The Role of Digital Marketing in Business Performance with the Moderating Effect of Environment Factors among SMEs of UAE

Mohammed T. Nuseira, Ahmad Aljumahb, a,bDepartment of Business Administration, College of Business, Alain University, Abu Dhabi Campus, P.O. Box 112612, Abu Dhabi, UAE, Email: aMohammed.nuseir@aau.ac.ae, bAhmad.aljumah@aau.ac.ae

The present research investigates the role of digital marketing on business performance in the small and medium enterprises sector of the United Arab Emirates. Technological advancements, such as the utilization of digital applications, enable firms to communicate with customers, while being responsive towards competitors with minimal resources. The ability of customers to seek information from SMEs products or services must be provided easy, timely and correctly through various digital technologies. The purpose of this research paper is to determine the empirical relationship between digital marketing and business performance among SMEs of UAE. The study was conducted on marketing managers and IT managers of SMEs to determine the proposed framework. The collected data was analysed on SMART-PLS through measurement and structural equation modelling and was based on the results of a study investigating how digital marketing influences business performance. The environment is considered to be an essential factor in business performance. The study found that hypothesis H1 was accepted but H2 and H3 were rejected on statistical grounds. The study did not observe any moderation in the proposed variables of the present research. The study is novel in determining the empirical investigation between digital marketing efforts and business performance with moderation effect of environmental factors.

Key words: Business performance (BP), Digital Marketing Application (DMA), Small and medium-sized enterprises (SMEs), Environmental Factor (EF).
Introduction

The emergence of technological based approaches to traditional marketing boosted by digital elements is known as digital marketing. Digital marketing has dynamics and characteristics that need to be understood for the development and implementation of effective marketing strategic initiatives. Research scholars have expressed various classifications of digital channels according to the context of industry (Järvinen, Tollinen, Karjaluoto, & Jayawardhana, 2012). Digitalization has become an essential part of business life. It assists in upgrading traditional patterns of conducting business activities to interact with stakeholders. The emerging trend of utilization of digital media in business activities has transformed the basis for competition and influence consumer behaviour. Digitalization has an impact on firms, and influences products and brands through the usage of online services that includes storing, browsing and playing entertainment, email, Facebook and other applications that transform how we interact (Kiili, Leu, Marttunen, Hautala, & Leppänen, 2019). Literature has addressed the need of a ‘market in the digital world’ due to its importance in interacting with stakeholders. The online availability of goods and services enable firms to search, enquire, interact, complain, purchase and pay through electronic means from remote locations. The majority of corporations have adopted the latest available technological equipment and systems for effective interaction among stakeholders. Marketing strategies are largely inclined towards the adoption of online interactive systems to share information efficiently. For effective and efficient interaction between consumers and the company, relevant experience and deep knowledge about the consumer must be possessed. The nature of the devices used to establish connection with the company, interaction patterns, as well as the demanded contents of customers, must be known for effective digital marketing strategies. Deeper understating of consumers is required to assess behaviours and their interaction preferences for effective communication to deliver better experience that engage consumers. The firms seeks to obtain information about logistics, marketing, operational, sales and services to assess the satisfaction level of consumer and level of customers service being served online (Stone & Woodcock, 2014).

