

# Digital marketing capabilities and SME performance: the influence of market orientation and the complementarity effect on customer relationship management capabilities

Journal of  
Research in  
Marketing and  
Entrepreneurship

Joe Hazzam, Paul Dobson and Bharati Singh  
*Staffordshire Business School, Staffordshire University, Stoke-on-Trent, UK*

Blend Ibrahim

*Department of Tourism Management, Faculty of Tourism, Balikesir University, Balikesir, Turkey; University-Business Relations Research and Application Centre, Istanbul Ticaret University, Istanbul, Turkey and Applied Science Research Centre, Applied Science Private University, Amman, Jordan, and*

Ahmad Aljarah

*Faculty of Economics and Administrative Sciences,  
Cyprus International University, Lefkosa, North Cyprus*

Received 26 February 2025  
Revised 19 July 2025  
12 October 2025  
Accepted 16 October 2025

## Abstract

**Purpose** – Although digital marketing capabilities (DMCs) represent an opportunity for small to medium-sized enterprises (SMEs), the drivers and the complementarity effects of these newer marketing capabilities need further investigation. This study aims to examine the development and impact of DMCs on SME performance.

**Design/methodology/approach** – A quantitative survey method was implemented using data provided by 224 managers and directors of SMEs in the UK. The proposed model was tested using structural equation modelling, hierarchical regression and fuzzy qualitative comparative analysis.

**Findings** – The results indicate that DMCs contribute to SME performance beyond the influence of customer relationship management (CRM) capabilities, and market orientation (MO) contributes to the development of these capabilities. Furthermore, the findings reveal that three distinct configurations of MO, DMCs and CRM capabilities are sufficient to achieve higher SME performance.

**Practical implications** – The results suggest that SMEs possessing extensive knowledge of their market and customers current and latent needs are more capable of providing better services using DMCs. Also, the finding of this study informs SMEs managers that DMCs contribute to performance beyond the presence of CRM capabilities.

**Originality/value** – This study contributes to the marketing and entrepreneurship literature by identifying the driver and complementarity benefit of DMCs on SME performance.

**Keywords** Digital marketing capabilities, Market orientation, Customer relationship management capability, SME performance

**Paper type** Research paper



**Funding:** The authors gratefully acknowledge the financial support received from Staffordshire University.

Journal of Research in Marketing  
and Entrepreneurship  
© Emerald Publishing Limited  
1471-5201  
DOI 10.1108/JRME-02-2025-0029

## Introduction

Digital marketing capabilities (DMCs) refer to the firm's ability to integrate digital technologies in processes and activities to interact with their stakeholders, creating value that is measurable but not affected by distance or time (Hofacker *et al.*, 2020; Homburg and Wielgos, 2022; Kannan and Li, 2017). These capabilities are critical to leverage the benefits of digitalisation and enhance small to medium-sized enterprises' (SMEs') communications and relationships with customers, suppliers and channel partners at lower costs (Hofacker *et al.*, 2020; Ma *et al.*, 2025; Wang, 2020). For example, growth in marketing spending on digital channels in the UK was 12.76% in 2023, significantly higher than the 2.45% growth for the traditional channels (Statista, 2024). According to Apasrawirote *et al.* (2022), digital marketing presents a powerful form of marketing revolution to build a network of relationships enabling fluid and personalised customer communication. Despite the acknowledged benefits of digital marketing, the factors that enable SMEs' digital marketing practices and the drivers of DMCs are not well researched (Homburg and Wielgos, 2022; Setkute and Dibb, 2022; Wu *et al.*, 2024). To fill this gap in the literature, it is imperative to study SMEs' use of digital marketing and how these firms can keep up with the developments and the potential benefits of these channels (Ma *et al.*, 2025; Taiminen and Karjaluoto, 2015). Also, there is a limited knowledge on the SMEs' strategic orientation and marketing resources that facilitate the development of marketing capabilities and success in the digital environment (Gluga and Evers, 2023; Quinton *et al.*, 2017; Wu *et al.*, 2024).

Market orientation (MO) is a well-established marketing concept that explains the organisation culture towards information generation, dissemination and response to customers, competitors and suppliers (Kohli and Jaworski, 1990; Narver and Slater, 1990). SMEs are market-oriented and compete effectively with larger organisations despite the liabilities of smallness and disadvantages such as economies of scale (Beneke *et al.*, 2016). However, MO requires marketing capabilities as deployment mechanism to fully realise its value and support the SMEs competitive advantage and performance (Morgan *et al.*, 2009b; Quinton *et al.*, 2017). For example, Acikdilli *et al.* (2022) have shown that market-oriented SMEs need to develop marketing capabilities to achieve performance in highly competitive markets. Such, market-oriented SMEs emphasise the understanding of customers, knowledge and awareness of market dynamics and incorporate them in marketing strategies (Mandhachitara and Allapach, 2017). In the digital era, SMEs encounter strategic challenges with dynamic and fast changing customer needs and intense competition (Wu *et al.*, 2024). Thus, MO provides the required market knowledge for the development of SMEs marketing capabilities, such as DMCs and customer relationship management (CRM) capabilities (Slater and Narver, 1995; Vorhies *et al.*, 2010).

CRM capabilities refer to the organisation's ability to build and sustain valuable relationships with target customers by leveraging resources to enhance business performance (Harrigan *et al.*, 2012; Orr *et al.*, 2011). Prior research have highlighted the positive contribution of CRM capabilities on firm performance (Wang and Feng, 2012; Xu *et al.*, 2018). However, the contribution of DMCs to performance beyond the influence of CRM capabilities and the complementarity benefit of these capabilities remains a gap in the literature. More studies are required to understand the relationship between the traditional and the new digital marketing approaches, including the degree to which they integrate or reinforce each other (Harrigan *et al.*, 2012; Quinn *et al.*, 2016). This is specifically important for SMEs effective and efficient management of the dynamic and ongoing interactions in the digital environment (Herhausen *et al.*, 2020; Ma *et al.*, 2025; Setkute and Dibb, 2022).

Although prior studies have shown that marketing capabilities leverage MO to enhance performance, DMCs are conceptually distinct from both static marketing capabilities and

dynamic marketing capabilities, and research exploring their development in market oriented SMEs and their complementarity effect on other capabilities is lacking in literature (Bodlaj and Čater, 2022; Cacciolatti and Lee, 2016; Day, 2011; Wu *et al.*, 2024). This study aims to fill this gap and examines the impact of MO on the development of SMEs' DMC and CRM capabilities and investigates the value of DMCs beyond the influence of CRM capabilities. Further, this study aims to investigate the configurations of MO and marketing capabilities that contribute to higher SME performance. This approach advances the knowledge of when resources and capabilities perform in isolation or in combination, providing evidence on the complementarity effects of DMCs and their contributions to SME performance. Managers are also informed about the effective configurations and synchronisation of EO, DMCs and CRM capabilities that achieve higher SME performance.

Our research extends the marketing and entrepreneurship literature and contributes to the entrepreneurial marketing practice. This study differs from previous research by examining the development of DMCs in market oriented SMEs and the unique and complementarity impacts of these capabilities on SME performance. Firstly, we contribute to the current discussion on the drivers of DMCs in SMEs by identifying the strategic orientation that enhances their development, offering a better understanding of the business philosophy that builds DMCs to achieve higher performance. Secondly, the study provides empirical evidence on the significant contribution of DMCs to SME performance beyond the influence of CRM capabilities. This is important for SME managers lacking investment in digital channels to build profitable relationships with their customers. Thirdly, the finding provides a deeper understanding on the potential complementarity of MO, DMCs and CRM capabilities, suggesting three distinct configurations of MO, DMCs and CRM capabilities that contribute to higher SME performance. Our result implies that the complementarity of DMCs and CRM capabilities generates competitive advantage, and not all SMEs are able to implement MO and transform market-based knowledge into performance.

