



International Journal of Business Performance Management

ISSN online: 1741-5039 - ISSN print: 1368-4892

<https://www.inderscience.com/ijbpm>

The impact of digital marketing on the business performance of firms in Laos

Viengsavang Thipphavong, Xayphone Kongmanila

DOI: [10.1504/IJBPM.2026.10065925](https://doi.org/10.1504/IJBPM.2026.10065925)

Article History:

Received:	29 October 2023
Last revised:	02 January 2024
Accepted:	08 January 2024
Published online:	27 January 2025

The impact of digital marketing on the business performance of firms in Laos

Viengsavang Thipphavong* and
Xayphone Kongmanila

Faculty of Economics and Business Management,
National University of Laos,
Vientiane, Laos

Email: viengsavang@nuol.edu.la

Email: x.kongmanila@nuol.edu.la

*Corresponding author

Abstract: The study explores the impact of digital marketing on the financial and operational performance of Laos-based firms using the Smart PLS4 structural equation model (SEM). Results show that online advertising significantly impacts both financial and operational performance, but not IT capabilities. Social media marketing affects financial performance, operational efficacy, and IT capabilities, while content marketing primarily focuses on IT capabilities. Mobile marketing affects operational and IT capabilities' efficacy but not financial performance. The study suggests that Laos firms should focus on online advertising and digital marketing tools for improved financial performance and operational efficiency. The government should promote digital IT access, manage digital marketing, and provide IT training for entrepreneurs.

Keywords: digital marketing; financial performance; operational performance; online advertising; social media; content marketing; mobile marketing; IT capabilities.

Reference to this paper should be made as follows: Thipphavong, V. and Kongmanila, X. (2025) 'The impact of digital marketing on the business performance of firms In Laos', *Int. J. Business Performance Management*, Vol. 26, No. 7, pp.1–22.

Biographical notes: Viengsavang Thipphavong is currently a PhD candidate at the Faculty of Economics and Business Management, National University of Laos. He obtained a master's degree in Development Economics (Advanced) from Queensland University, Australia, and completed an advanced course on Training of Trainers on International Trade and Competitiveness, organised by the Estey Centre. He is also a research fellow at the Institute for Industry and Commerce, and Development Research Institute of Laos. He has contributed to several papers on business and trade-related issues in Laos and international publications.

Xayphone Kongmanila is an Associate Professor of Business Management at the National University of Laos, having earned his Doctoral Degree in Business Management from Hiroshima University in 2009. He has published numerous business management research articles in international journals, including *Malaysian Management Review*, *The Journal of International Development and Cooperation*, and *China-USA Business Review*. In 2018, he received the Best Researcher Award from the National University of Laos. He has also served as

an Auditor of BCEL, Lao Telecommunication Public Company, Souvany Home Centre Public Company, and Agriculture Promotion Bank. Currently, he is the Director of Accounting Department at the Faculty of Economics and Business Management at the National University of Laos.

1 Introduction

The global industrial revolution has transformed business marketing tools, leading to a widespread shift from analog to digital systems. The internet enabled the digital technology revolution, which has improved business communication. In recent years, it has been observed that the use of digital technology in commerce has spread rapidly in micro, small and medium enterprises, especially during the outbreak of the COVID-19 pandemic, which can be said to be an essential catalyst for the use of digital technology in online business operations. Many firms can conduct transactions with one another for less cost thanks to the internet's contribution to the development of digital technology. The usage of digital marketing in business has been shown to have favourable effects on business relationships and operational efficiency. Search engines, social media, email and websites are all important platforms for digital marketing which is used in tandem with online marketing to help firms research more customers and satisfy those that use digital devices.

Laos, with a telecommunication business since 1996, has seen a significant increase in mobile phone users, with SMEs prioritising digital marketing. Laos has a significant mobile phone-based internet access, but its proportion of internet users is only currently at 63% per 100 people, according to Ministry of Technology and Communication Report in 2021. Furthermore, the percentage of Lao people using digital systems for financial transactions through e-banking is only 8%, lower than Thailand (43%), Vietnam (16%), and Cambodia (12%), except for Myanmar (4%) (ASEAN Secretariat, 2021).

Laos is experiencing a surge in digital technology usage due to the COVID-19 pandemic, highlighting the importance of integrating digital technology into online company operations, despite not being a digital leader in the region. According to the United Nations Conference on Trade and Development (UNCTAD, 2021), it has been reported that Laos was among four developing nations with a five-point increase in electronic commerce in 2019. This growth is attributed to improvements in the country's postal transportation system, which has expanded services to facilitate online buying and selling. Almost all business entities in Laos are micro, small, and medium enterprises. The presence of affordable digital communication technologies has assisted existing and start-up enterprises to approach their customers with low marketing costs through numerous digital marketing platforms.

Digital marketing strategies, including advertising and online shopping via mobile devices, have gained popularity in Lao society due to the growing mobile phone user population, which exceeded 3.80 million in 2020. Social media platforms like Facebook, WhatsApp, and various websites are now used by online merchants and companies, with a consistent 8% annual growth rate in 3G/4G internet adoption from 2015 to 2019 (Ministry of Technology and Communications, 2019). According to data from open sources, the top 10 online media platforms utilised by Lao people in 2019 are Tiktok, Facebook, WhatsApp, Facebook Messenger, Facebook, Garena Free Fire, Mobile

Legends: Bang Bang, Line, YouTube, Ulike, and iMovie (Kang, 2019). WhatsApp is the most important social interaction method in Laos, but Facebook remains the most popular for advertising and selling products. As of April 2022, there are 4,094,900 Facebook user accounts in Laos, with 47% female and 53% male, and the highest percentage of users aged 18–24 (NapoloenCat, 2022).

This study aims to explore the impact of digital marketing on business performance in Lao firms. We will address the effects of key digital marketing tools on business performance, and provide recommendations for improving digital marketing in Laos.

2 Literature review

The digital marketing model has been a prominent subject of investigation among educational institutions and researchers worldwide, indicating its significance and prevalence in contemporary research investigations. In the 2000s, the USA was the pioneer among businesses to use the internet for business operations. The expectation was that this would boost the company's competitiveness and efficiency in comparison to its rivals. However, even with this early adoption, some businesses remain hesitant and unable to fully utilise the internet (Ehmke et al., 2001; Hannula and Lonnqvist, 2002). The adoption of information technology in marketing in developing countries presents challenges in transitioning from the old system to the modern one. In this matter, the main challenges include limited societal capacity to use communication technology, limited internet network usage, lack of legislations protecting business rights and benefits through ICT systems, and the need to maintain and protect personal databases. These factors make it difficult for developing countries to effectively integrate information technology into their economic systems (Avirutha, 2021; Fedulova, 2021; Tayibnapis et al., 2018).

