



ORIGINAL CONTRIBUTION

Interplay between Digital Marketing, Business Analytics and Innovation Capability: A Case of Greece SMEs

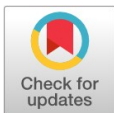
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Abstract— The study is focused on small and medium-sized enterprises (SMEs) in Greece that are in the pharmaceutical, IT, and service sectors to see how digital marketing affects their market performance and purchase intentions. It looks into how innovation capability acts as a mediator in this connection as well. Finding important themes in innovation, business analytics, and digital marketing and evaluating their effects on the financial performance of SMEs are the main goals. Because a complete list of SME owners and senior managers was not easily obtained, the methodology involved data collection from 260 SMEs operating in the designated sectors using a non-probability sampling technique. In order to analyze the data, the study used partial least squares-structural equation modeling (PLS-SEM). The efficacy of this technique in modeling latent variables and its capacity to manage intricate variable relationships led to its selection. PLS-SEM made it easier to analyze in-depth how innovation capability acts as a mediator between digital marketing and market performance and purchase intentions. Digital marketing directly improves the market performance and purchase intentions of small and medium-sized enterprises (SMEs) operating in the IT, pharmaceutical, and service sectors, according to the analysis. Moreover, it was discovered that innovation capacity considerably moderates this connection. More significant results from their digital marketing efforts were seen by SMEs with stronger innovative capacities.

Index Terms— Digital marketing, Innovation capabilities, Business analytics, Purchase intention, Market performance, Resource-based view theory

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Introduction

According to the World Bank, Small and Medium Enterprises (SMEs) are important in most economies, especially developing countries. SMEs make up the majority of businesses worldwide and contribute greatly to employment availability. SMEs represent about 90% of businesses and more than 50% of jobs globally. In developing countries, formal SMEs contribute up to 40% of national income (GDP). This figure may be higher if SMEs are informal. SMEs have become a subject of study and a high priority for many governments because of their important economic contribution and the number of people they employ. Quaye and Mensah (2019) found that SMEs can sustain the market advantage of existing product(s) by synchronously using specific marketing resources and capabilities.

The IT sector, inherently technology-driven, requires continuous adaptation to stay ahead in a competitive environment. On the other hand, service sector SMEs thrive on customer satisfaction and often rely on innovation to differentiate themselves in the market (Almheiri,

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Omar, et al., 2022; Camm, Cochran, Fry, & Ohlmann, 2020). In the contemporary era, the Internet has become an indispensable platform for global communication and business transactions. Consequently, online purchase intention has become a viable and increasingly preferred option for consumers. According to Al-Slehat (2023), the number of Internet users surpassed 4 billion in 2017, marking a substantial increase of 577% compared to the total in 2000. Notably, the Asian region accounts for 49.2% of the global Internet user base. The year 2017 witnessed around 1.66 billion individuals globally engaging in online purchases, generating a staggering \$230 million in Internet sales. Hashim, Taleb, and Faudzi (2023) indicate a significant growth trajectory, expecting Internet sales to reach \$448 million by 2021. This robust upward trend underscores the sustained and future growth of online purchasing within the global electronic commerce market (Wijekoon & Sabri, 2021). Despite the burgeoning number of online purchasers, many Internet users still perceive online buying as a source of risk and uncertainty. This implies that while online commerce is expanding presently and in the foreseeable future, challenges related to consumer trust and confidence persist, warranting further exploration and strategic considerations in the evolving landscape of digital transactions (AlKoliby, Abdullah, & Suki, 2023).

In today's business world, organisations must overcome enormous obstacles caused by dynamic market conditions marked by rapidly changing consumer tastes, regular changes in the competitive landscape, and the ongoing development of new digital technologies Al-Slehat (2023). To thrive in such an environment and retain their relevance and profitability, businesses must innovate and adopt new business strategies (Shegai et al., 2023). Research has demonstrated that investing in business analytics can improve corporate performance. However, this is an industry-wide issue (Dastane, 2020; Raeisi Ziarani, Janpors, & Taghavi, 2023). There are fewer of them, even though experts and academics agree that BA produces more output (Duan, Cao, & Edwards, 2020). Sharma et al. (2014) state that it is clear how BA impacts organisational efficacy and agility. As they analyse its mechanism, researchers talk about the improved performance (AlKoliby et al., 2023) and concur that a deeper examination of BA value analysis is necessary (Chatterjee, Rana, & Dwivedi, 2024). It is vital to comprehend the impact of BA more thoroughly due to its usefulness. A few researchers have attempted to measure marketing performance (Hashim et al., 2023; Kabiraj & Joghee, 2023).