## Literature review and hypotheses

### *Theoretical background*

Marketing researchers differentiate between static, dynamic and adaptive marketing capabilities drawing on the resource-based view (RBV) and the dynamic capabilities theories (Barney, 1991; Day, 2011; Joensuu-Salo *et al.*, 2022; Teece *et al.*, 1997). Static marketing capabilities focus on internal efficiencies and routinised process activities, which prevent the organisation from sensing and responding to the dynamic environment (Day, 2011). On the other hand, dynamic marketing capabilities refer to the responsiveness and efficiency of cross-functional business processes, including CRM capabilities (Fang and Zou, 2009; Xu *et al.*, 2018). Although CRM capabilities support the firms to satisfy current customer needs and anticipate future trends, the dynamic marketing capability approach limits the organisation's ability to sense weak signals and rapid market shifts in complex digital environments (Day, 2011). On the contrary, DMCs provide deep customer insights and process activities that can rapidly be reconfigured and amplified with emerging technologies (Day, 2011; Hazzam and Wilkins, 2021). DMCs are characterised by a higher degree of adaptability, enabling faster experimentation and shorter time span between market change and firm response (Day, 2011; Homburg and Wielgos, 2022).

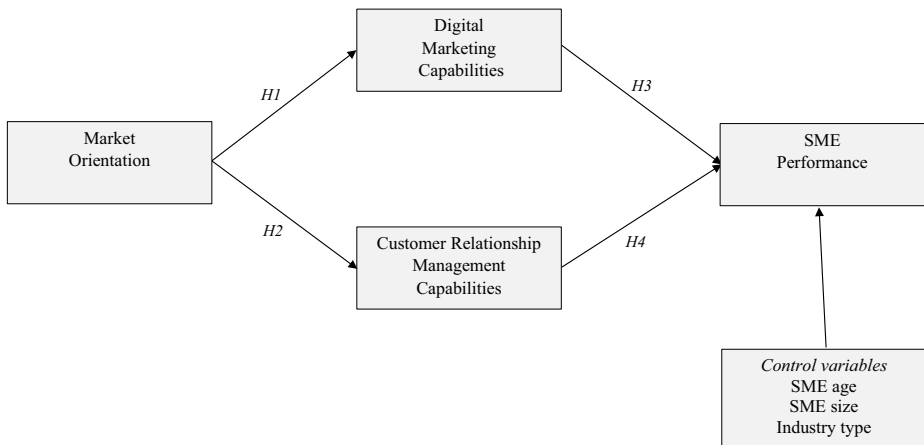
MO is considered a market-based asset that supports the firm to match its market environment and achieving a competitive advantage (Morgan *et al.*, 2009b). The relationship between MO and performance is complex and may be direct or indirect depending on the size, context of the firm and performance measures (Beneke *et al.*, 2016; Wasim *et al.*, 2022). SME studies have shown conflicting results towards the contribution of MO on performance

(Bodlaj and Čater, 2022). While MO seems to be important for SMEs, it may not be sufficient to achieve superior performance (Bodlaj and Čater, 2022). Therefore, MO may contribute significantly to performance through the mediation effect of marketing capabilities or the interactions with these capabilities (Bodlaj and Čater, 2022; Cacciolatti and Lee, 2016; Day, 1994; Morgan *et al.*, 2009b).

In this study, we propose that SMEs leverage MO to develop DMCs and CRM capabilities, which in turn contribute to performance. Besides, MO and marketing capabilities may complement each other to generate economic rents and provide a performance advantage (Day, 1994; Foley and Fahy, 2009; Morgan *et al.*, 2009b; Teece *et al.*, 1997). The correct configurations of MO and marketing capabilities may become a source of competitive advantage (Foley and Fahy, 2009; O’Cass and Ngo, 2011). Thus, a set-theoretic approach to MO, DMCs and CRM capabilities is applied in this study to complement the dimensional approach, providing a deeper understanding of MO and marketing capabilities configurations that contribute to higher SME performance (Fiss, 2007; Greckhamer, 2016; Woodside, 2013). Figure 1 presents the research conceptual model and the hypothesised relationships.

*Market orientation and digital marketing capabilities*

MO enables organisations to continuously sense and act on emerging customer and market trends through effective and efficient information generation and dissemination (Moorman and Day, 2016; Morgan *et al.*, 2009b). Previous studies in the context of SMEs have proposed and documented the positive contribution of market intelligence generation, dissemination and responsiveness towards developing marketing capabilities (Bodlaj and Čater, 2022; Carson *et al.*, 2020). MO emphasises the need for the entire organisation to collect, disseminate and respond to customers’ current and latent needs, and this knowledge is leveraged by the firm DMCs fostering high-scalable digital content that may be repurposed for email, mobile and social media marketing (Homburg and Wielgos, 2022; O’Cass and Ngo, 2011).



**Figure 1.** Proposed conceptual model  
**Source(s):** Authors

---

Organisations with robust MO enhance the development of adaptive capabilities such as DMCs facilitating anticipation and fast experimentation (Day, 2011). Digital channel users are highly expressive of their opinions on social media platforms, rating websites and blogs, and this generation of excess information is deployed by the firm DMCs for very precise targeting of individual customers and evaluation of marketing activities (Homburg and Wielgos, 2022; Ma et al., 2025). MO provides the knowledge that enables the firm to develop specific marketing capabilities such as DMCs, which enhance the linkage with SMEs stakeholders through novel interactions using automation, social media, email, search engine and mobile marketing (Homburg and Wielgos, 2022; O'Cass and Ngo, 2011; Wang, 2020). Therefore, we hypothesise:

H1. Market orientation is positively related to digital marketing capabilities.

#### *Market orientation and customer relationship management capabilities*

MO supports the organisation to learn more about their customers, competitors and channel members (Day, 1994; Kohli and Jaworski, 1990; Narver and Slater, 1990). This information generation, dissemination and responsiveness is essential to develop business process capabilities such as CRM capabilities (Jaakkola et al., 2016). MO increases the organisations' understanding of their customers expressed and latent needs, and firms with strong CRM capabilities deploy these market-based resources to attract, retain and better serve their customers (Morgan et al., 2009a; Slater and Narver, 1995). CRM capabilities support the firm to act on the knowledge generated by MO processes, enhancing the effectiveness and efficiency of CRM and maintain loyal customers (Harrigan et al., 2012; Orr et al., 2011).

SMEs may differ from large firms in their approach to integrate customer and market information generation, dissemination and responsiveness into a unique strategic resource (Beneke et al., 2016). According to Gliga and Evers (2023), SMEs' informational resources are essential inputs to build cross-functional capabilities such as CRM capabilities. The information generation, dissemination and responsiveness of MO processes improve SMEs market sensing, which facilitates the development of CRM capabilities (Cao and Weerawardena, 2023). Therefore, we hypothesise:

H2. Market orientation is positively related to customer relationship management capabilities.

#### *Digital marketing capabilities and small and medium-sized enterprise performance*

Digital marketing technologies allow businesses to compete and reach their customers effectively by incorporating market insights and analytics into their content, social media and other forms of digital marketing activities (Apasrawirote et al., 2022; Ma et al., 2025). Digital marketing facilitates the joint creation, communication and delivery of value to firm stakeholders through an adaptive process that is enabled by digital technologies (Kannan and Li, 2017). DMCs are scalable reducing the cost of search and reproduction through content and search engine marketing, which may influence revenues significantly (Homburg and Wielgos, 2022). This capability provides SMEs the opportunity to attract new customers and reach existing ones more efficiently with lower cost (Ma et al., 2025; Taiminen and Karjaluoto, 2015). This is particularly important for SMEs lacking marketing and financial resources and limiting their digital marketing focus to support traditional business practices (Joensuu-Salo et al., 2022; Setkute and Dibb, 2022; Su et al., 2023). DMCs enhance SMEs' management and coordination of stakeholder relationships by more actively listening and engaging with them using web analytics and social media marketing (Homburg and Wielgos, 2022; Ma et al., 2025; Wang, 2020).

Further, SMEs may use search engine optimisation at a relatively low cost, supporting the acquisition of new customers or increasing sales to current ones (Taiminen and Karjaluoto, 2015). Recent studies highlight the positive contributions of DMCs on large and SMEs sales growth, return on investment and business profitability (Dermonde et al., 2024; Homburg and Wielgos, 2022; Ranjan, 2023; Wang, 2020). Therefore, we hypothesise:

H3. Digital marketing capabilities are positively related to SME performance.