It has been observed that the utilization of digital media among the general public as consumers has increased rapidly since the last decade. Therefore, firms also use digital marketing techniques to approach their target markets. The rapid increase in internet users since 2010 was reported as exceeding 2 billion and it is expected to double every year. Digital marketing has become an essential practice for promoting products and services due to increased competition and the changing demand of consumers. Digital marketing is also known as e-marketing and involves online advertising that deliver electronic message to potential customers. Firms invest in digital marketing implementation to approach customers. It was reported that 60 billion US$ have been spent in recent years. The utilization of digital technologies for approaching customers has become a crucial phenomenon for development in the upcoming decade due to
increased globalized competition (Smith, 2011). Firms always seek to advance their competitive position through technological development and creativity that encourage growth. Therefore, the majority of the firms have realized the need to adopt and implement technologically advanced applications for supporting their operations that provide updated and timely information (Aggarwal, 2017). Digital technologies have changed lifestyle in various respects, and the operational activities of firms, specifically communication and information sharing, have changed due to increased competition. Online technologies and digital applications are considered as the most effective tool for initiating closer relationship with consumers. It has been observed that traditional marketing strategies are not sufficient and relevant anymore in a highly competitive business environment to create a sustainable competitive edge and growth (Kaur, 2017). Firms have transformed their traditional marketing strategies and structure to be more dynamic and have adopted technologically oriented operational activities, including communication with customers and stakeholders. Marketing communication enables firms to establish long term relations between customers and marketers for common goals and growth, as marketing communication via digital technologies enhances interaction among participants (Yoga, Korry, & Yulianti, 2019).

Previous studies have focused on the need of social media utilization for business needs that can bring benefits to the business (Siamagka, Christodoulides, Michaelidou, & Valvi, 2015; Zolkepli & Kamarulzaman, 2015). It has been reported that approximately 70% residents of United Arab Emirates take advice from social media before purchase as it has been seen that social media applications provide information to customers. Electronic marketplace emergence enables firms to interact with a large number of customers through social networking sites. Social media and digital media applications enabled firms has given access to customers to shop online from any remote location without any physical bounding. Utilization of technologically based applications and social media applications has become important and research scholars have paid greater attention due to its crucial role in today’s competitive business world (Gazal, Montague, Poudel, & Wiedenbeck, 2016). Research scholars have shown small and medium enterprises (SMEs) can gain benefits through effective utilization of social media and technological advanced tools for business management due to lack of traditional resources (Durkin, McGowan, & McKeown, 2013).

United Arab Emirates has large SME sector that consists of 95% of private businesses and provides 86% employment of the total workforce. The large and significantly important SME sector of UAE needs emphasize strategic technology adoption, including social media. It has been observed that SME possess limited resources and often face a scarcity of resources in terms of skills, abilities, and funding, which prevents them from adopting and implementing the latest technology that can provide long term benefits. The lack of resources also affects their ability to outsource the required module for marketing that involves digitalization of business operations to interact. Therefore, the importance of social media emerges among
SMEs due to its easy access and affordability in assisting businesses to approach their customers effectively (Ahmad, Ahmad, & Bakar, 2018). The utilization of social media among SMEs businesses has increased rapidly so therefore privacy and online security issues have become sensitive in various regions of world for data privacy and payment methods. Firms have to follow government rules and regulations for data security and financial safety as a proactive approach (Reyae & Ahmed, 2015). There is a scarcity of empirical evidences that addresses the influence of digital marketing on the performance of firms and there is a lack of literature that describes the role of digital and technological advancement in business operations in the UAE context (Ahmad, Abu Bakar, & Ahmad, 2019).

The present study seeks to investigate the empirical relationship between digital marketing strategies and SMEs performance with consideration to the digital environmental influence.