The digital revolution, driven by the internet, is revolutionising communication, accelerating Industrial Revolution 4.0, and fostering productive relationships between people and machines (Aghaei et al., 2012; Choudhury, 2014; Shivalingaiah and Naik, 2008). The internet's benefits have expanded digital marketing, improving customer relationships and enhancing firms' competitiveness in customer relationship management (Ahmadi and Letter, 2021; Pagani and Pardo, 2017). Information technology also helps to reduce the cost of trading relationships by promoting direct sales between suppliers and customers rather than through intermediaries (Walters, 2008). For example, it helps to reduce the cost of transportation under the on-time delivery system and inventory management (Porter and Millar, 1985). The digital information age has led to the development of new products and services like e-commerce and Fintech, but cyber security issues, particularly in developing countries, remain a significant challenge to address (Loh et al., 2021; Sunkpho et al., 2018).

Most current study findings indicate that the use of digital marketing in business-to-business (B2B) and business-to-customer (B2C) models has a favourable impact on business relationships and operational effectiveness (Bharadwaj and Soni, 2007; Shah, 2018; Tadesse and Pettersson, 2019; Wisdom, 2015). Some businesses struggle with utilising digital marketing strategies due to limited customer familiarity, inadequate timing, confusion, and disparities in awareness, which can hinder their ability to achieve similar levels of success (Dlodlo and Dhurup, 2010). Meanwhile, there is still a lack of consensus among the company's board of directors on their awareness and

comprehension of the advantages of using digital marketing (Gyamfi, 2016; Iddris and Ibrahim, 2011; Taiminen and Karjaluo, 2015). Regarding business competition, S. Singh et al. (2022) argued that service-oriented companies, while utilising websites to provide unique experiences and enhance online service quality, are not considered essential for enhancing their competitiveness.

The examination of the effects of employing digital marketing strategies on businesses is regarded as a nascent field of inquiry that is now gaining scholarly interest. Based on the Scopus database, an examination of digital marketing studies reveals a total of 643 research publications spanning the period from 2001 to September 2023. According to the study conducted by Giantari et al. (2022), the influence of digital marketing on business operations may be assessed through the evaluation of both financial and non-financial performance indicators inside the company.

Digital marketing positively impacts business operations through increased sales, largely due to the implementation of effective marketing strategies. This entails the successful engagement of customers and the concurrent reduction of business costs (Daud et al., 2022; Nuseir and Refae, 2022; Nuseir, 2018). Measuring operational efficiency serves as an additional means to evaluate the prevailing business circumstances within the company. Yu et al. (2022), found a strong correlation between a company's digital transformation capability and operational efficiency, with operational efficiency being influenced by employee job satisfaction, which in turn affects their work attentiveness. In addition, it is noteworthy to consider societal acceptance, environmental responsibility, customer satisfaction, regular customers, and the value of the product or service brand (Giantari et al., 2022; Santos and Brito, 2012).

Financial performance and operational performance are often used as indicators for assessing a company's business performance. The utilisation of digital marketing by organisations, particularly those categorised as small and medium-sized enterprises (SMEs), is intended to enhance business effectiveness through the application of digital technology. This approach facilitates the promotion of marketing efforts, enabling the targeting of specific client segments, fostering competitiveness, and facilitating market expansion, all while minimising costs (Algumzi, 2022; Amoah and Jibril, 2021; Obeidat, 2021). Two dependent variables that are directly impacted by the company's use of digital marketing are financial performance and operational efficiency. Previous studies have demonstrated the positive and statistically significant impact of introducing digital marketing as an independent variable in the examination of the connection between the aforementioned variables (Bone, 2017; Daud et al., 2022; Giantari et al., 2022; Nuseir, 2018). Nonetheless, In the digital marketing age, establishing consumer trust through quality and customer satisfaction is crucial for a business's financial and operational efficacy (Hasyim et al., 2022).

The use of digital technology in business marketing in Laos has been prevalent since 1999, with the first private internet service being established. However, there is a lack of research on the application of digital technology in business operations, particularly the impact of digital marketing on business operations. According to Laos' Ministry of Technology and Communication's report, there is a higher trend in ICT investment, from 38 million dollars in 2014 to 135 million dollars in 2018, primarily in the sales of ICT equipment, internet coffee shops, and IT equipment repair shops. Digital technology is increasingly being used in various sectors, including business, commerce, and official services. This includes applications for passenger transport, mobile payment, and order placement and delivery. Digital platforms are also used for booking plane tickets, making

hotel reservations, buying and selling lotteries online, and accessing product and service information. However, the informal use of digital platforms for trading or service provision, particularly through Facebook and YouTube, is experiencing rapid growth and presents challenges in terms of regulation and control (Ministry of Technology and Communications, 2023).

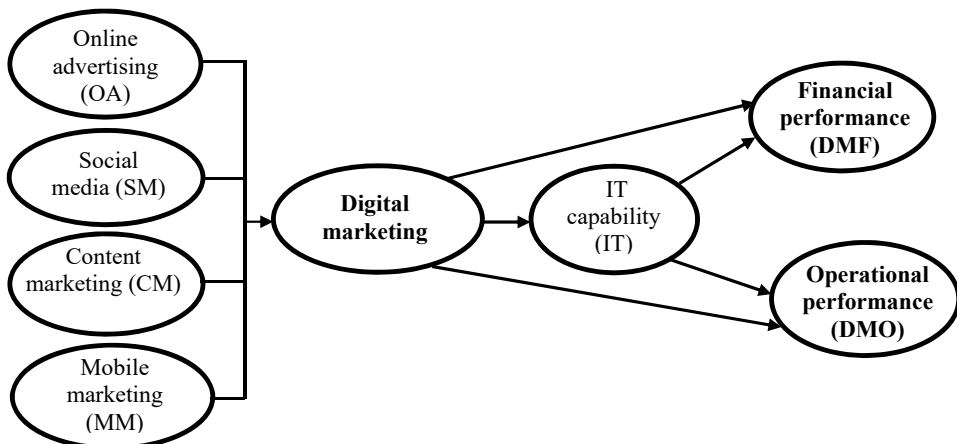
Numerous research articles examining companies and the utilisation of technology in Laos have consistently demonstrated that the integration of modern technology has substantially bolstered companies' competitive advantage. However, several challenges persist, including the absence of well-defined regulatory frameworks, limited proficiency in technology utilisation, inadequate infrastructure support – such as low-speed or inadequate internet connectivity, underdeveloped electronic payment systems, and inefficiencies in postal services. These challenges collectively pose significant obstacles that necessitate future resolution (Kyophilavong et al., 2014; Leebouapao et al., 2020; Southiseng and Walsh, 2010).