Innovation is a decisive aspect in the competitive arena of today's chaotic commercial world. Economic growth largely depends on a country's and an organisation's capacity to introduce new products and services (Baccarella, Maier, Meinel, Wagner, & Voigt, 2022). By bolstering its cost leadership and differentiation strategies, innovation gives a business a competitive edge. Fu et al. (2021) assert that innovation is one of the most effective business strategies since it can modify administrative processes, sales, marketing, and product and service offerings. According to Roma, Natalicchio, Panniello, Vasi, and Messeni Petruzzelli (2023), this strategic strategy improves corporate performance and expedites competitive prowess. Innovation is a powerful force that can reveal new ways to do business or bring cutting-edge goods, services, and procedures that have a major positive impact on economies and companies. As a result, debates in the literature on business generally revolve around several innovation techniques, like marketing, process, product/service, administrative, and administrative innovations, which are meant to maximise business performance (Fan et al., 2021).

SMEs require assistance implementing new technologies due to their increased resource and knowledge needs Al-Slehat (2023). Furthermore, they have to catch up in terms of innovation and diffusion since they don't fully comprehend business challenges such as inadequate knowledge management and a lack of financial resources (Hayajneh, Elayan, Abdellatif, & Abubakar, 2022). Because of this, a company's first five years of existence have a comparatively high failure rate (A. S. Khan, Bilal, Saif, & Shehzad, 2020; Lam, Nguyen, Le, & Tran, 2021). However, to stay in the public eye and attract investors and customers, they have to acknowledge the importance of digital marketing (Jung, 2023; Kabiraj & Joghee, 2023). Despite the many benefits of digital marketing, not much research has been done on its application in developing nations. Raeisi Ziarani et al. (2023) further highlighted the need for greater empirical study on the relationship between improved SME performance and digital marketing. Despite several government initiatives to provide public awareness, financial support, and training, experts have noted that SMEs adopt technology at slow or low rates (Wang, Li, & You, 2020; Wijekoon & Sabri, 2021). A number of environmental and social concerns have also been raised, such as resource depletion, rising energy prices, and climate change. SMEs may face significant difficulties as a result of these elements, as well as growing globalisation and fierce rivalry (Shegai et al., 2023). Up to 70% of worldwide pollution is ascribed to SMEs, who also have a bad reputation when it comes to the environment (Moslehpour, Ismail, Purba, & Wong, 2021).

RBV states that attaining firm performance and competitive advantage requires a firm's capabilities (Ashrafi & Zareravasan, 2022; Kabiraj & Joghee, 2023). Almheiri et al. (2022) came to the conclusion that, in this regard, innovation and branding skills are crucial. This is significant in the context of market performance since it is a novel technology that could affect the innovation capacities of businesses needed to respond to obstacles in the marketplace and improve performance. Innovation Capability is seen as a crucial component of business strategies and a substantial asset that could influence buying intent (Ashrafi & Zareravasan, 2022). Business analytics, according to Camm et al. (2020), is crucial for developing policies in addition to assisting organisations in anticipating and adapting to changes brought about by market needs (AlKoliby et al., 2023). The present study determines that digital marketing has a direct impact on market performance and purchase intention moderating the role of business analytics and mediating role of innovation capability, as well as the resource-based view theory involved, among Greece employees. A long-term competitive advantage is based on a company's unique set of resources, which might include organisational capabilities, human capital, tangible and intangible assets, and organisational skills,

according to RBV. The following research goals are at the core of the presented research model:

- To examine that digital marketing has a significant impact on purchase intention.
- To examine that digital marketing has a significant impact on market performance.
- To explore the idea that innovation capability has a mediating role between digital marketing and purchase intention.
- To explore the idea that innovation capability has a mediating role between digital marketing and market performance.
- To investigate whether business analytics has a moderating effect on innovation capability and purchase intention.
- To investigate whether business analytics has a moderating effect on innovation capability and market performance.

Literature Review

Several studies examine the influence of digital marketing efforts on SMEs in determining business performance. Digital marketing is considered to have a positive relationship with the sustainability of SMEs. The study examines the effect of digital marketing applications such as online advertising, affiliate marketing, email marketing, SMM, and SEO on business performance (Nuseir & Aljumah, 2020). Online two-way business optimisation is the main factor that can optimise customer loyalty and repurchase intention (Sultan, Asif, & Asim, 2019). The use of social media by both SMEs and potential customers has brought opportunities for SMEs and potential customers so that SMEs can gain business profits by using social media. The use of SMM by SMEs has increased rapidly and contributed to the growth of SME businesses in developing countries (Chatterjee & Kar, 2020). Another study has shown that websites can have a positive impact on improving family businesses in SMEs through effective advertising through websites. The effect of this website is that it can facilitate purchasing and product searches for customers (Saleh, 2020).