---

*Customer relationship management capabilities and small and medium-sized enterprises' performance*

CRM capabilities are valuable to firm growth margins by continually lowering the average cost of serving their customers (Morgan et al., 2009a). The investment in CRM capabilities has demonstrated a positive contribution to customer satisfaction and retention (Harrigan et al., 2012; Orr et al., 2011). These CRM capabilities enable the successful management of customer relationships and channel members by learning about their needs and satisfy them (Harrigan et al., 2012; Xu et al., 2018). Similar to large organisations, SMEs have implemented CRM to compete effectively and enhance performance in dynamic business environments. SMEs perceive CRM processes as a technological innovation that improves their business and provides them with strategic advantages. Recently, Cao and Weerawardena (2023) confirmed the positive relationship between SMEs' CRM capabilities and marketing performance such as sales revenue growth, market share growth and acquisition of new customers. Therefore, we propose the following hypothesis:

H4. Customer relationship management capabilities are positively related to SME performance.

*The complementarity effects of market orientation, digital marketing capabilities and customer relationship management capabilities and small and medium-sized enterprise performance*

Complementarity between capabilities refers to the interaction or the marginal benefit of one capability in the presence of other capabilities (Homburg and Wielgos, 2022). According to Teece et al. (1997), this complementarity between capabilities is valuable, increasing the effectiveness of the firm and limiting competitors' ability of imitating the source of competitive advantage (Hazzam et al., 2022; Morgan et al., 2009a). For example, Orr et al. (2011) found that the complementarity of brand management capabilities and employee development capabilities has positive and significant impacts on customer satisfaction and market effectiveness. Luo et al. (2024) suggested that SMEs complement the use of social media with CRM capabilities to achieve higher marketing performance. On the other hand, MO as market-based knowledge assets and marketing capabilities complement one another and their interactions contribute to firm performance (Cacciolatti and Lee, 2016; Morgan et al., 2009b).

Although the studies that measure interactions between capabilities have advanced the knowledge on the complementarity of capabilities, these studies have used hierarchical regression presenting the limitation of measurement error. Hence, we have used hierarchical regression only to examine the value of DMCs beyond the influence of MO and CRM capabilities on performance. This method complements structural equation modelling (SEM), allowing easy assessment of nested models and control for SME size, age and industry types (Morgan et al., 2009b). However, we have used fuzzy qualitative comparative analysis (fsQCA) to investigate the complementarity of capabilities and understand the configurations of MO,

---

DMCs and CRM capabilities that achieve higher SME performance (Greckhamer, 2016; Woodside, 2013).

## Methodology

### *Sample and data collection*

In this study, we have conducted a survey to collect data from SME directors and/or marketing managers operating in UK. SMEs are defined as businesses with 0–249 employees and represent 99.9% of all firms in UK (UK Government, 2022). These firms contribute significantly to UK’s regional employment rate and economic turnover. Staffordshire is the largest economy in the West Midlands region and has a strong record of economic growth and low unemployment (Staffordshire County Council, 2023). We used a convenience sampling approach, and the sampling frame was developed from Staffordshire Chambers of Commerce database of 748 companies. The required sample size to achieve a confidence level of 95% at 5% margin of error is 255. However, previous SME studies have shown that the response rate is generally low due to greater research focus on SMEs (Cenamor *et al.*, 2019). Thus, we sent the survey followed by two reminders to the 748 companies. Overall, we received 230 usable responses highlighting a 30.7% response rate. However, 224 responses were retained from companies that matched the criteria of having fewer than 249 employees. Table 1 highlights the main characteristics of the SME profiles.

### *Measures*

In this research, we have used existing measurement scales from previous studies to measure the study constructs. MO is treated as a reflective second-order factor, including three first-order factors: intelligence generation; intelligence dissemination and responsiveness. Three items for each MO dimension adapted from O’Cass and Ngo (2011) were deployed to measure MO. A Likert-type seven-point scale was implemented ranging from (1) “strongly disagree” to (7) “strongly agree”, with a mid-point label of “neither agree nor disagree”. We measured DMCs with seven items adapted from Homburg and Wielgos (2022) using seven-point scale anchors of (–3) “much worse than competitors” and (+3) “much better than competitors”. We have adapted the measurement scale of Orr *et al.* (2011) to measure CRM capabilities using seven-point scale anchors of (–3) “much worse than competitors” and (+3) “much better than competitors”. Lastly, SME performance was measured using the scale developed by Morgan *et al.* (2009b), including eight items that measure market effectiveness and financial performance. We have used seven-point scale anchors of (–3) “much worse than competitors” and (+3) “much better than competitors” to measure SME performance. All the items that we have used in this study are provided in Appendix.

In addition to the study’s main variables, we have collected data on three generally accepted SME characteristics as control variables, including SMEs’ age, size and industry types (Cenamor *et al.*, 2019; Wasim *et al.*, 2022). Besides, we have collected data on a marker variable that is theoretically unrelated to the main study constructs to control for common method variance (Lindell and Whitney, 2001).

## Results

### *Non-response and key informant bias*

We have tested non-response bias using an independent *t*-test by comparing variable means between early and late respondents. The result of this test indicates that there are no significant differences between early and late respondents for MO (significance *t*-test for equality of means = 0.294), CRM capabilities (significance *t*-test for equality of means = 0.083), DMC (significance *t*-test for equality of means = 0.778) and performance (significance *t*-test for

**Table 1.** SME profiles

Characteristic	Variation	Count	%
SMEs' age	Less than 3 years	35	15.6
	Between 3 and 5 years	25	11.2
	Over 5 years	164	73.2
SMEs' size	Fewer than 10 employees	131	58.5
	Between 10 and 49 employees	53	23.7
	Between 50 and 249 employees	40	17.8
SMEs' industry type	Accommodation and food service	7	3.1
	Administrative and support service	4	1.8
	Advertising and design	20	8.9
	Building and property service	2	0.9
	Ceramic	2	0.9
	Financial and insurance service	17	7.6
	Computing and IT service	19	8.5
	Construction	7	3.1
	Consultant	10	4.5
	Education	6	2.7
	Engineering	9	4.0
	Human health and social work	7	3.1
	Information and communication	4	1.8
	Legal service	2	0.9
	Manufacturing	22	9.8
	Motor vehicles	2	0.9
	Office equipment	1	0.4
	Printing and media	5	2.2
	Real estate	6	2.7
	Recruitments and careers	4	1.8
	Training	4	1.8
	Transportation and storage	4	1.8
	Travel	2	0.9
	Wholesale and retail	20	8.9
	Others	38	17.0

**Source(s):** Authors

equality of means = 0.534) ([Armstrong and Terry, 1977](#)). We have followed two approaches to check key informant quality. Firstly, we have targeted SME directors and managers, and most of the respondents were in high hierarchical positions. Secondly, we have checked on the ability of the key informants to answer the survey items. The results indicate that 56.7% of key informants were highly competent and 43.3% were competent, highlighting that the key informants in this study were qualified in answering the survey items.

#### *Common method bias*

We have deployed several procedures to control for common method variance in this study. Firstly, the result of Harman's single factor test shows that the first factor explained 38.3% of model's variance, which is less than the threshold of 50% ([Podsakoff et al., 2012](#)).

Secondly, we introduced and connected a common latent factor to all the measured indicators of the original measurement model. The standardised factor loadings of this model were then compared with the standardised loadings where no common latent factor is present in the measurement model ([Podsakoff et al., 2012](#)). The difference between the two sets of

standardised loadings was significantly lower than the cut criterion of  $< 0.20$ , suggested by Nystrand and Olsen (2020).

Thirdly, we used the marker variable procedure of Lindell and Whitney (2001), and time management was used as a variable to control for common method bias. The mean change in correlations between the main study constructs when partialling the effect of the marker variable was 0.002. Thus, common method bias is unlikely to be a risk in this study.