In summary, the utilisation of contemporary technology for the purpose of enhancing organisations' marketing efforts in Laos is an area that has not been extensively explored in terms of theoretical frameworks and scientific analytical methodologies. Hence, conducting research on the influence of digital marketing on business operations in Laos presents an opportunity to explore an unexplored scholarly and academic area in the field of digital marketing that is specific to the context of Laos. The resulting research findings will provide valuable statistical evidence to comprehend and acknowledge the business landscape in Laos under the new market conditions.

3 Conceptual framework

Digital marketing is marketing through the internet and digital devices such as computers and mobile phones as the medium to communicate goods and service promotions. It is also known as direct marketing with a carefully selected group of individual consumers and customers in the community to receive immediate contact when interacting. It helps firms to create long-term relationships with customers (Kotler and Armstrong, 2017).

Figure 1 Conceptual framework



Digital marketing is a widely used strategy in today's digital era, enabling businesses to enhance operational effectiveness, gain a competitive edge, build relationships, and save costs (Ištvančić et al., 2017; Łysik and Łopaciński, 2019; Mishra, 2020). Previous studies have focused on assessing company performance through financial indicators, but this approach may lack comprehensiveness (Daud et al., 2022; Giantari et al., 2022; Popa et al., 2021). This study uses a research approach based on Santos and Brito (2012) to evaluate the effect of digital marketing on business operations in Laos. The conceptual framework depicted in Figure 1 illustrates the relationship between digital marketing tools (independent latent variables) widely utilised in Laos, including online advertising, social media, content marketing, and mobile marketing, and their impact on the financial and operational performance of firms (dependent latent variables). Additionally, the framework considers the moderating role of a company's IT capabilities (Cisco, 2020; ITU, 2008; UNCTAD, 2021).

3.1 Research hypothesis

Business performance is a variable that uses financial performance and operating efficiency as the two explanatory variables for this variable. Using financial variables will show awareness of changes in income, company growth, and business transactions (Business interaction) after using digital marketing tools. The variable of the company's operational efficiency is considered a good indicator showing the condition of customer satisfaction (customer satisfaction), regular customers (loyalty customers), and brand value of products/services (brand equity) that will change after the use of digital marketing of the company (Giantari et al., 2022; Santos and Brito, 2012; Tarutė and Gatautis, 2014).

Previous research studies on the analysis of digital marketing variables show that digital marketing variables have many latent variables that surround them (Bala and Verma, 2018; Desai, 2019; Jacuński, 2018; Ponde and Jain, 2019). However, according to the current use of digital technology in Lao society and businesses, this study will separate the digital marketing variable into four latent variables: online advertising, social media marketing, and content marketing and mobile marketing. Based on those investigations, a set of hypotheses for this study encompasses the key variables (latent external variables) of digital marketing, namely online advertising, social media, content marketing, and mobile marketing, has been established based on the review of the aforementioned related research and the unique aspects of the use of digital technology in conducting business in Laos; Additionally, there will be variables (internal latent variables) that assess the company's ability to leverage its IT skills as a mediator, to examine the effects on its financial and operational performance. These are listed below.

- H1 Online advertising has a positive and significant effect on the firm's financial performance.
- H2 Online advertising has a positive and significant effect on the firm's operational performance.
- H3 Online advertising has a positive and significant effect on the firm's IT capabilities.

- H4 Social media has a positive and significant effect on financial performance.
- H5 Social media has a positive and significant effect on operational performance.
- H6 Social media has a positive and significant effect on IT capabilities.
- H7 Content marketing has a positive and significant effect on financial performance.
- H8 Content marketing has a positive and significant effect on operational performance.
- H9 Content marketing has a positive and significant effect on IT capabilities.
- H10 Mobile marketing has a positive and significant effect on financial performance.
- H11 Mobile marketing has a positive and significant effect on operational performance.
- H12 Mobile marketing has a positive and significant effect on IT capabilities.
- H13 The IT capabilities has a positive and significant effect on financial performance.
- H14 The IT capabilities will have a positive and significant effect on operational performance.
- H15 The IT capabilities can mediate the relationship between online advertising and the firm's financial performance.
- H16 The IT capabilities can mediate the relationship between social media and the firm's financial performance.
- H17 The IT capabilities can mediate the relationship between content marketing and the firm's financial performance.
- H18 The IT capabilities can mediate the relationship between mobile marketing and the firm's financial performance.
- H19 The IT capabilities can mediate the relationship between online advertising and the firm's operational performance.
- H20 The IT capabilities can mediate the relationship between social media and the firm's operational performance.
- H21 The IT capabilities can mediate the relationship between content marketing and the firm's operational performance.
- H22 The IT capabilities can mediate the relationship between mobile marketing and the firm's operational performance.

4 Research methods

This study applies a quantitative-based cross-sectional study design. The data collection was conducted in three provinces, began on May 12th and ended on June 7th, 2023, with dedicated staff in each province. Luang Prabang, Vientiane, and Champasak provinces collaborated to collect data. These provinces represent a prominent economic centre of the country, accounting for 49% of total business registration in 2023. Luangprabang is the most popular tourist destination, where many firms choose to settle their businesses.

Vientiane is the capital of the country, and thus it is a centre of politics and economy. Champasak is a leading economic development in the southern part of the country. Prior to conducting the field survey, 30 firms in Vientiane were selected for pre-test in April 2023. Then, the researcher directly instructed the enumerators in each province to complete the questionnaire form.

By applying the Taro Yamane method, 134 firms were selected as the study sample in each province, with an additional 10% collected to account for potential errors or omissions. Sampling is done by proportional random sampling (Israel, 1992). The sample includes 98% micro, small, and large enterprises, with services accounting for 65.3%, followed by trading at 27.7%, and manufacturing at 7%. The total sample size is expected to be 441. The assessment of digital marketing, financial performance, and operational performance is conducted by executive directors, marketing managers, and IT managers using a Likert scale with five levels, ranging from 'strongly disagree' to 'strongly agree'.

The analysis in the study aims to estimate relationships among measures of theoretical concepts with many variables. Then, structural equation modelling (SEM) is used over other empirical models, such as the multiple regression model, because it can enable researchers to simultaneously model and estimate complex relationships among multiple dependent and independent variables. At the same time, the latter involves one layer of dependent and independent variables (Hair et al., 2021). The SEM method for quantitative analysis utilises a technique based on mathematics, psychology, and economics, to integrate diversity within a sociological framework that incorporates economics and psychology principles (Bielby and Hauser, 1977). The Pearson correlation and Cronbach's alpha coefficient were used to test the instrument's validity and reliability.

The study starts with data screening for statistical accuracy and a descriptive overview of the sample group. It then conducts a SEM analysis using theory, hypothesis, and data, assessing the measurement model's fit and testing the hypothesis using Smart PLS4.