**Literature Review**

Research scholars have given attention to the digital aspect of marketing through the utilization of technological advancements, including the monitoring and analysis of customer feedback, the response towards customer feedback, the digital implementation plan, the establishing of digital management reputations, the analysis of social media’s impact and the integration of third-party review sites that drive positively towards better performance (De Pelsmacker, Van Tilburg, & Holthof, 2018). Recently, various research scholars have suggested conducting empirical investigations on digital marketing strategies that enhance the performance of SMEs (Baka, 2016). The emergence of technological based digital marketing influences traditional marketing approaches and requires rethinking for the development of strategic initiatives to remain competitive in a digital era. At its initial stage, content marketing became the key for successful online marketing campaigns and a tool for digital marketing. The online survey was conducted to determine the future of digital marketing based on an interview survey of 262 marketing executives towards digital marketing initiatives that lead towards an increase in budget in the upcoming years (Baltes, 2015). Recently, various well-known brands have adopted digitalized marketing initiatives including Rolex, Coca-Cola, the New York Times and Nike by the implementation of digital content marketing. DMC was found to be effective in creating and fostering consumer awareness due to its significant importance. The influence of digital content marketing has been observed on the engagement level of employees, sales increased, as well as trust and loyalty (Hollebeek & Macky, 2019). It has been stated in literature that global revenue to digital content marketing has increased in recent years from 87.2b US$ to 144.8b US$ and is expected to grow up to 313.4b US$ in the present year of 2019. DMC is understood as a management process that is responsible for the identification, anticipation and satisfaction of customers at profitable level through the effective utilization of digital contents. Due to the effective utilization of digital content marketing efforts, it has been seen that the development of consumer connection and attachments has contributed to
increased performance. Digital content marketing has gained importance due to its importance as is evident in various studies (Hollebeek & Macky, 2019).

The emergence of intent technology influenced technology based business activities, including marketing, and has gain much scholarly attention due to its significant importance in today’s business world. Electronic marketing enables firms to gain a large customer base due to its remote availability. Internet based applications have changed the rules of marketing, which have been redefined due to the changed lifestyle of consumers and their purchasing habits. Traditional strategies for marketing have been changed due to the inclusion of technology and digitalization as older patterns are not suitable for the sustainable development of businesses. It has been recognized that digital marketing has become essential for firms to conduct business at a competitive level in rapidly changing environment. Digitalization focuses the mode of communication and information sharing among participants of firms and enables an increase in revenue and the establishment of long term relationships (Batinić, 2015).

Research scholars have explained digital market under six characteristics for determining the successful digital marketing campaigns.

I. Quality of website is considered a prerequisite for successful online business activities, and assist in approaching customers away from the boundary. Further, it serves as a digital destination for the audience.

II. Strong social media presence enables firms to reach customers through their Facebook, Twitter and Instagram applications directly, which enables firms to establish credible, improved and sustainable relationships in the long term.

III. Search engine optimization is considered an integral and essential part of digital marketing for measuring online ranking at search engines that demonstrates online popularity.

IV. Email marketing remains an effective strategy to approach the audience but it must be done under proper planning to gain maximum results. It has been observed that emails to users may provide better responses with instant replies due to interest in the business. Customized offers and effective communication encourages customers to remain and repeat purchases by establishing a long term relationship.

V. It has been included that mobile friendly apps are also found to be impactful towards approaching customers. The majority of users utilizes mobile phone apps to assess online stores to find their preferred items. Effective and user-friendly mobile applications must be developed by firms to give easy and quick access to customers.

A fundamental role in the economy is played by the SME sector in developing countries according to their level of business activity. SME sector is taken as very important and significant in developed nations due to their impact on the economy and the GDP, as well as their role in providing employment. It has been reported in a recent study that SMEs earned
3.5 $ billion in electronic commerce revenue and that contribution is expected to grow to 300$ billion in next few years. The global market can be accessed through the contribution of SMEs. The emergence of technologically based equipment enables SMEs to respond to the changing needs of customers. Therefore, the performance of small and medium enterprises can be influenced through digital media implementation and proceedings (Nuseir, 2018). Research scholars have reported that an increasing number of people are involved in digital media for business activities and shopping purposes, but on the other hand few economies are observed to have failed to determine the influence of digital media on performance due to a lack of awareness about digitalization phenomenon (Apenteng & Doe, 2014). Usage of internet and digital devices to conduct business activities, specifically marketing, is known as digital marketing. Research scholars have further defined digital marketing as the application of internet and related digital technologies in conjunction with traditional marketing efforts to achieve marketing goals. Computer systems, mobile phones and tablet computers are well known digital devices that enable an individual to connect any system for information seeking or sharing. Digital marketing consists of online advertising, websites, mobile advertising, social media utilization, online presence, email marketing and links to other websites. This demonstrates the large scale of the phenomenon and a wide area of concern. Digital marketing enables firms to establish meaningful contact with customers through the utilization of interactive services that engage them for purchasing decisions. Research scholars have identified three different types of media that are effective for the marketer. They must focus on developing a marketing strategy to influence potential online customers. These types of media include owned, earned and paid media. Owned media are owned by an organization’s brand, which includes websites, blogs and social presence. Earned media comprises publisher editorials, word of mouth, and influencer outreach. The paid media includes paid research, display advertising and affiliate marketing (Banjo, 2013).