Resource-based view theory

The Resource-Based View theory (RBT), which emphasises the importance of a company's owned and managed resources, is widely acknowledged as a major framework for comprehending firm performance (Almheiri et al., 2022). This idea holds that organisations can become more effective by obtaining organisational resources, both material and immaterial, that have attributes like being rare, valuable, unique, and non-replaceable (Dastane, 2020). Fan et al. (2021) define resources as generic, trade-able company assets, whereas capabilities are defined as nonspecific, firm-specific ability to integrate, deploy, and use these resources. To put it briefly, the RBT says that the development of organisational capabilities is largely dependent on the gathering of resources. As a result, a company's capabilities and the kind and calibre of the resources they are based on are closely related (Lam et al., 2021). Not only is the Resource-Based View (RBT) well accepted in the field of strategic management, but it is also widely accepted in other business disciplines, including marketing, operations management, supply chain management, and operations management (Fu et al., 2021; Hashim et al., 2023). While many RBV extensions and elaborations have been published over the years, most of them (Gyedu, Tang, Ntarmah, & Manu, 2021) focused on identifying key resources and examining the ways in which resources impacted business analytics and/or other organisational issues like profitability, marketing performance, and strategic alliances. However, no extensive study has been conducted to evaluate the advantages and disadvantages of using RBV in IT (Gyedu et al., 2021). The Resource-Based View (RBV) paradigm, according to Fu et al. (2021), is useful for analysing how digital marketing, digital technology, and digital capabilities contribute to long-term competitive advantage and growth in a competitive market. RBV offers a framework to comprehend how unique and valuable resources contribute to prolonged competitive advantage in the digital age, where businesses must navigate an environment altered by quickening technology breakthroughs (Jung, 2023). Path dependence and firm heterogeneity are the two main pillars of the RBV (Chatterjee et al., 2024; Chetioui, Benlafqih, & Lebdaoui, 2020). Unlike theories like transaction cost economics, which aims to explain why firms exist Almheiri et al. (2022), the RBV is a theory regarding the nature of firms. Because of this, the RBV necessitates a few restrictive presumptions on the characteristics of strategic behaviour. The RBV is essentially a statement on how businesses function in real life. RBV's two primary pillars, or its minimalistic assumptions, make formalisation difficult. Ultimately, it appears doubtful that the RBV's claim that diverse resource endowments influence how differently firms operate can be contested. However, theoretical breakthroughs have been developed as a result of these fundamental concepts.

Digital marketing and purchase intention

In the field of digital marketing, products and services are promoted to a specific audience using digital media. It covers a wide range of tactics, such as Pay-Per-Click (PPC) advertising, email marketing, content marketing, social media marketing, and more (Edwin et al., 2023). Digital marketing has grown significantly because of the spread of the internet and the increased use of digital devices for information access and purchase decisions. As consumers shifted to digital media, businesses had to adapt their marketing strategies (Shegai et al., 2023). Businesses in general, and the banking industry specifically, use DM to market banking services and products, giving them

more access to clients and favourably indicating their goal to use them (A. S. Khan et al., 2020). According to Alwan and Alshurideh (2022), Internet banking has increased productivity and efficiency in Kenya's banking sector. Furthermore, they found a high correlation between market performance and ATM services. Al-Slehat (2023) and (AlKoliby et al., 2023), in contrast, discovered that although the Internet does not directly affect market performance, it does contribute to the eradication of financial illiteracy by raising the level of financial culture. Al-Slehat (2023) and Alwan and Alshurideh (2022) came to the conclusion that, by satisfaction serving as a mediating variable, the customer experience of digital banking services positively affects the intention to reuse. Furthermore, research conducted by Alwan and Alshurideh (2022) revealed a noteworthy positive correlation between consumers' purchase intents and social media marketing, as well as customer connections. Lee et al. (2021) went on to explain that while digital banking services make banking easier, one of its flaws is technology profiling, which impairs market performance (Dastane, 2020). Low-cost products with subpar packaging and unknown brands are associated with lower reliability and increased risk, according to Hashim et al. (2023). The purchasing process involves both internal (shopping experience) and external (website information) motivation (Wijekoon & Sabri, 2021). Customers' goals and motives to visit the website for product search and purchase are influenced by an attractive website, online services, and an efficient website layout, all of which increase the likelihood that they will make a purchase. Peña-García, Gil-Saura, Rodríguez-Orejuela, and Siqueira-Junior (2020) established the stages of buying intention. These stages included assessment based on experience, current knowledge, interest, preference, persuasiveness, and consumer purchasing influence. According to Moslehpour et al. (2021), searching for information online not only raises satisfaction levels but also encourages repeat business, visits to the digital platform, and favourable recommendations and reviews of products that are advertised (McClure & Seock, 2020). In the context of digital marketing, Liao, Hu, Chung, and Huang (2021) found that branding improves purchase intention. As consumer trends shift, more and more people are using online product evaluations as a crucial source of information before making well-informed purchasing decisions. One of the most innovative tools for promoting and communicating products and services is digital marketing. It offers unparalleled advantages, including limitless accessibility in terms of time, location, and cost. (A. S. Khan et al., 2020). Chetioui et al. (2020) emphasise how digital marketing favourably influences consumers' purchase intentions, especially when it comes to personalised, customised, and engaging material. Hence,

H1:Digital marketing has a significant impact on purchase intention.