5 SEM results

5.1 Measurement model

Analysis of the measurement model is to test the relationship between different structures within the model by first testing the consistency of the model (measurement model fit) by analysing the statistical value of confirmatory factor analysis (CFA). The estimation of the CFA value is conducted by the examination of the outer loadings using the Smart PLS4. The result of this analysis is presented in Table 1. In statistical terminology, a CFA value equal to or more than 0.70 is considered appropriate (Hair et al., 2021). Thus, all variables exhibit a statistically significant relationship, as determined by the standard value of ≥ 0.07 .

5.2 Testing of goodness of fit model

The analysis of goodness of fit was conducted by specifically focusing on two consistency metrics, namely standardised root mean squared residual and normed fit index (SRMR and NFI). The results, presented in Table 2, indicate that the SRMR and

NFI are at an acceptable level. The measurement value for SRMR is 0.04 (Goffin, 2007; Hox and Bechger, 1999), which is below the criterion value of 0.08. Similarly, the measurement value for NFI is 0.90, which meets the criterion value of ≥ 0.90 (Diamantopoulos, 1994; Kaplan, 2008).

Table 1 Statistical value of outer loading

<i>Variables</i>	<i>Outer loadings</i>	<i>Variables</i>	<i>Outer loadings</i>
OA1 <- OA	0.884	MM3 <- MM	0.940
OA2 <- OA	0.920	MM4 <- MM	0.922
OA3 <- OA	0.920	MM5 <- MM	0.931
OA4 <- OA	0.908	MM6 <- MM	0.924
OA5 <- OA	0.883	IT1 <- IT	0.866
OA6 <- OA	0.862	IT2 <- IT	0.854
SM1 <- SM	0.843	IT3 <- IT	0.869
SM2 <- SM	0.847	IT4 <- IT	0.849
SM3 <- SM	0.821	IT5 <- IT	0.867
SM4 <- SM	0.851	IT6 <- IT	0.840
SM5 <- SM	0.836	IT7 <- IT	0.816
SM6 <- SM	0.818	IT8 <- IT	0.835
CM1 <- CM	0.958	DMF1 <- DMF	0.853
CM2 <- CM	0.949	DMF2 <- DMF	0.884
CM3 <- CM	0.945	DMF3 <- DMF	0.898
CM4 <- CM	0.950	DMF4 <- DMF	0.879
CM5 <- CM	0.948	DMO1 <- DMO	0.888
CM6 <- CM	0.954	DMO2 <- DMO	0.867
MM1 <- MM	0.934	DMO3 <- DMO	0.871
MM2 <- MM	0.931	DMO4 <- DMO	0.838

Source: Data processed 2023 by Smart PLS4

Table 2 Model fit

	<i>Threshold index</i>	<i>Estimated index</i>	<i>Information</i>
SRMR	< 0.08	0.04	Good fit
NFI	≥ 0.90	0.90	Good fit

Source: Data processed 2023 by Smart PLS4

5.3 Reliability and validity testing

The assessment of reliability and validity in the equation model adheres to the measurement principles outlined by Smid and Rosseel (2020). Hair et al. (2021) asserted that for the model to be considered reliable and valid, the Cronbach's alpha value should be 0.70 or higher, and the average variance explained (AVE) value should be 0.05 or higher (Tarhini, 2013).

Upon examination of Table 3, it is evident that the statistical values pertaining to reliability and validity have been summarised. It is noticed that each factor possesses a level of reliability and validity that aligns with the standard values, hence indicating a high level of acceptance.

Table 3 Reliability and validity

<i>Factor</i>	<i>Cronbach's alpha</i>	<i>Average variance extracted (AVE)</i>	<i>Information</i>
CM	0.979	0.904	Good fit
DMF	0.902	0.772	Good fit
DMO	0.889	0.751	Good fit
IT	0.945	0.722	Good fit
MM	0.969	0.865	Good fit
OA	0.951	0.804	Good fit
SM	0.914	0.699	Good fit

Source: Data processed 2023 by Smart PLS4

5.4 Discriminant validity

In measuring the statistical value of discriminant validity, comparing the average value of the correlation of unrelated latent variables and the average value of the correlation of related latent variables, the current practice is to use the value of Heterotrait-Monotrait ratio of correlations (HTMT) that should not exceed 0.90 (< 0.09) as a standard value to measure (Gold et al., 2001; Ringle et al., 2023). The analysis findings using the Smart PLS4 program displayed in Table 4 reveal that the correlation of the variables has statistical significance under the HTMT standard value, indicating that the equation model of this study is consistent.

Table 4 Correlation between latent variables

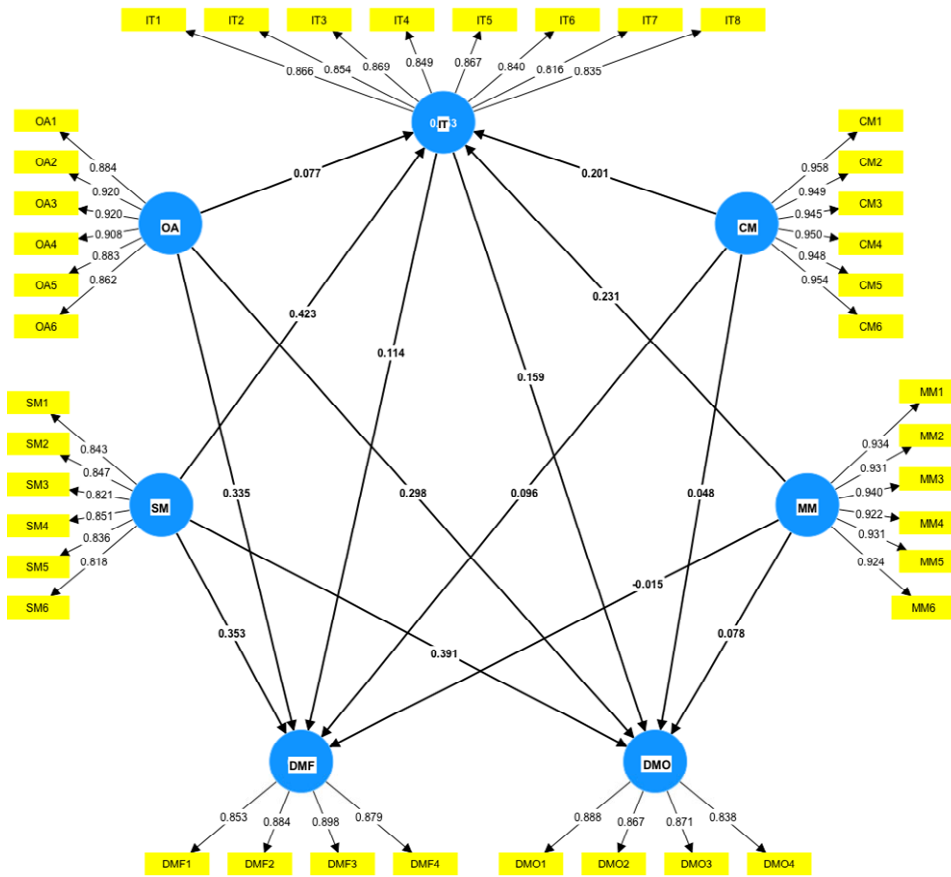
	<i>CM</i>	<i>DMF</i>	<i>DMO</i>	<i>IT</i>	<i>MM</i>	<i>OA</i>	<i>SM</i>
CM	1.000						
DMF	0.521	1.000					
DMO	0.533	0.805	1.000				
IT	0.556	0.574	0.648	1.000			
MM	0.349	0.361	0.464	0.523	1.000		
OA	0.510	0.647	0.664	0.514	0.359	1.000	
SM	0.557	0.677	0.739	0.687	0.460	0.594	1.000