Research studies have depicted various elements of digital marketing that operate through digital devices and that include (i) online advertising (ii) email marketing (iii) social media (iv) text messaging (v) affiliate marketing (vi) search engine optimization and (vii) pay per click (PPC). Further advantages of adoption of digital media in marketing have been explored in previous research studies. These benefits and advantages include (i) updated information of products or services (ii) greater engagement of customers (iii) clear availability of information (iv) easy to compare with competitors or service providers (v) online 24/7 shopping option availability (vi) share content among interested participants or friends (vii) pricing and (viii) the option to purchase online instantly through digital devices and systems provided by firms (Yasmin, Tasneem, & Fatema, 2015). Various studies have been conducted to determine the role of marketing efforts on the performance of businesses in relation to the reviews on products or services. The number of reviews on products or services by consumers was found to be positively influential on business performance and revenue growth, including hotels, online services or any firms contacting or approaching customers through digital devices and internet.
technologies (Kim, Li, & Brymer, 2016). Previous studies also found a positive relationship between reviews and purchase intentions in the hospitality industry that addresses the room occupancy. The studies have reported that the number of reviews also positively influence the occupancy rate regardless of review scores. It is evident in studies that the number of online reviews positively affects the performance. Negative reviews indicate the popularity of product or service and it increases the awareness of products. The numbers of reviews keep the product in customer’s mind for long time and attract information seekers by reducing uncertainty and risk. This positively influences the behaviours of customers. The studies have suggested on the base of their findings that popularity has strong relevance with preferences of consumers. The research scholars have argued that better reviews impact the performance and influence the purchase behaviour of customers in the hospitality industry (De Pelsmacker et al., 2018).

Previously, studies have examined the influence of digital marketing on business outcomes. Internet based technologies and systems are recognized as an important and essential force that influences the various industries positively. The study has been conducted on hotel industry and hotel managers to determine the role of digital marketing on the performance of a hotel. The study found that the utilization of information technology based systems and equipment for marketing purposes can improve performance significantly as it was found to be effective in engaging customers due to a quick approach and the direct provision of the necessary information (Melián-González & Bulchand-Gidumal, 2016). Research scholars have argued that online feedback assists managers to assess the attitude, opinion and satisfaction level of customers and, by investing appropriately, can play role in managing the business activities in response to feedback. Studies have found that if managers consider and value feedback and develop their marketing strategy accordingly, they are likely to improve in quality and influence the perception of customers. Further, it has been reported that the influence of social media and hotel websites also influence the behaviour of guests. The study found that websites and social media influence the perception of customers by being informative, enjoyable, socially interactive and satisfying, which further influences purchase intention (Aluri, Slevitch, & Larzelere, 2016).

Firms operate in specific business environments that are impacted by external powers, including competitors, government authorities and the globalization phenomenon. The firms operate in a climate where they face environmental factors that are also related to the structure of industry, suppliers and regulatory authorities. Firms have to face the competitive pressure arising from the threat of losing the competitive advantage gained in an industry based on skills, knowledge or abilities. The research scholars have suggested adopting innovative ideas that influence the changes in industry at every level to influence better performance. The adoption of better technologically based information systems brings long term benefits to businesses by through social media marketing and digital marketing strategies that respond to competitors. Competitive pressure expresses the degree of rivalry in an industry that is affected by various
factors such as the globalized phenomenon, technology development and adoption, rapidly chaining external environment, and the development of technological based items. A higher numbers of firms in an industry encourages innovative initiatives. The studies have suggested that electronic business adoption in Europe was pressured by trading partners to maintain technological status among participants (Ahmad et al., 2019).