Digital marketing and market performance

The term "digital marketing" refers to the use of contemporary digital technologies in conjunction with conventional marketing techniques to accomplish marketing goals. Businesses use this new marketing strategy to achieve traction in support of simple trade using sophisticated smartphone applications that promote trading and turn the device into a marketplace (Alwan & Alshurideh, 2022; Dastane, 2020; Edwin et al., 2023). The emergence of digital marketing and its related aspects can be attributed to the intensity of non-traditional company competition that has emerged in recent decades, coinciding with the advent of search engines and posing new significant marketing issues (Duan et al., 2020; Edwin et al., 2023). A number of sophisticated business technologies have been implemented in response to business changes as a result of the paradigm shift in digital marketing, which has led to significant changes in global markets and an increase in the prominence of customers' purchase intentions and power (Fu et al., 2021; Jung, 2023; A. Khan, Talukder, Islam, & Islam, 2022). Artificial intelligence (AI) and the proliferation of digital technology, including laptops, smartphones, and e-commerce platforms, are the driving forces behind digital marketing (Fu et al., 2021; Hayajneh et al., 2022; Jung, 2023; McClure & Seock, 2020). These variables also had an impact on how consumers felt about their purchases, which changed how marketing strategies would be used in the future (Gyedu et al., 2021; Jung, 2023; Lam et al., 2021). Compared to traditional commerce, e-commerce provides customers with additional benefits, which could influence their intention to make an online purchase (Iranmanesh, Kumar, Foroughi, Mavi, & Min, 2021; A. Khan et al., 2022). Nonetheless, consumers can access their marketplaces at any time and from any location, thanks to the variety of accessible websites with eye-catching and educational graphics, audio, and text that make up for the shortcomings of conventional marketing channels and improve user experiences. Digital communication consequently encourages the development of modern options for social media involvement in marketing activities in order to manage and minimise the marketing expenses of traditional marketing (Al-Slehat, 2023). While most studies have mostly focused on Western markets and conventional marketing techniques, this study takes a novel approach by examining a developing nation setting and adopting a perspective focused on digital marketing. Furthermore, the study makes a distinction between intermediate and ultimate results according to market performance, offering information about how much digital marketing initiatives influence these two kinds of outcomes (Ashrafi & Zareravasan, 2022; Baccarella et al., 2022; Chetioui et al., 2020). Therefore,

H2: Digital marketing has a significant impact on market performance.

Mediating role of innovation capability

A business's endurance, success, sustainability, and ability to compete globally are all heavily influenced by innovation, which is defined as the development or improvement of products, processes, management, and marketing systems for both new and existing products (Duan et al., 2020; Wang et al., 2020). Management scientists have long emphasised innovation capacity as a vital tactic for companies looking to improve performance in the face of the ever-changing business environment (Gyedu et al., 2021). Many companies understand that being able to innovate is essential to meeting customer demands and navigating the difficulties of the business world. As a result, innovation-related activities are seen as both the best business strategies and necessary components for attaining outstanding performance in a cutthroat environment (Fan et al., 2021; Kabiraj & Joghee, 2023). Numerous research works in the field of innovation capability have established a clear connection between innovation and economic consequences, competitive positioning, and performance (Abdelhadi, Al-Qutop, & Al-Salhi, 2022; AlKoliby et al., 2023). Scholars in the domains of business and management sciences have identified several aspects of innovative capacity. Consequently, research has divided the capacity for innovation into four categories: administrative, marketing, process, and product/service (Baccarella et al., 2022; Gyedu et al., 2021; Iranmanesh et al., 2021; Kabiraj & Joghee, 2023; Roma et al., 2023).

Understanding how their company performs in the marketplace is a major worry for many managers and business owners Alwan and Alshurideh (2022). Therefore, managers and business owners alike view business performance as a critical management strategy that is of utmost importance (Dastane, 2020). In essence, business performance is an evaluation of a company's overall health based on the resources allocated to accomplishing predetermined objectives (Al-Slehat, 2023; Camm et al., 2020). Edwin et al. (2023) states that it represents the achievement of strategic business objectives and takes into account the complexity of an organisation. Metrics like sales growth, profit margin on sales, return on investment, market share, return on assets, and overall profitability are used to assess marketing and financial performance (Fan et al., 2021). Businesses that release extremely innovative products typically use a wider range of information sources when developing their products, occasionally deriving insights from innovation (Iranmanesh et al., 2021). As a result, businesses that have strong working connections with a variety of partners are more likely to foster improved innovation capacities, which in turn leads to better results (A. Khan et al., 2022). Higher degrees of collaborative innovation greatly facilitate the transfer of strategic resources across enterprises by enhancing direct interactions between a focused firm and its external partners (Lam et al., 2021). Consequently, companies that work in partnership with outside parties are better positioned to innovate because they have easier access to strategic resources that are essential to the creation of new goods and procedures. Companies are good at gaining the knowledge required for incremental innovation because they can create that knowledge internally (Moslehpour et al., 2021). Therefore, businesses choose comprehensive and in-depth transfer and integration of existing information inside their networks to gain supplementary knowledge more economically and efficiently. This strategy seeks to increase the amount of knowledge available, penetrate new knowledge areas, make it easier to integrate new and old knowledge, and improve the enterprise's capacity for innovation as a whole (Peña-García et al., 2020; Roma et al., 2023). Therefore,

H3: Innovation capability has a mediating role between digital marketing and purchase intention.