### Measurement model

To establish the convergent and discriminant validity, confirmatory factor analysis (CFA) was conducted (Hair *et al.*, 2010), using the AMOS software version 24 and performing covariance-based SEM (CB-SEM). This method works well for our study since the theory under investigation is very well established, and the objective is to estimate model parameters and not to maximise the variance explained in the dependent variable (Hair *et al.*, 2017). Also, CB-SEM is more effective for reflective measurement model specification when compared to variance-based SEM that includes some error variance to predict the dependent variable (Hair *et al.*, 2017; Henseler *et al.*, 2025). The result of the CFA (Table 2) indicates that all *t*-values of the loadings of the measurement variables on the respective

**Table 2.** Results of the measurement model

Construct	Item	Loading	<i>t</i> -value	$\alpha$	CR	AVE
Intelligence generation	IG1	0.604	8.298	0.77	0.781	0.549
	IG2	0.860	10.814			
	IG3	0.736	–			
Intelligence dissemination	ID1	0.733	10.973	0.84	0.843	0.643
	ID2	0.896	13.068			
	ID3	0.767	–			
Responsiveness	RESP1	0.676	10.165	0.82	0.832	0.625
	RESP2	0.899	13.215			
	RESP3	0.781	–			
Digital marketing capabilities	DMC1	0.800	–	0.91	0.907	0.582
	DMC2	0.726	13.733			
	DMC3	0.814	13.185			
	DMC4	0.766	12.160			
	DMC5	0.756	11.949			
	DMC6	0.794	12.750			
	DMC7	0.675	10.391			
CRM capabilities	CRM1	0.569	–	0.86	0.864	0.571
	CRM2	0.531	9.025			
	CRM3	0.865	8.827			
	CRM4	0.891	8.394			
	CRM5	0.841	8.712			
SME performance	SMEP1	0.832	–	0.95	0.949	0.702
	SMEP2	0.760	17.282			
	SMEP3	0.865	16.223			
	SMEP4	0.903	17.418			
	SMEP5	0.846	15.614			
	SMEP6	0.803	14.408			
	SMEP7	0.829	15.151			
	SMEP8	0.856	15.921			

Source(s): Authors

latent variables are statistically significant (Hair et al., 2010). The model exhibits satisfactory goodness of fit indices, highlighting that the data have an acceptable fit with the model despite the significant value of the chi-square test:  $\chi^2 = 832.473$  ( $df = 354, p < 0.01$ );  $\chi^2/df = 2.35$ ; RMSEA = 0.078; CFI = 0.904; and SRMR = 0.073. Besides, the reliability tests (Table 2) indicate that Cronbach's alpha and composite reliability (CR) are above the 0.7 threshold, and the average variance extracted (AVE) of all study constructs is above the 0.5 threshold, indicating good reliability and convergent validity (Anderson and Gerbing, 1988).

To assess discriminant validity, we have evaluated whether the square root of AVE of the study constructs is greater than their correlations with other constructs (Fornell and Larcker, 1981). Table 3 highlights that the study constructs achieve discriminant validity.

*Hypothesis testing*

The structural model was evaluated to test the hypothesised relationships (Table 4). MO is treated as a second-order latent factor linking to the three first-order latent factors: intelligence generation, intelligence dissemination and responsiveness. DMCs, CRM capabilities and SME performance were treated as first-order latent variables. SMEs' age, size and industry types are included as control variables. The chi-square test and goodness of fit indices ( $\chi^2 = 889.889$  ( $df = 389, p < 0.01$ );  $\chi^2/df = 2.28$ ; RMSEA = 0.076; CFI = 0.900; and SRMR = 0.076) indicate that the structural model fits the data adequately. The model explains a variance of 62.8% in SME performance, and as per the examination of the standardised path coefficients and *t*-values, the four hypotheses in our model are supported (Table 4). MO is positively and significantly

**Table 3.** Correlation matrix and discriminant validity

Variables	M	SD	1	2	3	4	5	6
1. Intelligence generation	5.12	1.27	<i>0.74</i>					
2. Intelligence dissemination	4.50	1.47	0.54**	<i>0.80</i>				
3. Responsiveness	4.85	1.27	0.57**	0.63**	<i>0.79</i>			
4. Digital marketing capabilities	0.16	1.12	0.24**	0.27**	0.23**	<i>0.76</i>		
5. CRM capabilities	0.95	0.99	0.21**	0.17**	0.25**	0.50**	<i>0.75</i>	
6. SME performance	0.64	1.12	0.21**	0.20**	0.24**	0.64**	0.62**	<i>0.83</i>

**Note(s):** \*\* Correlation is significant at the 0.01 level (two-tailed). *Italic diagonal elements are the square root of the AVE*

**Source(s):** Authors

**Table 4.** Hypothesis test results

Hypotheses	Structural relationships	Standardised loading	Standard error	<i>t</i> -value	Result
H1	Market orientation to digital marketing capabilities	0.34***	0.093	4.254	Supported
H2	Market orientation to CRM capabilities	0.22**	0.050	2.716	Supported
H3	Digital marketing capabilities to SME performance	0.48***	0.059	7.531	Supported
H4	CRM capabilities to SME performance	0.41***	0.130	5.565	Supported

**Note(s):** \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Source(s):** Authors

related to DMCs ( $H1$ ;  $\beta = 0.34$ ,  $p < 0.001$ ) and CRM capabilities ( $H2$ ;  $\beta = 0.22$ ,  $p < 0.01$ ). DMCs ( $H3$ ;  $\beta = 0.48$ ,  $p < 0.001$ ) and CRM capabilities ( $H4$ ;  $\beta = 0.41$ ,  $p < 0.001$ ) are positively related to SMEs' performance. Out of the three control variables, only SME size ( $\beta = 0.13$ ,  $p < 0.01$ ) significantly impacts SME performance.

Although we did not hypothesise the mediating effect of marketing capabilities between MO and SME performance, we have evaluated the indirect effect of MO on SME performance using bias-corrected (BC) bootstrap confidence intervals (Preacher and Hayes, 2008). Results indicate that the direct effect of MO ( $\beta = 0.006$ , 95% BC CI = [-0.119, 0.127]) on SME performance is not significant. However, the indirect effect of MO ( $\beta = 0.263$ , 95% BC CI = [0.158, 0.370]) on SMEs performance is significant. Thus, we conclude that DMCs and CRM capabilities mediate the relationship between MO and SME performance.

### Hierarchical regression

We complement the SEM analysis with hierarchical regression to easily control for SMEs' age, size and industry type and assess the differences between nested models and evaluate the effect of DMCs beyond the influence of MO and CRM capabilities. We estimated four regression models, including the control variables, adding MO, adding CRM capabilities and adding DMCs. The variance inflation factors (VIFs) in the regression analysis are lower than 2, suggesting that multicollinearity is not a concern for this study. Table 5 presents the findings of the hierarchical regression analysis. Model 1 ( $F = 5.279$ ,  $p < 0.01$ ) is significant and includes the control variables, explaining 6.7% of the variance in SME performance. SME's age and size were significant predictors of performance in this first model. In Model 2, MO is added and this model ( $F = 6.990$ ,  $p < 0.001$ ) is significant and explains 11.3% of the variance in SME performance. The change in  $R$ -square from Model 1 ( $\Delta R^2 = 0.045$ ,  $p < 0.01$ ) is significant and MO is a significant predictor of SME performance. However, the control variables estimates including SMEs age and size are not significant in Model 2. Model 3 ( $F = 34.581$ ,  $p < 0.001$ ) is significant and includes the addition of CRM capabilities. This model explains 44.2% of the variance in SME performance, and the change in  $R$ -square from Model 2 ( $\Delta R^2 = 0.329$ ,  $p < 0.001$ ) is significant. CRM capabilities is a significant predictor of SME performance. However, the positive relationship between MO and SME performance in Model 2 becomes insignificant in Model 3. Model 4 ( $F = 44.913$ ,  $p < 0.001$ ) is

**Table 5.** Hierarchical regression analysis

Dependent variable: SME performance	Model 1	Model 2	Model 3	Model 4
SME age	0.149*	0.134	0.107	0.075
SME size	0.160*	0.128	0.139*	0.088
SME industry type	-0.025	-0.027	0.031	0.050
Market orientation		0.218**	0.071	0.009
CRM capabilities			0.596***	0.415***
DMCs				0.403***
$R^2$	0.067	0.113	0.442	0.554
$\Delta R^2$ from model 1		0.046		
$\Delta R^2$ from model 2			0.329	
$\Delta R^2$ from model 3				0.112
F	5.279**	6.990***	34.581***	44.913***
$\Delta F$		11.375**	128.649***	54.299***

**Note(s):** \* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$

**Source(s):** Authors

significant and includes the addition of DMCs. The model explains 55.4% of the variance in SME performance, and the change in  $R$ -square from Model 3 ( $\Delta R^2 = 0.112$ ,  $p < 0.001$ ) is significant. In Model 4, CRM capabilities and DMCs are the only significant predictors of SME performance.

