that the link between SM use and CRM may be more

Table 6
Number of segments.

	1	2	3	4	5	6
AIC (Akaike’s information criterion)	1611.289	1558.837	1534.756	1503.58	1501.035	1503.326
AIC3 (modified AIC with Factor 3)	1624.289	1585.837	1575.756	1558.58	1570.035	1586.326
AIC4 (modified AIC with Factor 4)	1637.289	1612.837	1616.756	1613.58	1639.035	1669.326
BIC (Bayesian information criterion)	1649.806	1638.834	1656.233	1666.537	1705.471	1749.243
CAIC (consistent AIC)	1662.806	1665.834	1697.233	1721.537	1774.471	1832.243
HQ (Hannan-Quinn criterion)	1626.941	1591.344	1584.118	1569.798	1584.108	1603.255
MDL5 (minimum description length with factor 5)	1907.874	2174.821	2470.139	2758.363	3075.216	3396.907
LnL (LogLikelihood)	-792.645	-752.418	-726.378	-696.79	-681.517	-668.663
EN (normed entropy statistic)	0	0.646	0.635	0.733	0.737	0.746
NFI (non-fuzzy index)	0	0.695	0.644	0.708	0.708	0.7
NEC (normalized entropy criterion)	0	50.664	52.19	38.193	37.642	36.291

complicated than the direct link demonstrated by prior studies; our findings show that brand management capability plays an important mediation role between SM use and CRM capability. This not only contributes theoretically to the SM literature but also provides empirical support to the view that B2B firms view SM use for relational oriented usage not as important as their B2C counterparts (Iankova et al., 2019), arguably due to B2C and B2B firms having significant differences (e.g. Baabdullah et al., 2021; Iankova et al., 2019), and that brand management drives customer knowledge and expectations (Orr et al., 2011), allowing B2B firms to differentiate their market offerings (Michell et al., 2001).

Our study has also developed an understanding of the relationship between SM use and brand management capability, which is insufficiently investigated in past research (Deng et al., 2021; Swani et al., 2020). Our findings reveal that SM use positively affects brand management capability. While our finding is seen to be broadly compatible with prior research on the connection between SM use and brand related features in the context of B2C (Khan, 2022; Zollo et al., 2020), B2B domain (Cawsey and Rowley, 2016), and through the lens of B2B SMEs (Hsiao et al., 2020; Karampela et al., 2020; Michaelidou et al., 2011), our research is among the first to have conceptually and empirically supported the direct link between SM use and brand management capability.

Thus, our study is one of the original to answer the calls for understanding how B2B firms can use SM strategically (e.g. Chaker et al., 2022; Iankova et al., 2019; Tiwary et al., 2021) by shedding light on the impact of SM use on CRM and brand management capabilities in the context of B2B SMEs. While conceptual research has recognized that SM could be used to attract new customers, develop relationships, improve brand awareness, and so on in the B2B context (Tiwary et al., 2021; Trainor et al., 2014), there are hardly any empirical papers addressing SM-related capabilities in the B2B domain (Herhausen et al., 2020). Our research highlights, conceptually and empirically, the mechanisms through which market-centric B2B SMEs use SM to enhance their CLC. Specifically, our research shows that SM use stimulates the firm to build and nurture CLC in CRM and branding, thereby enhancing firm competitiveness (Day, 1994; Hooley et al., 2005; Rapp et al., 2010). This is possible because the strategic use of SM allows B2B SMEs to recognize inflection points in technological and market evolution to prompt seizing and reconfiguring strategic market processes (Defee and Fugate, 2010; Teece, 2007) such as CRM and brand management as strategic choices.

6.1.3. Customer-linking capabilities, marketing performance, and financial performance

Our research contributes to marketing performance literature (e.g. Merrilees et al., 2011; O'sullivan and Abela, 2007; Vorhies and Morgan, 2005) by adopting SM use coupled with two CLC, namely, CRM and brand management. As viewed by O'sullivan and Abela (2007), "Marketing practitioners are under increasing pressure to demonstrate their contribution to firm performance. It has been widely argued that an inability to account for marketing's contribution has undermined its standing within the firm" (p. 79). Morgan et al. (2002) concurred and indicated that "both academics and managers currently lack a comprehensive understanding of the marketing performance process and the factors that affect the design and use of marketing performance assessment systems within corporations" (p. 363).

To address the foregoing concerns, in this study we separated marketing performance from financial performance to facilitate examining how CLC contribute to marketing performance before their contribution to financial performance. Past research has predominantly tested the direct contribution to firm performance from, for example, CRM (Keramati, Mehrabi, and Mojir, 2010; Reinartz, Krafft, and Hoyer, 2004) and brand management (Lee, Park, Baek, and Lee, 2008; Wong and Merrilees, 2008).