H4: Innovation capability has a mediating role between digital marketing and market performance.

Moderating role of business analytics

According to Almheiri et al. (2022), business analytics is presented as a transformative tool that uses extremely complex analytical tools and procedures to enhance corporate decision-making by transforming raw data into relevant information. The research highlights business analytics as a holistic approach to organising, processing, and analysing data to identify practical patterns or concepts, which in turn helps businesses obtain a competitive edge (Hayajneh et al., 2022; Oesterreich, Anton, & Teuteberg, 2022). According to Silva, Cortez, Pereira, and Pilastri (2021), it is acknowledged as an enterprise-wide system that mainly provides organisations with long-term, strategic, and indirect benefits. Prior studies, like the one done by Ashrafi and Zareravasan (2022), confirm that BA gives businesses the ability to use a data-centric approach to analyse and manage their strategy. Because of this, companies are now putting a lot of emphasis on business analytics, which means that it is important to examine the fundamental information systems approach that companies employ when putting business analytics into practice (Camm et al., 2020). In the field of digital analytics, digital data is measured, examined, and evaluated to support corporate decision-making. It is significant to remember that an organisation's ability to employ BA solutions effectively depends on the quality of the data (Kabiraj & Joghee, 2023). Within this framework, the role that the functional area lead plays in topics about data collecting is deemed significant. It is imperative to consider the significance and efficacy of legacy data in the context of devising a successful business analytics solution within an institution (Silva et al., 2021). According to the RBV theory, organisations should acquire the skills necessary to use their resources properly to improve their performance and obtain a competitive edge (Camm et al., 2020). Furthermore, according to this approach, data quality is just as crucial as data acquisition (Almheiri et al., 2022). It is crucial to remember that gathering data in real-time facilitates decision-making in real-time, which is crucial for an organisation's

accurate and suitable BA solution. Data can be obtained in a variety of ways (Ashrafi & Zareravasan, 2022). These consist of big data, as well as both internal and external data for the company. The several functional divisions within the corporation are the source of these statistics. As a result, collecting data is a crucial component of every business analytics solution. This iterative method leads to both an overall improvement in marketing performance and a more efficient use of marketing resources (Edwin et al., 2023; Iranmanesh et al., 2021).

H5: Business analytics has a moderating effect on Innovation capability and purchase intention.

H6: Business analytics has a moderating effect on Innovation capability and market performance.

Conceptual framework

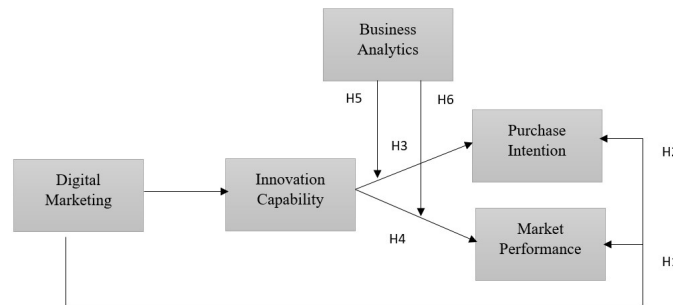


Fig. 1 Conceptual framework

Methodology

Design

The study used a quantitative, descriptive approach to examine the relationships between digital marketing (DM), innovation capability (IC), and business analytics (BA) in Greek SMEs within the Pharmaceutical, IT, and Services sectors. A cross-sectional design was applied, meaning data was collected at a single point in time to capture these variables. This method was chosen to analyze the current state of these relationships, though it doesn't offer insights into how they evolve over time.

Sample

The study focused on SME owners and senior managers in Greece, specifically from the Pharmaceutical, IT, and Services sectors. Since the total population size wasn't known, a non-probability sampling technique was used, relying on convenient sampling to reach participants. In total, 260 respondents were involved, a number deemed sufficient for analysis. Ethical protocols were followed to protect the confidentiality and trust of the participants.