### *Configurational analysis*

Configurational analysis complements SEM and provides a better understanding of how resources and capabilities combine to achieve performance, confirming the specific conditions under which a variable may influence the outcome (Fiss, 2007). This approach provides better understanding of multiple between-construct relationships, accommodating causal complexity beyond linear or interaction models of causality (Misangyi et al., 2017). The fsQCA is particularly important to understand complementarities and substitutes of capabilities in configurations that answer previous research conflicting results, highlighting that marketing capabilities can function as complements or substitutes (Fiss, 2007; Homburg and Wielgos, 2022). We have used fsQCA 4.0 software to conduct the analysis, including three main steps (Greckhamer et al., 2018; Ragin, 2008). Firstly, fsQCA requires transforming data into fuzzy-set and calibrating measures into full membership, full non-membership and the cross-over point (Woodside, 2013). In this study, the cross-over point is set to the median, full membership is set to the 90th percentile and the full non-membership is set to the tenth percentile following the recommendations of Linton and Kask (2017).

Secondly, we construct the truth table by setting the frequency threshold as 15 retaining more than 80% of the cases, and  $> 0.8$  for raw consistency (Greckhamer et al., 2018; Ragin, 2008). Table 6 provides all possible configurations of MO, DMCs and CRM capabilities that predict high performance. Thirdly, the construction of a truth table is followed by necessary and sufficient analysis and the reduction of truth table rows into simplified solutions (Linton and Kask, 2017). For the necessary analysis, none of the conditions achieved both consistency and coverage greater than 0.9 (Ragin, 2008). For the sufficient analysis, the results (Table 7) highlight that three configurations of MO, DMC and CRM capabilities explain SME performance and one combination for the absence of SME performance achieving consistency  $> 0.8$  and coverage  $> 0.2$  (Greckhamer et al., 2018; Ragin, 2008). Table 7 shows that the combinations of the absence of MO and the presence of CRM capabilities denoted  $\sim MO * CRM$ , the combination of the absence of MO and the presence of DMCs denoted  $\sim MO * DMCs$  and the combination of the presence of CRM and DMC capabilities denoted  $CRM * DMCs$  generate high level of SME performance. On the other hand, the configuration denoted  $\sim CRM * \sim DMC$  explains that the absence of CRM and DMC capabilities generates low level of SME performance.

**Table 6.** Truth table for the configurations to predict higher performance

MO	DMCs	CRM	No.	SMEP	Consistency
1	1	1	38	1	0.939
0	1	1	25	1	0.893
0	0	1	15	1	0.812
0	1	0	15	1	0.811

**Note(s):** MO: market orientation; DMCs: digital marketing capabilities; CRM: customer relationship management capabilities; SMEP: SME performance

**Source(s):** Authors

**Table 7.** Sufficient configurations of MO and marketing capabilities to predict higher and lower performance

Configurations	Raw coverage	Unique coverage	Consistency
<i>Configurations for high level of SMEP</i>			
~MO*CRM	0.407	0.054	0.807
~MO*DMCs	0.433	0.079	0.814
CRM*DMCs	0.634	0.280	0.903
Solution coverage: 0.768			
Solution consistency: 0.810			
<i>Configurations for low level of SMEP</i>			
~CRM*~DMCs	0.671	0.671	0.856
Solution coverage: 0.671			
Solution consistency: 0.856			

**Note(s):** MO: market orientation; DMCs: digital marketing capabilities; CRM: customer relationship management capabilities; SMEP: SME performance

**Source(s):** Authors

## Discussion

This research achieved three objectives. Firstly, the findings provide new insights into the role of MO as a facilitator of the development of DMCs and CRM capabilities in SMEs. The results indicate positive and significant relationships between MO and DMCs and CRM capabilities. While previous studies suggest conflicting results about the MO-performance relationship, our findings suggest that the presence of MO in SMEs is not sufficient to improve SME performance (Bodlaj and Cater, 2022). These firms deploy customers, competitors and suppliers' knowledge to develop DMCs and CRM capabilities, which in turn contribute significantly to SME performance. The hierarchical regression, the mediation and the fsQCA confirm this view. Therefore, this study enhances our understanding of the SMEs' strategic orientation and its contribution to performance by improving DMCs and CRM capabilities (Quinton *et al.*, 2017). The intelligence generation, dissemination and responsiveness should be leveraged by SMEs marketing capabilities, and in particular, by DMCs and CRM capabilities to achieve higher performance.

Secondly, this study provides empirical evidence on the impact of DMCs on SME performance beyond the presence of other marketing capabilities. Studies that examine the contribution of DMCs on performance are scarce and limited to large firms or exporting SMEs (Homburg and Wielgos, 2022; Ranjan, 2023; Wang, 2020). The result confirms that DMCs explain a significant variance in SME performance beyond the influence of CRM capabilities. This is critical for SMEs that have limited resources, preventing the development of newer capabilities without relevant evidence of their impact on growth and return on investment (Harrigan *et al.*, 2012; Joensuu-Salo *et al.*, 2022). Our study highlights that SMEs' developing DMCs, including social media, mobile, content, search engine optimisation, email, web analytics and marketing automation, have the potential to achieve higher performance (Homburg and Wielgos, 2022; Taiminen and Karjaluoto, 2015). SMEs' may use social media to effectively engage and interact with their customers (Ma *et al.*, 2025). On the other hand, the use of search engine optimisation enhances the SMEs' online visibility and reach predicting higher performance. Lastly, SMEs may use emails and automation to better serve their customers, improving marketing processes, reducing the cost of marketing activities and enhancing customer retention and loyalty (Harrigan *et al.*, 2012).

Thirdly, the result of the fsQCA complements the findings of SEM and hierarchical regression analysis and suggests that the presence of DMCs or CRM capabilities separately or in combination contributes to SME performance. This finding highlights the benefit from the complementarity of capabilities and informs SMEs to develop and integrate DMCs into their capability's portfolio for higher performance. In addition, the analysis of configurations for low performing SMEs confirms that the absence of the two capabilities as a configuration predicts lower performance. Thus, SMEs need to consider the complementarity benefits of DMCs and CRM capabilities in better reaching and engaging the target audiences, creating and capturing value and achieving higher performance.

#### *Theoretical contributions*

By investigating the drivers and outcomes of DMCs, this study contributes to the marketing and entrepreneurship literature in the context of SMEs. Firstly, the result shows that MO has a positive and significant effect on DMCs, highlighting the importance of market-based assets in the development of these marketing capabilities (Day, 1994; Moorman and Day, 2016). However, the direct relationship between MO and SME performance was not significant, challenging the premise of the RBV and previous studies that found a direct relationship between MO and performance. MO has influenced SME performance indirectly through its impact on DMCs and CRM capabilities. This finding is confirmed by our mediation and hierarchical regression analysis. Digital marketing and CRM processes leverage the generation and dissemination of intelligence in market-oriented SMEs to perform fast experimentation and reconfiguration using emerging technologies such as automation, social media and mobile marketing (Day, 2011; Homburg and Wielgos, 2022; Ma et al., 2025). This finding highlights the critical role of market knowledge in the deployment of DMCs and CRM capabilities, reaching customers through their preferred digital channels and touchpoint configurations (Day, 2011; Harrigan et al., 2012). Therefore, SMEs need to develop adaptive and dynamic marketing capabilities such as DMCs and CRM enabling anticipation and faster understanding of changes in consumer behaviours (Bodlaj and Čater, 2022; Day, 2011). These capabilities contribute to SME performance and serve as an underlying mechanism transforming the generation and dissemination of intelligence into performance.