As theorized for the current study, CLC represent a firm's capacity,

skills, and processes required to effectively establish and maintain close customer relationships after the firm has identified its customers' needs (Day, 1994). Our study indicates that marketing performance is directly and positively affected by CRM and by brand management capabilities and that marketing performance is positively related to financial performance. This provides new evidence in the context of SM to support the findings from prior studies in other research contexts (e.g. Guerola-Navarro et al., 2021; Rahman et al., 2018).

Our assumed direct effect of SM use on marketing performance is not supported. However, this contribution is indirectly through brand management capability. Our mediation analysis (Fig. 3) suggests that the relationship between SM use and marketing performance can be complex, depending on the nomological network of relationships. When SM use and its effect on marketing performance are considered alone, SM use can have a positive direct effect on marketing performance; when they are considered together with CRM and brand management capability as mediators, SM use only has an indirect effect on marketing performance. Additionally, our mediation analysis indicates that brand management capability is a much stronger mediator than CRM capability in the context of B2B SMEs. While our findings are generally consistent with the findings from prior B2B studies (e.g. Bowen et al., 2021; Cheng et al., 2021; Ogilvie et al., 2018) in that SM use only affects marketing performance indirectly, it is the first to explain the mediating role played by brand management capability in the context of B2B SMEs. This indicates that a B2B SME can improve its firm performance by using SM to significantly enhance its brand management capability. Our findings could also be compared with those of B2C studies (Foltean et al., 2019; Tajvidi and Karami, 2021) to indicate that it might be worth investigating how the relationship between SM use and firm performance could be mediated through both CRM and brand management capabilities simultaneously in the B2C context.

Our findings reveal marketing performance in turn leads to better financial performance, which is broadly in line with prior studies (Eusebio et al., 2006; O'sullivan and Abela, 2007). In particular, our finding agrees with the finding of Merrilees et al. (2011) through the lens of B2B SMEs. While the contribution of CRM and brand management in firm performance has received researchers' attention (e.g. Low and Blois, 2002; Rahman et al., 2018), their contribution to marketing performance has escaped empirical scrutiny in B2B SME context. In particular, brand management literature has primarily and almost exclusively focused on large, multi-national brands overlooking SMEs (Berthon et al., 2008).

6.1.4. Dynamic capabilities as an overarching framework

The findings of the study support the dynamic capability framework which we adopted for this study, thus providing a strong theoretical foundation for the study. The dynamic capabilities view suggests that the firm can use its dynamic capabilities to create new knowledge configurations to pursue its primary competitive strategy (Eisenhardt and Martin, 2000; Teece, Pisano, and Shuen, 1997). For this, the firm will reshape and deploy organizational capabilities through three processes, namely, sensing, seizing, and responding to environmental dynamism (Defee and Fugate, 2010; Teece, 2007). Our research provides new empirical evidence in support of this overarching theoretical foundation in the context of B2B SMEs, which is so far under-researched (Bodlaj and Čater, 2022; Raju et al., 2011). Our findings confirm the unsubstantiated view that market orientation can constitute a strategic capability (Wilden et al., 2019), that is, market-sensing, and stimulate other strategic resources (Smirnova et al., 2011), namely, SM use as an integral part of market-sensing. Therefore, the firm will be able to better sense market opportunities, which will stimulate the firm to seize or respond to market opportunities through the two CLC, namely, CRM and brand management. Finally, marketing and financial performance capture reconfiguring or deployment of reconfigured knowledge for performance outcomes.

Overall, our study addresses an important void in knowledge by

examining the role of the highly advocated use of SM in B2B SME marketing strategy (e.g. Cawsey and Rowley, 2016; Luo et al., 2021; Tiwary et al., 2021).

6.2. Managerial implications

Our findings provide a useful and feasible path for B2B SMEs to use the highly advocated SM platforms strategically to achieve greater marketing and financial performance, given that SMEs are lagging behind larger firms in terms of integrating digital technologies including SM into their businesses (Muller et al., 2021). First, as our findings reveal, B2B SMEs wishing to be more successful should be more market-centric - actively engage in increased market information processing about changing customer needs and competitor behavior, and strategically use SM platforms to actively engage with customers to sense market opportunities. This guidance is important and well-timed because B2B firms in general tend to perceive SM use as less important.

Second, to seize or respond to the sensed opportunities, the firm must build and nurture CLC in CRM and brand management. Because of the knowledge resources embedded in these capabilities, they are suggested as distinctive capabilities that cannot be easily imitated by the firm's closest competitors. SM use is easy to implement and cost-efficient while having low-cost accessibility. Instead of using SM as a firm-based marketing activity or a tactical tool, B2B SMEs should use SM platforms strategically or as strategic resources and capabilities to improve organizational effectiveness.