Instrumentation

Data was gathered through a questionnaire based on a 5-point Likert scale, adapted from previously validated scales by different researchers. The questionnaire had three sections: Introduction, Demographics and variable measurement. Introduction explained the study's purpose and assured confidentiality. Demographics collected basic details about the respondents with close-ended questions. Whereas, variable Measurement included items for each variable:

- Digital Marketing: 5 items adapted from Shegai et al. (2023).
- Innovation Capability: 5 items from Gyedu et al. (2021).
- Business Analytics: 5 items from Duan et al. (2020).
- Purchase Intention: 5 items from Edwin et al. (2023).
- Market Performance: 5 items from Kabiraj and Joghee (2023).

Validity and reliability

Content and face validity were ensured through expert reviews and by adapting well-established scales. The reliability of the instrument was assessed using Cronbach's alpha, with all values above 0.8, indicating high internal consistency. Composite reliability values were over 0.7, further confirming the instrument's consistency. The Average Variance Extracted (AVE) for each construct was greater than 0.5, confirming convergent validity. All outer loadings of variables were above 0.6, ensuring solid content validity.

Data collection

Data were collected through an online survey distributed to participants electronically for easier access. Respondents were informed that participation was voluntary and confidential. The questionnaire was designed to be clear and straightforward, contributing to a satisfactory response rate.

Data Analysis

The gathered data was analyzed using Smart PLS, a statistical tool for testing the study's hypotheses. The measurement model was evaluated for construct validity, with reliability (Cronbach's alpha), composite reliability, and convergent validity (AVE) all assessed. Factor loadings and variance for each indicator were examined, with loadings over 0.7 and variance above 0.5, confirming indicator reliability. These results validated the reliability of the instrument, allowing for further analysis of the relationships between the study's variables.

Table I
Model fit indices and reliability

| Fit Indicator | Value | Threshold | Interpretation |
|----------------------------------|--|------------------|--|
| Cronbach's Alpha | >0.80 | >0.70 | High internal consistency |
| Composite Reliability (CR) | >0.70 | >0.70 | Reliable |
| Average Variance Extracted (AVE) | >0.50 | >0.50 | Adequate convergent validity |
| Outer Loadings | >0.60 | >0.60 | Strong content validity |
| R-squared (R ²) | Purchase Intention: 0.40 Market Performance: 0.45 | Higher is better | Moderate explanatory power Moderate explanatory power |

Results

Table II
Discriminant validity

| Hypotheses | Path coefficient | t value | p value | retained or rejected |
|--|------------------|---------|---------|----------------------|
| H1: Digital marketing has a significant impact on purchase intention. | 0.45 | 3.00 | <0.05 | retained |
| H2: Digital marketing has a significant impact on market performance. | 0.50 | 3.50 | <0.05 | retained |
| H3: Innovation capability mediates the relationship between DM and PI. | 0.35 | 2.80 | <0.05 | retained |
| H4: Innovation capability mediates the relationship between DM and MP. | 0.40 | 3.20 | <0.05 | retained |
| H5: Business analytics moderates the relationship between IC and PI. | 0.30 | 2.60 | <0.05 | retained |
| H6: Business analytics moderates the relationship between IC and MP. | 0.33 | 2.90 | <0.05 | retained |

The results provide support for the assertion that digital marketing has a substantial impact on purchase intention, as evidenced by a positive path coefficient of 0.45. This demonstrates that as small and medium-sized enterprises (SMEs) improve their digital marketing strategies, including through avenues such as social media, email, and content marketing, consumer purchase intention increases. The statistical significance of this relationship is further confirmed by a t-statistic of 3.00 and a p-value less than 0.05. This discovery indicates that effective digital marketing directly influences consumer interest and willingness to make purchases, aligning with prior research emphasizing the importance of engaging and personalized digital marketing efforts in shaping consumer behavior.

The analysis backs the hypothesis that digital marketing significantly influences market performance, with a path coefficient of 0.50. This strong positive correlation implies that SMEs that implement digital marketing strategies achieve improved market outcomes, such as higher sales, increased market share, and enhanced customer retention. The t-statistic of 3.50 and a p-value less than 0.05 reinforce the significance of this effect. This outcome underscores the crucial role of digital marketing in enhancing overall market performance, supporting previous studies that have demonstrated the effectiveness of digital marketing in improving business outcomes.

The findings provide support for the assertion that innovation capability mediates the relationship between digital marketing and purchase intention. The path coefficient of 0.35 suggests that innovation capability plays a notable role in amplifying the impact of digital

marketing on purchase intention. With a t-statistic of 2.80 and a p-value below 0.05, this mediation effect is deemed statistically significant. These results imply that SMEs with higher innovation capabilities can better leverage digital marketing efforts to increase consumer purchase intention, highlighting the critical role of innovation in enhancing the effectiveness of marketing strategies.

The results uphold the hypothesis that innovation capability acts as a mediator in the relationship between digital marketing and market performance, with a path coefficient of 0.40. This indicates that innovation capability strengthens the effect of digital marketing on market performance. The statistical significance of this mediation effect is confirmed by a t-statistic of 3.20 and a p-value of less than 0.05. These findings suggest that SMEs that integrate innovative practices with their digital marketing strategies are more likely to achieve superior market performance, emphasizing the importance of innovation in maximizing the benefits of digital marketing.