Secondly, our research sheds new light on the value of DMCs on SME performance beyond the presence of CRM capabilities. The result of hierarchical regression indicates a positive and significant relationship between DMCs and SME performance, and this contribution is valuable beyond the presence of CRM capabilities. This finding is particularly important for SMEs given resource limitations for the development of new capabilities (Harrigan et al., 2012). DMCs are highly scalable requiring less deployment cost and enabling the achievement of higher SME returns (Homburg and Wielgos, 2022; Ma et al., 2025). These DMCs enable the SMEs to act ahead of rivals by using deep analytics and evaluating more effectively the performance of marketing activities (Wang, 2020; Homburg and Wielgos, 2022). Our result extends previous literature on the orientation and function of marketing capabilities (Day, 1994; Day, 2011). The findings suggest that SMEs are required to balance between capabilities that maintain efficiency and the new capabilities such as DMCs for anticipation and fast experimentation, thus enabling a rapid reconfiguration of processes as needed to achieve higher performance.

Lastly, the study offers new theoretical insights into the complementarity of capabilities and how several configurations of capabilities contribute to SME performance. The finding indicates that DMCs and CRM capabilities in the absence of MO not only relate to SME performance, but also the configuration that includes these two capabilities predicts higher SME performance. This result confirms previous research highlighting that the

complementarity of capabilities generates economic rent and competitive advantage (Day, 1994; O'Casey and Ngo, 2011; Teece *et al.*, 1997). However, the absence of MO in the configurations of capabilities that drive higher performance contradicts previous studies that found a positive contribution to the interaction between MO and marketing capabilities (Cacciolatti and Lee, 2016; Morgan *et al.*, 2009b). This result explains that not all firms are able to implement MO and transform market-based knowledge into performance (Day, 1994; Day, 2011).

### *Managerial implications*

The study presents several implications for SME managers. Firstly, these managers must understand the critical role of knowledge generation, dissemination and responsiveness in the creation of DMCs. Various digital marketing processes such as search engine optimisation, social media and email marketing leverage market-based knowledge to reach, engage and create value to target segments through their preferred channels and at optimal times. SMEs that possess extensive knowledge of their market and customers current and latent needs are more capable of providing better services using digital and social media marketing capabilities (Ma *et al.*, 2025; Wang, 2020). SMEs that have extensive knowledge about their customer behaviours and market characteristics are more proficient to effectively develop digital content that caters to their needs and wants. These SMEs can use the flexibility of emails and social media marketing to deliver the type, format and style of messages and media that engage their customers in a long-term relationship, contributing to performance (Ma *et al.*, 2025).

Secondly, the finding of the study informs SME managers that DMCs contribute to performance beyond the presence of CRM capabilities. This is important for SMEs that rely on relationships and lack the resources and skills to develop new capabilities. The result explains that DMCs enhance SME performance substantially without the deployment of higher cost in comparison to other types of capabilities (Homburg and Wielgos, 2022). SMEs may use search engines and social media marketing to reach and engage their customers in a profitable relationship. Website analytics can provide valuable insights into customer visit behaviours and interests, and the data may be used by CRM programmes to develop creative content and send personalised and targeted emails that link customers to their preferred products or services.

Thirdly, the result suggests that successful configurations of DMCs and CRM capabilities contribute to higher SME performance. This finding explains that SME managers may benefit from the attributes of these two capabilities to understand their target customer behaviours better and deploy social media or email marketing to provide them value and better services (Ma *et al.*, 2025). Managers of SMEs that combine DMCs and CRM capabilities may customise digital marketing content and use automation to satisfy their customers and improve customer relationship performance. For example, SMEs can manage customer relationships through social media platforms by solving in real-time customer concerns and problems (Luo *et al.*, 2024). On the other hand, search engine optimisation can attract new customers and website analytics improve SME's prediction of customer preferences (Wu *et al.*, 2024). The configurations of content, email and automation can support SMEs to communicate effectively and timely with their target segments.

### *Limitations and future research*

This study presents several limitations and opportunities for future research. Although we have used several procedures to reduce the impact of common method bias, future studies may collect secondary data to mitigate or complement the use of data from a single source.

Secondly, the cross-sectional design limits our ability to understand the development of capabilities over a period of time. Future research may collect data using longitudinal design to better understand the development of DMCs and the contribution to SME performance. Also, firms with higher levels of DMCs and CRM capabilities may become more market-oriented, and cross-sectional data limits our ability to make causal inferences and validate the directions of relationships between the variables under study. Thus, longitudinal data can provide a better understanding of the inverse relationships between MO, DMCs and CRM capabilities. Thirdly, this study did not investigate the relationships between DMCs and CRM capabilities under different levels of environmental turbulence. Therefore, future research may evaluate the influences of market or technological intensity on the contributions of these capabilities to SME performance. Fourthly, we focus in this study on MO as a driver of marketing capabilities. Future studies may examine other market-based assets such as entrepreneurial orientation as an enabler of DMCs. Lastly, the result of our study is based on a sample of SMEs from a specific country and region, which may not represent the characteristics of SMEs in other countries. Therefore, future research may test the model in different countries and institutional settings.

## References

- Acikdilli, G., Mintu-Wimsatt, A., Kara, A. and Spillan, J.E. (2022), "Export market orientation, marketing capabilities and export performance of SMEs in an emerging market: a resource-based approach", *Journal of Marketing Theory and Practice*, Vol. 30 No. 4, pp. 526-541.
- Anderson, J. and Gerbing, D. (1988), "Structural equation modeling in practice: a review and recommended two-step approach", *Psychological Bulletin*, Vol. 103 No. 3, pp. 411-423.
- Apasrawirote, D., Yawised, K. and Muneesawang, P. (2022), "Digital marketing capability: the mystery of business capabilities", *Marketing Intelligence and Planning*, Vol. 40 No. 4, pp. 477-496. doi: [10.1108/mip-11-2021-0399](https://doi.org/10.1108/mip-11-2021-0399).
- Armstrong, J. and Terry, S. (1977), "Estimating nonresponse bias in mail surveys", *Journal of Marketing Research*, Vol. 14 No. 3, pp. 396-402.
- Barney, J. (1991), "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17 No. 1, pp. 99-120.
- Beneke, J., Blampied, S., Dewar, N. and Soriano, L. (2016), "The impact of market orientation and learning orientation on organisational performance: a study of small to medium-sized enterprises in cape town, South Africa", *Journal of Research in Marketing and Entrepreneurship*, Vol. 18 No. 1, pp. 90-108.
- Bodlaj, M. and Čater, B. (2022), "Responsive and proactive market orientation in relation to SMEs' export venture performance: the mediating role of marketing capabilities", *Journal of Business Research*, Vol. 138, pp. 256-265. doi: [10.1016/j.jbusres.2021.09.034](https://doi.org/10.1016/j.jbusres.2021.09.034).
- Caccioliatti, L. and Lee, S.H. (2016), "Revisiting the relationship between marketing capabilities and firm performance: the moderating role of market orientation, marketing strategy and organisational power", *Journal of Business Research*, Vol. 69 No. 12, pp. 5597-5610, doi: [10.1016/j.jbusres.2016.03.067](https://doi.org/10.1016/j.jbusres.2016.03.067).
- Cao, G. and Weerawardena, J. (2023), "Strategic use of social media in marketing and financial performance: the B2B SME context", *Industrial Marketing Management*, Vol. 111, pp. 41-54. doi: [10.1016/j.indmarman.2023.03.007](https://doi.org/10.1016/j.indmarman.2023.03.007).
- Carson, G., O'Connor, C. and Simmons, G. (2020), "The crucial role of market intelligence in the development of small business marketing capabilities", *Journal of Small Business and Enterprise Development*, Vol. 27 No. 5, pp. 797-816, doi: [10.1108/jsbed-12-2019-0394](https://doi.org/10.1108/jsbed-12-2019-0394).
- Cenamor, J., Parida, V. and Wincent, J. (2019), "How entrepreneurial SMES compete through digital platforms: the roles of digital platform capability, network capability and ambidexterity", *Journal of Business Research*, Vol. 100, pp. 196-206, doi: [10.1016/j.jbusres.2019.03.035](https://doi.org/10.1016/j.jbusres.2019.03.035).