Source: Data processed 2023 by Smart PLS4

5.5 Convergent validity

The measurement is considered convergent if the loading factor value is more than 0.7 (Hair et al., 2010). Figure 2 demonstrates that all loading factors have a value greater than 0.7, implying that all indicators have passed the convergent validity criteria. Indicators for all variables have not been removed from the model.

Figure 2 Convergent validity (see online version for colours)



Source: Data processed 2023 by Smart PLS4

5.6 Hypothesis testing

The hypothesis testing is evaluated by comparing P-values at 5% statistical significance. Table 5 depicts the statistical relationship between variables, path coefficient, and p-value, which were utilised to present the findings of the latent variable’s direct hypothesis test. Table 6, on the other hand, displays the results of the intermediate variable (moderator) correlation test to the endogenous latent variables (financial and operations performance) employed in the research, as well as the statistical confirmation value.

6 Discussion

6.1 The effect of online advertising on the firm’s financial performance

Based on the analysis of the effect of online advertising on the financial performance of the company, the coefficient value (β) is 0.335 and the statistical significance value (α) is

$0.000 < 0.05$. This statistical result indicates that online advertising has a clear positive effect on the company's financial situation. Therefore, online advertising to promote the company's sales has enabled the firm to sell more products or services to customers. The results of the analysis are also consistent with the results of previous studies such as Galeazzo (2021), Giantari et al. (2022) and Daud et al. (2022).

Table 5 Director effect testing

<i>Correlation between variables</i>	<i>Path coefficients</i>	<i>T-statistics</i>	<i>P-values</i>	<i>Information</i>
OA -> DMF	0.335	6.688	0.000	Accepted
OA -> DMO	0.298	5.695	0.000	Accepted
OA -> IT	0.077	1.345	0.179	Rejected
SM -> DMF	0.353	5.052	0.000	Accepted
SM -> DMO	0.391	5.887	0.000	Accepted
SM -> IT	0.423	6.624	0.000	Accepted
CM -> DMF	0.096	1.787	0.074	Rejected
CM -> DMO	0.048	1.053	0.292	Rejected
CM -> IT	0.201	3.895	0.000	Accepted
MM -> DMF	-0.015	0.359	0.720	Rejected
MM -> DMO	0.078	2.036	0.042	Accepted
MM -> IT	0.231	5.009	0.000	Accepted
IT -> DMF	0.114	1.744	0.081	Rejected
IT -> DMO	0.159	2.513	0.012	Accepted

Source: Data processed 2023 by Smart PLS4

Table 6 Indirect effect testing

<i>Correlation between variables</i>	<i>Path coefficient</i>	<i>T-statistics</i>	<i>P-values</i>	<i>Information</i>
OA -> IT -> DMF	0.009	0.897	0.370	Rejected
SM -> IT -> DMF	0.048	1.632	0.103	Rejected
CM -> IT -> DMF	0.023	1.614	0.107	Rejected
MM -> IT -> DMF	0.026	1.712	0.087	Rejected
OA -> IT -> DMO	0.012	1.061	0.289	Rejected
SM -> IT -> DMO	0.067	2.193	0.028	Accepted
CM -> IT -> DMO	0.032	2.328	0.020	Accepted
MM -> IT -> DMO	0.037	2.396	0.017	Accepted

Source: Data processed 2023 by Smart PLS4

6.2 *The effect of online advertising on the firm's operational performance*

The analysis results demonstrate that online advertising has a positive and statistically significant effect on the company's operational performance, with $\beta = 0.298$ and $\alpha = 0.000 < 0.05$. As a result, it is possible to infer that online advertising has a definite positive effect on the operational performance of the firm. This study's findings are also in line with those of Santos and Brito (2012), Yu et al. (2022) and Giantari et al. (2022)

as digital marketing tools can increase levels of customer satisfaction, which in turn helps firms have positive operational performance.

6.3 The impact of online advertising on the firm's IT capabilities

According to the findings of the online advertising analysis, the firm's IT capabilities have no statistically meaningful value, at $\beta = 0.077$ and $\alpha = 0.179 < 0.05$. As a result, online advertising has a beneficial impact on operational efficiency but has no statistically significant impact on the firm's communication technology skills. According to the findings of this study, the firm's communication technology capabilities have not changed as a result of the usage of online advertising. In fact, the majority of online advertising in Laos is done through Facebook, and it is a platform that does not require advanced IT skills to operate, thus the influence of the company's IT capabilities is not visible when online advertising is employed. This condition is also similar with the findings of Wang et al. (2020), who investigated the digital marketing and operational efficiency of micro, small, and medium-sized enterprises in China utilising IT skills as an intermediate variable with no statistical significance.

6.4 The effect of using social media on the firm's financial performance

The research revealed that the usage of social media can have a positive and statistically significant influence on the company's financial performance, with $\beta = 0.353$ and $\alpha = 0.000$. This analysis supports the conclusions of Thomkaew et al. (2019) and Saleh (2020).

6.5 The effect of social media on the firm's operational performance

According to the findings, the usage of social media has a favourable and statistically significant effect on the operational performance of the firm. Based on the analysis's results, $\beta = 0.391$ and $\alpha = 0.000$. The use of social media in connecting with the company's consumers is now quick and easy, which will encourage customers to pay more attention to products and services, making them more satisfied and more likely to become regular consumers. Additionally, firms are now able to enhance the rapidity and efficiency with which personnel communicate throughout the firm. The similar studies that provide the same analysis results are Alwan and Alshurideh (2022), Alghamdi (2023), Singh (2021) and Suryani et al. (2022). These studies show positive correlation between digital marketing applications and customer satisfaction.