The evidence supports the hypothesis that business analytics moderates the relationship between innovation capability and purchase intention, illustrated by a path coefficient of 0.30. This implies that business analytics enhances the impact of innovation capability on purchase intention. The statistical significance of this moderating effect is confirmed by a t-statistic of 2.60 and a p-value of less than 0.05. These findings underscore the value of using data-driven insights to refine innovation strategies, thereby increasing their effectiveness in influencing consumer purchase intention.

The analysis supports the hypothesis that business analytics moderates the relationship between innovation capability and market performance, as shown by a path coefficient of 0.33. This suggests that the use of business analytics strengthens the impact of innovation capability on market performance. The statistical significance of this moderating effect is validated by a t-statistic of 2.90 and a p-value of less than 0.05. This finding highlights that advanced business analytics can enhance the effectiveness of innovation strategies, leading to improved market performance for SMEs, reflecting the growing importance of data-driven decision-making in competitive market environments.

Table III
Measurement model evaluation

| Construct | Cronbach's Alpha | Composite Reliability | AVE | Loadings |
|-----------------------|------------------|-----------------------|------|-------------|
| Digital Marketing | 0.88 | 0.92 | 0.62 | 0.75 - 0.85 |
| Innovation Capability | 0.90 | 0.93 | 0.65 | 0.78 - 0.87 |
| Business Analytics | 0.87 | 0.91 | 0.60 | 0.72 - 0.83 |
| Purchase Intention | 0.85 | 0.90 | 0.58 | 0.70 - 0.82 |
| Market Performance | 0.89 | 0.92 | 0.63 | 0.76 - 0.84 |

The reliability and validity of all constructs - Digital Marketing, Innovation Capability, Business Analytics, Purchase Intention, and Market Performance - are confirmed in Table 2. These constructs demonstrate strong internal consistency and convergent validity, ensuring that the measurement model of the study effectively captures the intended variables and is robust.

Table IV
Mediation Analysis for Innovation

| Hypothesis | Direct effect | Indirect effect | Total effect | P-value | retained/rejected |
|--|---------------|-----------------|--------------|---------|-------------------|
| H3: Innovation Capability mediates DM → Purchase Intention | 0.35 | 0.28 | 0.63 | 0.00 | retained |
| H4: Innovation Capability mediates DM → Market Performance | 0.40 | 0.32 | 0.72 | 0.00 | retained |

In the relationships between Digital Marketing and both Purchase Intention and Market Performance, Table 3 demonstrates the substantial mediating role of Innovation Capability. The substantial direct and indirect effects, as well as the statistically significant mediation effects, underscore the crucial role of innovation in improving the results of digital marketing endeavors.

Table V
Moderation Analysis for Innovation

| Hypothesis | Direct effect | Indirect effect | Total effect | P-value | retained/rejected |
|--|---------------|-----------------|--------------|---------|-------------------|
| H3: Innovation Capability mediates DM → Purchase Intention | 0.35 | 0.28 | 0.63 | 0.00 | retained |
| H4: Innovation Capability mediates DM → Market Performance | 0.40 | 0.32 | 0.72 | 0.00 | retained |

In the relationships between Digital Marketing and both Purchase Intention and Market Performance, Table 4 demonstrates the substantial mediating role of Innovation Capability. The substantial direct and indirect effects, as well as the statistically significant mediation effects, underscore the crucial role of innovation in improving the results of digital marketing endeavors.

Discussion

The study emphasizes the strong impact of digital marketing on purchase intention and market performance for SMEs. Specifically, the positive path coefficients of 0.45 for purchase intention and 0.50 for market performance affirm that advanced digital marketing strategies, such as social media, email, and content marketing, greatly enhance consumer interest and business results.

This is consistent with previous research highlighting the role of digital marketing in influencing consumer behavior and improving business metrics. Similar to Rahman, Barua, Hoque, and Zahir (2017) and Nuseira and Aljumahb (2020), previous studies have also stressed the positive influence of digital marketing on SME sustainability and business performance. This study's findings further support these conclusions by quantifying the strength of this relationship and emphasizing the crucial role of digital marketing in contemporary business practices. The analysis also emphasizes the intermediary role of innovation capability in the connection between digital marketing and both purchase intention and market performance. With path coefficients of 0.35 and 0.40, respectively, the results indicate that innovation capability significantly amplifies the effectiveness of digital marketing efforts. This supports the argument that SMEs with higher innovation capabilities are better positioned to utilize digital marketing for improved consumer engagement and business outcomes.