- Day, G. (1994), "The capabilities of market-driven organizations", *Journal of Marketing*, Vol. 58 No. 4, p. 37.
- Day, G. (2011), "Closing the marketing capabilities gap", *Journal of Marketing*, Vol. 75 No. 4, pp. 183-195.
- Dermonde, M., Brandão Fischer, B. and Moraes, G.H.S.M. (2024), "Digital marketing capabilities, entrepreneurial orientation and franchise systems' performance", *Management Decision*, Vol. 62 No. 12, pp. 3978-3995.
- Fang, E. and Zou, S. (2009), "Antecedents and consequences of marketing dynamic capabilities in international joint ventures", *Journal of International Business Studies*, Vol. 40 No. 5, pp. 742-761.
- Fiss, P.C. (2007), "A set-theoretic approach to organizational configurations", *Academy of Management Review*, Vol. 32 No. 4, pp. 1180-1198.
- Foley, A. and Fahy, J. (2009), "Seeing market orientation through a capabilities lens", *European Journal of Marketing*, Vol. 43 Nos 1-2, pp. 13-20.
- 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 No. 3, pp. 382-388
- Gliga, G. and Evers, N. (2023), "Marketing capability development through networking – an entrepreneurial marketing perspective", *Journal of Business Research*, Vol. 156, p. 113472, doi: [10.1016/j.jbusres.2022.113472](https://doi.org/10.1016/j.jbusres.2022.113472).
- Greckhamer, T. (2016), "CEO compensation in relation to worker compensation across countries: the configurational impact of country-level institutions", *Strategic Management Journal*, Vol. 37 No. 4, pp. 793-815.
- Greckhamer, T., Furnari, S., Fiss, P.C. and Aguilera, R.V. (2018), "Studying configurations with qualitative comparative analysis: best practices in strategy and organization research", *Strategic Organization*, Vol. 16 No. 4, pp. 482-495.
- Hair, J.F., Jr, Matthews, L.M., Matthews, R.L. and Sarstedt, M. (2017), "PLS-SEM or CB-SEM: updated guidelines on which method to use", *International Journal of Multivariate Data Analysis*, Vol. 1 No. 2, pp. 107-123.
- Hair, J.F., Black, W.C., Babin, B.J. and Anderson, R.E. (2010), *Multivariate Data Analysis*, 7th ed., Prentice Hall, Upper Saddle River, NJ.
- Harrigan, P., Ramsey, E. and Ibbotson, P. (2012), "Entrepreneurial marketing in SMEs: the key capabilities of e-CRM", *Journal of Research in Marketing and Entrepreneurship*, Vol. 14 No. 1, pp. 40-64.
- Hazzam, J. and Wilkins, S. (2021), "International marketing capabilities development: the role of firm cultural intelligence and social media technologies", *Journal of Marketing Theory and Practice*, Vol. 30 No. 3, pp. 325-341, doi: [10.1080/10696679.2021.1946409](https://doi.org/10.1080/10696679.2021.1946409).
- Hazzam, J., Wilkins, S. and Strong, C. (2022), "The impact of social media technologies on organization cultural intelligence and new product development in international markets", *Cross Cultural and Strategic Management*, Vol. 30 No. 2, pp. 272-300, doi: [10.1108/ccsm-03-2022-0046](https://doi.org/10.1108/ccsm-03-2022-0046).
- Henseler, J., Schubert, F., Lee, N. and Kemény, I. (2025), "Why researchers should be cautious about using PLS-SEM", *Industrial Marketing Management*, Vol. 128.
- Herhausen, D., Miočević, D., Morgan, R.E. and Kleijnen, M.H.P. (2020), "The digital marketing capabilities gap", *Industrial Marketing Management*, Vol. 90, pp. 276-290, doi: [10.1016/j.indmarman.2020.07.022](https://doi.org/10.1016/j.indmarman.2020.07.022).
- Hofacker, C., Golgeci, I., Pillai, K.G. and Gligor, D.M. (2020), "Digital marketing and business-to-business relationships: a close look at the interface and a roadmap for the future", *European Journal of Marketing*, Vol. 54 No. 6, pp. 1161-1179, doi: [10.1108/ejm-04-2020-0247](https://doi.org/10.1108/ejm-04-2020-0247).
- Homburg, C. and Wielgos, D.M. (2022), "The value relevance of digital marketing capabilities to firm performance", *Journal of the Academy of Marketing Science*, Vol. 50 No. 4, pp. 666-688, doi: [10.1007/s11747-022-00858-7](https://doi.org/10.1007/s11747-022-00858-7).
- Jaakkola, M., Frösén, J., Tikkanen, H., Aspara, J., Vassinen, A. and Parvinen, P. (2016), "Is more capability always beneficial for firm performance? Market orientation, core business process

- capabilities and business environment”, *Journal of Marketing Management*, Vol. 32 Nos 13-14, pp. 1359-1385, doi: [10.1080/0267257x.2016.1181098](https://doi.org/10.1080/0267257x.2016.1181098).
- Joensuu-Salo, S., Viljamaa, A. and Kangas, E. (2022), “Marketing first? The role of marketing capability in SME growth”, *Journal of Research in Marketing and Entrepreneurship*, Vol. 25 No. 2, pp. 185-202.
- Kannan, P.K. and Li, H.A. (2017), “Digital marketing: a framework, review and research agenda”, *International Journal of Research in Marketing*, Vol. 34 No. 1, pp. 22-45.
- Kohli, A.K. and Jaworski, B.J. (1990), “Market orientation: “the construct, research propositions, and managerial implications”, *Journal of Marketing*, Vol. 54 No. 2, pp. 1-18.
- Lindell, M.K. and Whitney, D.J. (2001), “Accounting for common method variance in cross-sectional research designs”, *Journal of Applied Psychology*, Vol. 86 No. 1, pp. 114-121.
- Linton, G. and Kask, J. (2017), “Configurations of entrepreneurial orientation and competitive strategy for high performance”, *Journal of Business Research*, Vol. 70, pp. 168-176, doi: [10.1016/j.jbusres.2016.08.022](https://doi.org/10.1016/j.jbusres.2016.08.022).
- Luo, Z., Guo, J., Benitez, J., Scaringella, L. and Lin, J. (2024), “How do organizations leverage social media to enhance marketing performance? Unveiling the power of social CRM capability and Guanxi”, *Decision Support Systems*, Vol. 178, p. 114123.
- Ma, D., Chen, H. and Wei, X. (2025), “Social media resources and entrepreneurial opportunity evaluation”, *Journal of Research in Marketing and Entrepreneurship*, Vol. 27 No. 1, pp. 61-82.
- Mandhachitara, R. and Allapach, S. (2017), “Small business performance in Thailand: key success factors”, *Journal of Research in Marketing and Entrepreneurship*, Vol. 19 No. 2, pp. 161-181
- Misangyi, V., Greckhamer, T., Furnari, S., Fiss, P., Crilly, D. and Aguilera, R. (2017), “Embracing causal complexity: the emergence of a neo-configurational perspective”, *Journal of Management*, Vol. 43 No. 1, pp. 255-282.
- Moorman, C. and Day, G.S. (2016), “Organizing for marketing excellence”, *Journal of Marketing*, Vol. 80 No. 6, pp. 6-35.
- Morgan, N.A., Slotegraaf, R.J. and Vorhies, D.W. (2009a), “Linking marketing capabilities with profit growth”, *International Journal of Research in Marketing*, Vol. 26 No. 4, pp. 284-293, doi: [10.1016/j.ijresmar.2009.06.005](https://doi.org/10.1016/j.ijresmar.2009.06.005).
- Morgan, N.A., Vorhies, D.W. and Mason, C.H. (2009b), “Market orientation, marketing capabilities, and firm performance”, *Strategic Management Journal*, Vol. 30 No. 8, pp. 909-920, doi: [10.1002/smj.764](https://doi.org/10.1002/smj.764).
- Narver, J.C. and Slater, S.F. (1990), “The effect of a market orientation on business, profitability”, *Journal of Marketing*, Vol. 54 No. 4, pp. 20-35.
- Nystrand, B.T. and Olsen, S.O. (2020), “Consumers’ attitudes and intentions toward consuming functional foods in Norway”, *Food Quality and Preference*, Vol. 80, p. 103827.
- O’Cass, A. and Ngo, L. (2011), “Winning through innovation and marketing: lessons from Australia and Vietnam”, *Industrial Marketing Management*, Vol. 40 No. 8, pp. 1319-1329.
- Orr, L.M., Bush, V.D. and Vorhies, D.W. (2011), “Leveraging firm-level marketing capabilities with marketing employee development”, *Journal of Business Research*, Vol. 64 No. 10, pp. 1074-1081.
- Podsakoff, P., MacKenzie, S. and Podsakoff, N. (2012), “Sources of method bias in social science research and recommendations on how to control it”, *Annual Review of Psychology*, Vol. 63 No. 1, pp. 539-569.
- Preacher, K.J. and Hayes, A.F. (2008), “Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models”, *Behavior Research Methods*, Vol. 40 No. 3, pp. 879-891.
- Quinn, L., Dibb, S., Simkin, L., Canhoto, A. and Analogbei, M. (2016), “Troubled waters: the transformation of marketing in a digital world”, *European Journal of Marketing*, Vol. 50 No. 12, pp. 2103-2133, doi: [10.1108/ejm-08-2015-0537](https://doi.org/10.1108/ejm-08-2015-0537).