6.6 The impact of using social media on the firm's IT capabilities

The analysis results show that using social media has a positive and statistically significant influence on the firm's IT capabilities, as observed from $\beta = 0.423$ and $\alpha = 0.000$. Social media is a popular and simple way of communication in Lao society. It is low-cost and only requires an internet connection, smartphone, or other signal receiver. However, compared to ten years ago, when smartphones and internet were expensive to buy, small and medium-sized businesses did not use social media. This has now become

a normal thing amongst Lao firms, therefore the use of social media in business is regarded to strengthen the IT capacity of the company in Laos.

6.7 The effect of content marketing on the firm's financial performance

Based on the findings of the analysis, it was determined that content marketing has no statistical importance to the firm's financial performance, with $\beta = 0.096$ and $\alpha = 0.074$. As a result, content marketing has a favourable effect on the financial situation, although there is no statistical significance. This study's findings contradict the previous studies by Pulizzi and Barrett (2009) and Baltes (2015), who discovered that marketing through content is vital in attracting customers through digital marketing tools. Marketing through content may be a new type of digital marketing for companies in Laos, and it can be expensive because creating content or information that draws people in young generations to the company's products requires the hiring of experts in this field. As a result, digital marketing in this context is not as appealing to firms in Laos as it should be.

6.8 The effect of content marketing on the firm's operating performance

According to the test results, content marketing has no statistical relevance in terms of the firm's operational performance. The results of $\beta = 0.048$ and $\alpha = 0.292$. As a result, content marketing has a favourable influence on operational conditions, but there is no statistical significance. The firm's operational performance in Laos is not dependent on content marketing, which is not consistent with previous studies by Costanza (2017) and Yosep et al. (2021), which show that the use of simple content communication through various online media can attract customers and increase the efficiency of the firm's operation. To gain from content marketing, managers must change their understanding of content marketing, be willing to learn on a continuous basis, and be able to develop fresh and actionable material (Hollebeek and Macky, 2019). However, because many businesses in Laos are micro and small enterprises that are managed and controlled by family members, it is difficult for those firms to take advantage from the potential benefits of content marketing.

6.9 The impact of content marketing on the firm's IT capabilities

Based on the findings of the analysis, content marketing has a positive and statistically significant influence on the firm's IT capabilities, with $\beta = 0.201$ and $\alpha = 0.000$. According to the findings of the analysis, marketing through content, which is one of the digital marketing tools, has caused the firm to increase its IT capabilities, particularly the use of digital communication technologies such as Facebook, YouTube, and WhatsApp, which has increased more with the increase in the use of the internet in Laos. In fact, according to the Ministry of Technology and Communications (2021) report, access to the internet as a percentage of the Lao population rose to 63% in 2021, up from 43% in 2018.

6.10 The effect of mobile marketing on the firm's financial performance

Through the analysis, the test results show that marketing through mobile phones is not statistically significant with respect to the company's financial performance. Here, $\beta = -0.015$ and $\alpha = 0.720$. The study contradicts Islam et al. (2018)'s study, which observed that mobile marketing negatively impacts a firm's financial performance, despite its potential to enhance customer, social, and business relations. Mobile marketing in Laos is underutilised, affecting sales promotion, especially in inefficient, family-run micro-sized businesses (Kyophilavong et al., 2014). Using digital marketing tools simultaneously in advertising can be challenging for managers, but it is crucial for the success of mobile marketing advertising, as it requires multiple strategies (Maduku et al., 2016).

6.11 The effect of mobile marketing on the firm's operational performance

From the results of the analysis, it is demonstrated that marketing via mobile phone has a statistically significant value for the firm's operational performance, with values of $\beta = 0.078$ and $\alpha = 0.042$. As a result, marketing through mobile phones has a favourable and statistically significant influence on the firm's operational efficiency. Furthermore, the findings of this analysis are similar to prior research by Islam et al. (2018).

6.12 The effect of mobile marketing on IT capabilities

The analysis results indicate that mobile marketing has a statistically significant impact on the firm's IT capabilities, with values of $\beta = 0.231$ and $\alpha = 0.000$. This finding explains why mobile phone marketing has a positive and statistically significant influence on the firm's IT capabilities. The results of this investigation are also comparable with the findings of Eze et al. (2019), who discovered that 73% of firms in Nigeria had a high degree of acceptance for the usage of mobile marketing.

6.13 The effect of IT capabilities on the firm's financial performance

The examination of this hypothesis reveals that the firm's IT capabilities have a positive but statistically insignificant effect on the company's financial performance, with values of $\beta = 0.114$ and $\alpha = 0.081$. The firm's financial situation has an impact on its IT capabilities. Thus, if it is a SME with limited resources, this aspect will diminish the IT capabilities of the firm and distance it from maximising IT capabilities for the firm's business operations (Ramon-Jeronimo et al., 2019). As a result, given that the majority of firms in Laos are SMEs, it is clear that the hypothesis concerning the influence of IT capabilities on the financial performance of the firm lacks statistical significance.

6.14 The effect of IT capabilities on the firm's operational performance

The hypothesis analysis findings show that the firm's IT capabilities have a statistically significant impact on its operational performance, with values of $\beta = 0.159$ and $\alpha = 0.012$. According to this research, IT capabilities have a positive and statistically significant effect on the firm's efficiency. The findings are consistent with those of Wang

(2020), who discovered that the IT capabilities of Chinese SMEs have a positive and statistically significant impact on the firm's operational efficiency.

6.15 The role of IT capabilities in mediating the effect of online advertising on the firm's financial performance

The analysis results show that IT capabilities cannot mediate the effect of using online advertising on the firm's financial performance. The test findings show that $\beta = 0.009$ and $\alpha = 0.370$. This research suggests that, despite the firm's IT capability, the usage of social media has little effect on its financial performance.

6.16 The role of IT capabilities in mediating the effect of social media on the firm's financial performance

The analysis results show that IT ability cannot mediate the effect of using social media on the company's financial performance. The test results indicate that $\beta = 0.048$ and $\alpha = 0.103$. This analysis implies that the use of social media does not affect the company's finances, despite its IT capabilities.

6.17 The role of IT capabilities in mediating the effect of content marketing on the firm's financial performance

The analysis results show that IT capability cannot mediate the effect of content marketing on the company's financial performance because $\beta = 0.023$ and $\alpha = 0.107$ have no statistical significance. The results of this analysis mean that IT capabilities cannot cause the use of content marketing to affect the company's finances.

6.18 The role of IT capabilities in mediating the effect of mobile marketing on the firm's financial performance

Based on the analysis, IT capability cannot mediate the effect of mobile marketing on the company's financial performance, with values of $\beta = 0.026$ and $\alpha = 0.087$. There is no statistical significance. It can be explained that the use of mobile marketing does not affect the firm's finances, despite its IT capabilities.

6.19 The role of IT capabilities in mediating the effect of online advertising on the firm's operational performance

Observing from the results of the analysis, it can be said that the IT capabilities of the company cannot be a medium for the effect of online advertising on operational performance, it shows values of $\beta = 0.012$ and $\alpha = 0.289$. The results of the study also explained that online advertising does not affect the company's operational efficiency despite its IT capabilities.