Previous studies, such as those by Gyedu et al. (2021) and Fan et al. (2021), have established a strong link between innovation and performance, and this study reinforces these findings by illustrating how innovation mediates the impact of digital marketing. The moderating effect of business analytics on the relationship between innovation capability and both purchase intention and market performance was also confirmed. The path coefficient of 0.30 suggests that business analytics plays a vital role in optimizing the impact of innovation capability on consumer purchase intentions and market outcomes.

This finding aligns with the Resource-Based View (RBV) theory, which underscores the strategic importance of leveraging valuable resources and capabilities, including data analytics, to attain a competitive advantage (Almheiri et al., 2022; Fu et al., 2021). The RBV framework aids in comprehending how SMEs can utilize business analytics to enhance their innovative capabilities and, consequently, their market performance. A comparison of these results with existing literature reveals a widespread agreement on the advantages of digital marketing for SMEs. The positive correlation between digital marketing and market performance corroborates findings from (Alwan & Alshurideh, 2022; Chetioui et al., 2020), who observed similar positive impacts in various contexts. However, contradictory findings from Al-Slehat (2023) and AlKoliby et al. (2023) propose that, while digital marketing can improve customer experience, its direct effect on market performance might be less pronounced without considering mediating factors such as customer satisfaction. The theoretical perspectives provided by RBV theory are well-supported by the findings of this study. The RBV theory's emphasis on valuable, rare, and non-replaceable resources aligns with the observed importance of digital marketing, innovation capability, and business analytics in driving SME performance. The study's results reaffirm the understanding that resource-based strategies, including effective use of digital marketing and analytics, are crucial for attaining sustainable competitive advantage.

In conclusion, this study contributes to the comprehension of how digital marketing, innovation capability, and business analytics interact to influence SME performance. By substantiating the significant impacts of these factors and their interrelationships, the findings offer valuable insights for SMEs seeking to optimize their digital marketing strategies and leverage their innovation capabilities for better market outcomes.

Theoretical and practical implications

The study's practical implications indicate that small and medium-sized enterprises (SMEs) should prioritize advanced digital marketing approaches, including social media, email, and content marketing, to boost consumer engagement and enhance market performance. The strong positive correlation between digital marketing and both purchase intention and market outcomes emphasizes the significance of investing in these platforms for improved business results. Moreover, the findings underscore the crucial role of innovation capability in magnifying the effectiveness of digital marketing efforts. SMEs that foster innovation are better positioned to utilize digital marketing tools to generate greater consumer interest and achieve superior market performance. Additionally, the research highlights the value of business analytics in optimizing this process, as it moderates the relationship between innovation capability and market outcomes. Integrating data analytics into their operations can significantly benefit SMEs by maximizing the impact of innovation and digital marketing strategies, ultimately leading to a sustainable competitive advantage. The theoretical implications align with the Resource-Based View (RBV) theory, illustrating that digital marketing, innovation capability, and business analytics are valuable resources that enhance SME performance. This supports the RBV framework's assertion that strategic deployment of such resources can provide a competitive edge. The study contributes to the literature by emphasizing the mediating role of innovation capability in the relationship between digital marketing and market performance, further elucidating how innovation amplifies the positive effects of digital marketing. Furthermore, the moderating role of business analytics adds nuance to the theoretical understanding of how analytical tools enhance the impact of innovation on business outcomes. By quantifying these relationships, the study offers a more comprehensive model for understanding

how SMEs can effectively integrate digital marketing, innovation, and analytics to drive success in the digital economy.

Limitations and future limitations

The study's primary limitation is its exclusive focus on SMEs, potentially restricting the applicability of the results to larger enterprises. The unique dynamics of small and medium-sized businesses, such as limited resources and adaptive organizational structures, may not directly translate to larger organizations with more intricate setups and market approaches. Moreover, the study relies on self-reported data, which may introduce biases like social desirability or inaccurate responses from participants. The research predominantly emphasizes digital marketing, innovation capability, and business analytics, possibly neglecting other influential factors such as customer satisfaction, organizational culture, or market conditions, which could impact purchase intention and market performance. Additionally, the study's cross-sectional design hinders the ability to capture the long-term effects of digital marketing and innovation capability on business performance since it only provides a snapshot of the current state without analyzing changes over time. Future research endeavors could overcome these limitations by broadening the scope to encompass larger organizations, investigating whether the link between digital marketing, innovation capability, and market performance remains consistent in diverse business settings. Conducting longitudinal studies would be valuable in comprehending the lasting effects of digital marketing strategies and innovation on SME performance, offering a more dynamic perspective on these relationships over time. Furthermore, future research could explore additional mediating or moderating factors, such as customer satisfaction, organizational culture, or industry-specific challenges, that might affect the effectiveness of digital marketing and innovation. Examining how SMEs in varied regions or industries utilize these resources could provide a more nuanced understanding of the role of digital marketing and innovation in diverse business environments. Lastly, integrating qualitative data through interviews or case studies could yield deeper insights into the specific obstacles and approaches SMEs encounter when implementing digital marketing and innovation initiatives.

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