- 
- Quinton, S., Canhoto, A., Molinillo, S., Pera, R. and Budhathoki, T. (2017), "Conceptualising a digital orientation: antecedents of supporting SME performance in the digital economy", *Journal of Strategic Marketing*, Vol. 26 No. 5, pp. 427-439, doi: [10.1080/0965254x.2016.1258004](https://doi.org/10.1080/0965254x.2016.1258004).
- Ragin, C.C. (2008), *Redesigning Social Inquiry: Fuzzy Sets and Beyond*, University of Chicago Press, Chicago and London.
- Ranjan, P. (2023), "IT-related resources, digital marketing capabilities and business performance: moderating effects of digital orientation and technological turbulence", *Industrial Management and Data Systems*, Vol. 123 No. 11, pp. 2836-2856.
- Setkute, J. and Dibb, S. (2022), "'Old boys' club': barriers to digital marketing in small B2B firms", *Industrial Marketing Management*, Vol. 102, pp. 266-279, doi: [10.1016/j.indmarman.2022.01.022](https://doi.org/10.1016/j.indmarman.2022.01.022).
- Slater, S.F. and Narver, J.C. (1995), "Market orientation and the learning organization", *Journal of Marketing*, Vol. 59 No. 3, pp. 63-74.
- Staffordshire County Council (2023), available at: [www.staffordshire.gov.uk/Newsroom/The-Staffordshire-Story.aspx](http://www.staffordshire.gov.uk/Newsroom/The-Staffordshire-Story.aspx)
- Statista (2024), *Marketing in the United Kingdom (UK)*, Statista.
- Su, J., Zhang, Y. and Wu, X. (2023), "How market pressures and organizational readiness drive digital marketing adoption strategies' evolution in small and medium enterprises", *Technological Forecasting and Social Change*, Vol. 193, p. 122655, doi: [10.1016/j.techfore.2023.122655](https://doi.org/10.1016/j.techfore.2023.122655).
- Taiminen, H.M. and Karjaluoto, H. (2015), "The usage of digital marketing channels in SMES", *Journal of Small Business and Enterprise Development*, Vol. 22 No. 4, pp. 633-651, doi: [10.1108/jsbed-05-2013-0073](https://doi.org/10.1108/jsbed-05-2013-0073).
- Teece, D., Pisano, G. and Shuen, A. (1997), "Dynamic capabilities and strategic management", *Strategic Management Journal*, Vol. 18 No. 7, pp. 509-533.
- UK Government (2022), "Business population estimates for the UK and regions 2022", Statistical release (HTML), GOV.UK, available at: [www.gov.uk/government/statistics/business-population-estimates-2022/business-population-estimates-for-the-uk-and-regions-2022-statistical-release-html#definitions-and-terminology](http://www.gov.uk/government/statistics/business-population-estimates-2022/business-population-estimates-for-the-uk-and-regions-2022-statistical-release-html#definitions-and-terminology) (accessed 27 August 2023).
- Vorhies, D.W., Orr, L.M. and Bush, V.D. (2010), "Improving customer-focused marketing capabilities and firm financial performance via marketing exploration and exploitation", *Journal of the Academy of Marketing Science*, Vol. 39 No. 5, pp. 736-756, doi: [10.1007/s11747-010-0228-z](https://doi.org/10.1007/s11747-010-0228-z).
- Wang, F. (2020), "Digital marketing capabilities in international firms: a relational perspective", *International Marketing Review*, Vol. 37 No. 3, pp. 559-577, doi: [10.1108/imr-04-2018-0128](https://doi.org/10.1108/imr-04-2018-0128).
- Wang, Y. and Feng, H. (2012), "Customer relationship management capabilities: measurement, antecedents and consequences", *Management Decision*, Vol. 50 No. 1, pp. 115-129.
- Wasim, M., Ahmed, S., Kalsoom, T., Khan, M.S. and Rafi-Ul-Shan, P.M. (2022), "Market orientation and SME performance: moderating role of IoT and mediating role of creativity", *Journal of Small Business Management*, Vol. 62 No. 2, pp. 1-28, doi: [10.1080/00472778.2022.2100897](https://doi.org/10.1080/00472778.2022.2100897).
- Woodside, A.G. (2013), "Moving beyond multiple regression analysis to algorithms: calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory", *Journal of Business Research*, Vol. 66 No. 4, pp. 463-472.
- Wu, C.W., Botella-Carrubi, D. and Blanco-González-Tejero, C. (2024), "The empirical study of digital marketing strategy and performance in small and medium-sized enterprises (SMEs)", *Technological Forecasting and Social Change*, Vol. 200, p. 123142.
- Xu, H., Guo, H., Zhang, J. and Dang, A. (2018), "Facilitating dynamic marketing capabilities development for domestic and foreign firms in an emerging economy", *Journal of Business Research*, Vol. 86, pp. 141-152, doi: [10.1016/j.jbusres.2018.01.038](https://doi.org/10.1016/j.jbusres.2018.01.038).

**Table A1.** Measurement scales used in the study

Construct	Items	Source
Market orientation		O'Cass and Ngo (2011)
Intelligence generation	IG1 – We generate information about our customers (e.g. feedback on delivered products and/or services, needs, product/service preferences) IG2 – We generate information about our competitors (e.g. competitive products and/or services, pricing, promotion campaigns, strategic moves) IG3 – We generate information about our suppliers (e.g. manufacturing process, industry practices, clientele)	
Intelligence dissemination	ID1 – We disseminate information about customers (e.g. feedback on delivered products and/or services, needs, product/service preferences) throughout the business via a range of communication tools (e.g. circulated documents, cross-functional meetings) ID2 – We disseminate information about competitors (e.g. competitive products and/or services, pricing, promotion campaigns, strategic moves, etc.) throughout the business via a range of communication tools (e.g. circulated documents, cross-functional meetings) ID3 – We disseminate information about suppliers (e.g. manufacturing process, industry practices, clientele, etc.) throughout the business via a range of communication tools (e.g. circulated documents, cross-functional meetings)	
Responsiveness	RESP1 – We respond to information about customers that it generated and/or disseminated RESP2 – We respond to information about competitors that it generated and/or disseminated RESP3 – We respond to information about suppliers that it generated and/or disseminated	
Digital marketing capabilities	DMC1 – Social media marketing DMC2 – Mobile marketing DMC3 – Content marketing DMC4 – Search engine marketing DMC5 – Web analytics DMC6 – Marketing automation DMC7 – Email marketing	Homburg and Wielgos (2022)

*(continued)*

**Table A1.** Continued

Construct	Items	Source
Customer relationship management capabilities	CRM1 – Routinely establish a “dialogue” with target customers CRM2 – Get target customers to try our products/services on a consistent basis CRM3 – Focus on meeting customers’ long term needs to ensure repeat business CRM4 – Systematically maintain loyalty among attractive customers CRM5 – Routinely enhance the quality of relationships with attractive customers	<a href="#">Orr et al. (2011)</a>
SMEs performance	SMEP1 – Market share growth relative to competition SMEP2 – Acquiring new customers SMEP3 – Increasing sales to current customers SMEP4 – Growth in sales revenue SMEP5 – Business profitability SMEP6 – Return on investment (ROI) SMEP7 – Return on sales (ROS) SMEP8 – Reaching financial goals	<a href="#">Morgan et al. (2009b)</a>

**Source(s):** Authors

**Corresponding author**

Joe Hazzam can be contacted at: [joe.hazzam@staffs.ac.uk](mailto:joe.hazzam@staffs.ac.uk)