The above stated discussion demonstrates that digital marketing has a significant influence on various business outcomes. There is scarcity of research and empirical evidence that evaluates the relationship between digital marketing and business performance. The present study intends to determine the influence of digital marketing on business performance. The study is one of the first that determines the relationship and also examines the moderating role of environmental factors including competitive industry and competitive pressure to adopt digital technologies.

Research Framework

Figure 1. Proposed Framework

Hypotheses Development

On the base of above stated discussion following hypotheses of the study according to proposed research framework has been derived:

H1: Digital Marketing applications (online advertising, affiliate marketing, email marketing, social media marketing) positively significant to Business Performance among SMEs of United Arab Emirates
H2: Environmental Factors (Competitive Industry, Competitive Pressure) influence the business performance among SMEs of United Arab Emirates

H3: Environmental Factors Moderates the relationship between digital marketing application and Business Performance of SMEs of United Arab Emirates

Research Methodology

The present study determines the business performance of SMEs influenced by digital marketing applications with moderating role of environmental factors. The study is cross-sectional and quantitative in nature. All items of variables were investigated on a 5-point scale to determine the relationship between proposed variables of framework. The sample for present study was the SMEs sector of UAE and was selected randomly. The list of SMEs was acquired from UAE directory that provided the list of operating firms under SMEs in the country in the Dubai region. The fact has already been given that 95% of private business are SMEs. It is likely, therefore, that the researcher can assemble a diverse sample to get appropriate responses. The key respondents were marketing managers and IT managers. They were most likely to be knowledgeable about their firms marketing efforts, technology adoption and the role in performance. Online surveys are considered as an essential tool in research due to being a fast, cheap and simple method of data collection (Dutot & Bergeron, 2016). For data collection 550 questionnaires were sent out. 305 completed and useable responses were received for data analysis. The measurement scales of variables were adopted from previous studies. The 06 items scale to for business performance was adopted from the study of Ahmad et al. (2019). The environmental factors based on competitive industry and competitive pressure was also adopted from Ahmad et al. (2019). The measurement scale to determine the digital marketing applications was adopted from the study of (De Pelsmacker et al., 2018).

Analysis and Results

The present study utilized SMART-PLS for data analysis through measurement model and structural equation modelling techniques based on collected data. The data was investigated by examining its reliability, composite reliability and average variance extract under the measurement model. The relationships between constructs were examined on the basis of SEM through collected data. This section demonstrates the reliability test as first examined through PLS algorithm.
Table 1: Measurement Model (Reliability Test)

<table>
<thead>
<tr>
<th></th>
<th>Cronbach’s Alpha</th>
<th>Composite Reliability</th>
<th>Average Variance Extracted (AVE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>0.807</td>
<td>0.862</td>
<td>0.528</td>
</tr>
<tr>
<td>DMA</td>
<td>0.833</td>
<td>0.877</td>
<td>0.547</td>
</tr>
<tr>
<td>EnvF</td>
<td>0.938</td>
<td>0.956</td>
<td>0.844</td>
</tr>
</tbody>
</table>

The above table 1 demonstrated the values for Cronbach Alpha, Composite Reliability and Average Extracted (AVE). It is suggested that Cronbach alpha must remain higher than 0.7, composite reliability must remain higher than 0.7, whereas values for AVE must remain higher than 0.5 in order to be accepted statistically and reliably for the data collected tool (Hair Jr, Hult, Ringle, & Sarstedt, 2016). Above stated statistically satisfied values presents the construct validity and reliability.