6.20 The role of IT capabilities in mediating the effect of social media on the firm's operational performance

Based on the results of the analysis, the company's IT capabilities can mediate the effect of online advertising on operational efficiency, expressed in values of $\beta = 0.067$ and $\alpha = 0.028$. The results of the test can explain that the greater the use of social media, the greater the need for IT capacities, which will ultimately increase the efficiency of the company's operational performance.

6.21 The role of IT capabilities in mediating the effect of content marketing on the firm's operational performance

The research results show that IT capability can mediate the effect of content marketing on the company's operational performance. Based on the observed $\beta = 0.032$ and $\alpha = 0.020$ values. The results of this test explain that the use of content marketing methods requires more IT capabilities because it affects the company's operational efficiency.

6.22 The role of IT capabilities in mediating the effect of mobile marketing on the firm's operational performance

From the analysis results, it can be seen that IT capabilities can mediate the effect of mobile marketing on the company's operational efficiency, which is expressed in $\beta = 0.037$ and $\alpha = 0.017$ values. The results of the measurement mean that the use of mobile marketing has increased IT capabilities because it has resulted in better operational efficiency for the company.

7 Conclusions

This study investigates the impact of digital marketing on the financial and operational performance of firms in Laos. Using Smart PLS4 SEM modelling, the research analysed the relationship between exogenous variables (online advertising, social media marketing, content marketing, and mobile marketing) and endogenous variables (financial performance and operational performance). The results showed that online advertising significantly impacts both financial and operational performance, but not IT capabilities. Social media marketing significantly affects financial performance, operational efficacy, and IT capabilities, while content marketing primarily focuses on IT capabilities. Mobile marketing, however, affects operational and IT capabilities' efficacy, but not financial performance. The study found that IT capabilities had no significant influence on financial performance, but were important for operational performance. The IT capabilities variable did not mediate the impact of online advertising, social media, content marketing, and mobile marketing on financial performance, whereas these variables had a mediating effect on operational performance.

Laos firms primarily use online advertising and low-cost online media like Facebook and YouTube. However, they should focus on online advertising and digital marketing tools for improved financial performance and operational efficiency. The government should establish a national network for high-speed internet access and digital

infrastructure, educate remote enterprises on digital marketing, focus on e-commerce expansion, enhance digital security, and implement monitoring systems for policy optimisation. In addition, the promotion of fiscal incentives and collaboration between the corporate, government, and private sectors can encourage corporate investments in digital marketing technologies. Finally, the promotion of community-based digital platforms and social media channels can help SMEs with limited capital, providing economically viable and culturally significant alternatives to electronic advertising.

This study analyses the impact of digital marketing on firms' performance in Laos using SEM. However, it has limitations since it does not capture all kinds of firms equally; hence, future research should focus on specific businesses to better understand firm performance by business type under digital marketing utilisation.

References

- Aghaei, S., Nematbakhsh, M.A. and Farsani, H.K. (2012) 'Evolution of the world wide web: from WEB 1.0 TO WEB 4.0', *International Journal of Web and Semantic Technology*, Vol. 3, No. 1, pp.1–10.
- Ahmadi, J. and Letter, T. (2021) 'The impact of IT capability on company performance: the mediating role of business process management capability and supply chain integration capability', *Journal of Social, Management and Tourism Letter*, Vol. 2021, No. 1, pp.1–16.
- Alghamdi, A. (2023) 'A hybrid method for customer segmentation in Saudi Arabia restaurants using clustering, neural networks and optimization learning techniques', *Arabian Journal for Science and Engineering*, Vol. 48, No. 2, pp.2021–2039, DOI:10.1007/s13369-022-07091-y.
- Algumzi, A. (2022) 'Impact of digital marketing on SMEs performance in Saudi Arabia: implications on building NEOM', *Transnational Marketing Journal (TMJ)*, Vol. 10, No. 1, pp.27–38.
- Alwan, M. and Alshurideh, M. (2022) 'The effect of digital marketing on value creation and customer satisfaction', *International Journal of Data and Network Science*, Vol. 6, No. 4, pp.1557–1566.
- Amoah, J. and Jibril, A.B. (2021) 'Social media as a promotional tool towards SME's development: evidence from the financial industry in a developing economy', *Cogent Business and Management*, Vol. 8, No. 1, p.1923357.
- ASEAN Secretariat (2021) *ASEAN Digital Masterplan 2025* [online] <https://asean.org/book/asean-digital-masterplan-2025> (accessed 10 May 2022).
- Aviruttha, A.A. (2021) 'ASEAN in digital economy: opportunities and challenges', *Journal of ASEAN PLUS Studies*, Vol. 2, No. 1, pp.17–25.
- Bala, M. and Verma, D. (2018) 'A critical review of digital marketing', *International Journal of Management, IT and Engineering*, Vol. 8, No. 10, pp.321–339.
- Baltes, L.P. (2015) 'Content marketing-the fundamental tool of digital marketing', *Bulletin of the Transilvania University of Brasov. Economic Sciences. Series V*, Vol. 8, No. 2, p.111.
- Bharadwaj, P.N. and Soni, R.G. (2007) 'E-commerce usage and perception of E-commerce issues among small firms: results and implications from an empirical study', *Journal of Small Business Management*, Vol. 45, No. 4, pp.501–521.
- Bielby, W.T. and Hauser, R.M. (1977) 'Structural equation models', *Annual Review of Sociology*, Vol. 3, No. 1, pp.137–161.
- Bone, H. (2017) 'The effects of financial and non-financial performances towards the managerial performances with interpersonal trust as a mediation variable', *International Journal of Law and Management*, Vol. 59, No. 6, pp.1190–1202.
- Choudhury, N. (2014) 'World wide web and its journey from web 1.0 to web 4.0', *International Journal of Computer Science and Information Technologies*, Vol. 5, No. 6, pp.8096–8100.