Third, the two CLC, i.e. CRM and brand management, facilitate greater firm performance through enhanced marketing performance. Practically, this study suggests that B2B SMEs wishing to be more successful should be more market-centric, use SM, and develop their CLC.

We believe that B2B SMEs could benefit significantly from using SM strategically, as demonstrated by how a real-life B2B SME, Kimberly Sundt, utilizes SM strategically to improve its performance (Deloitte, 2019). Kimberly Sundt runs a small hospitality advisory and marketing business. It uses SM platforms to capture customers; then reviews and rebrands its clients' online presence for engaging their customers. Kimberly sees that SM platforms help build its brand awareness, understand its customers, and attract new clients. Kimberly reports that >20% of the visitors to its website via SM and 10% of its clients also come from SM platforms, which saves the firm around 15 h each week.

6.3. Limitations and future research

Our study also has some limitations. First, we examined how the firm's market orientation coupled with SM use facilitates market-sensing which stimulates building two CLC, namely, CRM and brand management. However, our quantitative analysis does not allow us to examine how the proposed relationships in this study evolve. Additionally, we didn't differentiate among different industry types while there is evidence in the literature to suggest that SMEs in different industries tend to have different business models and levels of SM use with varying success rates (Bowen et al., 2021; Müller et al., 2021); and that while manufacturing firms are increasingly using SM for enhanced marketing and R&D interface (Chirumalla, Oghazi, and Parida, 2018), the service industry tends to have different challenges in using SM (Serbetcioglu and Göçer, 2020) due to intangibility and simultaneous production and use of services (Scheuing and Johnson, 1989). We also did not examine how specific SM platforms could be used strategically given that they have distinct functionalities and characteristics (Eid et al., 2020; Kaplan and Haenlein, 2010; Karampela et al., 2020). Second, we measured each of our constructs based on data collected from a single informant who had a relatively high hierarchical position and long tenure as mentioned before, thus had relevant knowledge and experience to provide accurate information on our constructs that were about the present and salient events (Homburg, Klarmann, Reimann, and Schilke, 2012). While aggregate information from multiple

informants could be desirable, there are no well-accepted methods to address the associated practical difficulties such as "informant discrepancies" (De Los Reyes, Cook, Gresham, Makol, and Wang, 2019).

Future research may address the above limitations. First, given that B2B SMEs are widely using SM platforms such as LinkedIn, Facebook, and Twitter for a variety of strategic purposes such as improving customer awareness of the products and services marketed, attracting new customers, building customer relationships, and generating competitive intelligence (Cortez and Dastidar, 2022; Deloitte, 2019; Iannacci, Fearon, and Pole, 2021; Muller et al., 2021), future research may address the potential differences such as what specific MSC and CLC could be facilitated by the strategic use of SM across different industries, such as service versus manufacturing industries, and/or how diverse SM platforms can be used to build and nurture both MSC and CLC and deploy them for market sensing, customer engagement, sales force performance, etc. Second, to further validate the findings of our quantitative research, qualitative studies such as semi-structured interviews could be conducted to understand why and how the hypothesized relationships develop. Third, while our study shows the links between the key constructs, a longitudinal study will facilitate establishing the sequence of how strategic choices are made and have been developing, for example, from SM use to the development of MSC and CLC, and firm performance.

Additionally, while we developed our research model based on the market-driven view and the dynamic capabilities view and our Gaussian copula test indicated that our explanatory variables were not significantly endogenous, we were unable to reject the presence of endogeneity in our research given that some of the assumptions of Gaussian copula are not testable (Eckert & Hohberger, 2022). We were also unable to assess if our results were affected by unobserved heterogeneity due to our sample size being small. To identify unobserved heterogeneity using FIMIX-PLS, future research should probably double the required model-specific minimum sample size, thereby being able to estimate segment-specific models (Hair et al., 2014). Moreover, we were unable to rule out reverse causality because our data were cross-sectional. For example, a firm's brand management capability may affect both CRM and SM use; or firms with better past financial performance are likely to invest more in market orientation and SM use. The nature and role of reverse causality are a possible area for future research.

7. Conclusion

Overall, our study examined the much-advocated and under-investigated strategic use of SM for enhanced B2B marketing strategy. We opted to focus on the B2B SME context where it argued that due to the resource-constrained operating environment experienced by SMEs, the use of SM platforms will be particularly beneficial due to easiness of implementation, low-cost accessibility, and cost-efficiency. We promised our inquiry on the dynamic capabilities view and Day's (1994) seminal framework of capabilities in market-driven firms and theorized that the strategic use of SM provides a meaningful link between market orientation and CLC. Overall, our research model captures how the strategic use of SM strengthens MSC to effectively seize market opportunities through (re)developing two key CLC that drive enhanced marketing performance and in turn financial performance. Overall, the strategic use of SM remains a fertile ground for further inquiry in B2B marketing strategy context.

Data availability

Data will be made available on request.

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