Table 2: Measurement Model (Discriminant Validity)

<table>
<thead>
<tr>
<th></th>
<th>BP</th>
<th>DMA</th>
<th>EnvF</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP</td>
<td>0.727</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMA</td>
<td>0.626</td>
<td>0.739</td>
<td></td>
</tr>
<tr>
<td>EnvF</td>
<td>0.529</td>
<td>0.646</td>
<td>0.919</td>
</tr>
</tbody>
</table>

The above table 2 demonstrated the discriminant validity, which relates the correlation among variables. According to Fornell and Larcker (1981) the square root of AVE must remain higher than the correlation value with other variables. The square root of AVE is shown diagonally above table and it is shown that the first value of each column, the square root of AVE, is higher than the remaining values, which satisfies the condition of discriminant validity.
The present section of the study investigated the relationship between the proposed constructs of the framework by examining the hypotheses developed in an earlier section of present study. The collected data was examined through the bootstrapping method to determine the impact and influence of digital marketing applications on business performance. Moreover, the moderating effect of environmental factors is also investigated under this section.

Table 3: Hypothesis testing (Direct Relationship)

<table>
<thead>
<tr>
<th>Relationship</th>
<th>Original Sample (O)</th>
<th>T Statistics (JO/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMA -&gt; BP</td>
<td>0.522</td>
<td>6.334</td>
<td>0.000</td>
</tr>
<tr>
<td>EnvF -&gt; BP</td>
<td>0.140</td>
<td>1.770</td>
<td>0.077</td>
</tr>
</tbody>
</table>

The above table 3 demonstrates the relationship between independent variables and dependent variables. Hypothesis H1 determines the relationship between digital marketing application and business performance. The hypothesis H2 investigates the relationship between environment factors and business performance among SMEs of UAE. The results of H1 and H2 show that digital marketing applications positively and significantly influence business performance, which is shown by t-value of relationship. The results show that the t-value is found to be higher than the cut-off point and is observed as 6.334; which is acceptable.
hypothesis H2 determined the role of environmental factors on business performance. Surprisingly, the results show that environment factors are not relevant in the SME sector of UAE and do not influence business performance. The results of hypothesis H2 is rejected based on t-value and found to be contradictive with the study of (Ahmad et al., 2019).

Table 4: SEM (moderating effect)

<table>
<thead>
<tr>
<th></th>
<th>Original Sample (O)</th>
<th>T Statistics (O/STDEV)</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMA -&gt; BP</td>
<td>0.501</td>
<td>5.984</td>
<td>0.000</td>
</tr>
<tr>
<td>EnvF -&gt; BP</td>
<td>0.134</td>
<td>1.474</td>
<td>0.141</td>
</tr>
<tr>
<td>Moderating Eff...</td>
<td>-0.072</td>
<td>0.945</td>
<td>0.345</td>
</tr>
</tbody>
</table>

Table 4 demonstrates the results of the moderating effect of environment factors including competitive industry and competitive pressure. The results of the moderating effect show that environmental factors don’t moderate the relationship of constructs of the proposed framework. Therefore, hypothesis H3 is rejected on statistical grounds.

Conclusion

This research investigates the influence of digital marketing efforts adopted by small and medium enterprises of United Arab Emirates to determine the business performance. The study examined the influence of digital marketing applications such as online advertisement, affiliate marketing, email marketing, social media marketing and search engine optimization on business performance. The results showed that digital marketing efforts made by applications influence the performance among SEMs of UAE, and that the utilization of the latest technology enables firms to approach customers remotely. It has been observed that the adoption of digital marketing applications takes place due to external competitive pressure that influences business performance. The results of the study are found to be significant in determining the impact of digital marketing on performance, but on the other hand, the environmental factors such as competitive pressure and competitive industry do not influence the business performance. Moreover, a moderating role of the environmental factor was not observed, therefore, H1 was accepted, but H2 and H3 were rejected on statistical grounds. On the basis of these results, it is suggested that businesses must utilize latest technological advancements for marketing efforts to approach customers effectively and efficiently in order to grow in a highly competitive environment.
REFERENCES


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