- Cisco. (2020) *Cisco Global Digital Readiness Index 2019*, in White Paper Cisco Public San Jose.
- Costanza, F. (2017) *Social Media Marketing and Value Co-creation: A Dynamic Performance Management Perspective*, in *Lecture Notes in Business Information Processing*, Vol. 279, pp.131–143.
- Daud, I., Nurjannah, D., Mohyi, A., Ambarwati, T., Cahyono, Y., Haryoko, A., Handoko, A., Putra, R., Wijoyo, H. and Ari-yanto, A. (2022) 'The effect of digital marketing, digital finance and digital payment on finance performance of Indonesian SMEs', *International Journal of Data and Network Science*, Vol. 6, No. 1, pp.37–44.
- Desai, V. (2019) 'Digital marketing: a review', *International Journal of Trend in Scientific Research and Development*, Vol. 5, No. 5, pp.196–200.
- Diamantopoulos, A. (1994) 'Modelling with LISREL: a guide for the uninitiated', *Journal of Marketing Management*, Vol. 10, Nos. 1–3, pp.105–136.
- Dlodlo, N. and Dhurup, M. (2010) 'Barriers to E-marketing adoption among small and medium enterprises (SMEs) in the VAAL traingle', *Acta Commercii*, Vol. 10, No. 1, pp.164–180.
- Ehmke, C., Ernst, S.C., Hopkins, J.W. and Tweeten, L.G. (2001) 'The market for e-commerce services in agriculture', Paper presented at the *AAEA Annual Meeting*, Chicago, Illinois.
- Eze, S.C., Chinedu-Eze, V.C., Bello, A.O., Inegbedion, H., Nwanji, T. and Asamu, F. (2019) 'Mobile marketing technology adoption in service SMEs: a multi-perspective framework', *Journal of Science and Technology Policy Management*, Vol. 10, No. 3, pp.569–596.
- Fedulova, S.A. (2021) 'Influence of cross-border digital flows on the growth of global e-commerce on the backgroup of the COVID-19 pandemic', *European Vector of Economic Development*, Vol. 2, No. 31, pp.106–116.
- Galeazzo, A. (2021) 'Degree of Leanness and lean maturity: exploring the effects on financial performance', *Total Quality Management and Business Excellence*, Vol. 32, Nos. 7–8, pp.758–776.
- Giantari, I., Yasa, N., Suprasto, H. and Rahmayanti, P. (2022) 'The Role of digital marketing in mediating the effect of the COVID-19 pandemic and the intensity of competition on business performance', *International Journal of Data and Network Science*, Vol. 6, No. 1, pp.217–232.
- Goffin, R.D. (2007) 'Assessing the adequacy of structural equation models: golden rules and editorial policies', *Personality and Individual Differences*, Vol. 42, No. 5, pp.831–839.
- Gold, A.H., Malhotra, A. and Segars, A.H. (2001) 'Knowledge management: an organizational capabilities perspective', *Journal of Management Information Systems*, Vol. 18, No. 1, pp.185–214.
- Gyamfi, K.A. (2016) *Factors Affecting the Adoption of E-Marketing among SMEs; Case Study of Selected SMEs in the Kumasi Metropolis, Ashanti Region*, Doctoral Dissertation, Kwame Nkrumah University of Science and Technology.
- Hair Jr, J.F., Hult, G.T.M., Ringle, C.M., Sarstedt, M., Danks, N.P., Ray, S., Hair, J.F., Hult, G.T.M., Ringle, C.M. and Sarstedt, M. (2021) 'An introduction to structural equation modeling', *Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*, pp.1–29.
- Hair, J.F., Anderson, R.E., Tatham, R.L. and Black, W.C. (2010) *Multivariate Data Analysis*, Prentice-Hall, New Jersey.
- Hannula, M. and Lonnqvist, A. (2002) 'How the internet affects productivity', *International Business and Economics Research Journal*, Vol. 1, No. 2, pp.83–91.
- Hasyim, H., Simarmata, J. and Nasirwan, N. (2022) 'Building marketing performance through digital marketing and database-based networking capability in Indonesian SMEs', *International Journal of Data and Network Science*, Vol. 6, No. 4, pp.1125–1134.
- Hollebeek, L.D. and Macky, K. (2019) 'Digital content marketing's role in fostering consumer engagement, trust, and value: framework, fundamental propositions, and implications', *Journal of Interactive Marketing*, Vol. 45, No. 1, pp.27–41.
- Hox, J. and Bechger, T. (1999) 'An introduction to structural equation modeling', *Family Science Review*, Vol. 11, pp.354–373.

- Iddris, F. and Ibrahim, M. (2011) *Examining the Relationships Between E-Marketing Adoption and Marketing Performance of Small and Medium Enterprises in Ghana* [online] <https://www.diva-portal.org/smash/get/diva2:809311/FULLTEXT02.pdf>.
- Islam, M.M., Habes, E.M. and Alam, M.M. (2018) 'The usage and social capital of mobile phones and their effect on the performance of microenterprise: an empirical study', *Technological Forecasting and Social Change*, Vol. 132, pp.156–164.
- Israel, G.D. (1992) *Determining Sample Size*, University of Florida Cooperative Extension Service: Institute of Food and Agriculture Sciences, EDIS, Gainesville, FL.
- Ištvančić, M., Milić, C. and Krpić, Z. (2017) 'Digital marketing in the business environment', *International Journal of Electrical and Computer Engineering Systems*, Vol. 8, No. 2, pp.67–75.
- ITU (2008) *ITU: Committed to Connecting the World* [online] <https://www.itu.int/en/ITU/Statistics/Pages/stat/default.aspx> (accessed 19 January 2023).
- Jacuński, M. (2018) 'Measuring and analysis of digital marketing', in *Big Data, Digital Marketing and Trendwatching*, pp.11–27, University of Lower Silesia: National Center for Research and Development, Wrocław.
- Kang T. (2019) *WhatsApp the Most Popular Mobile App in Laos* [online] <https://laotiantimes.com/2019/07/12/whatsapp-the-most-popular-mobile-app-in-laos>.
- Kaplan, D. (2008) *Structural Equation Modeling: Foundations and Extensions*, Vol. 10, SAGE Publications, Singapore.
- Kotler, P.T. and Armstrong, G. (2017) *Principles of Marketing*, G. Edition Ed., Pearson Higher Ed.
- Kyophilavong, P., Vanhnalat, B. and Sayvaya, I. (2014) 'Factors affect on SMEs Performance in Lao PDR', *International Journal of Applied Business and Economic Research (IJABER)*, Vol. 12, No. 4, pp.1267–1276.
- Leebouapao, L., Sithideth, P., Douangpaseuth, K. and Suhud, Y. (Eds.) (2020) *E-Commerce Development in the Lao PDR: Some Policy Concerns*, Economic Research Institute for ASEAN and East Asia, Jakarta, Indonesia.
- Loh, Y.X., Hamid, N.A.A., Seah, C.S., Yo, J.J., Law, Y.C., Tan, S.Y., Chung, H.L., Liew, Y.L., and Chong, C. (2021) 'The factors and challenges affecting digital economy in Malaysia', *Paper presented at the CoMBInES-Conference on Management, Business, Innovation, Education and Social Sciences*.
- Lysik, Ł. and Łopaciński, K. (2019) 'Use of virtual reality in digital marketing communication', *Informatyka Ekonomiczna*, Vol. 4, No. 54, pp.29–45.
- Maduku, D.K., Mpiganjira, M. and Duh, H. (2016) 'Understanding mobile marketing adoption intention by South African SMEs: a multi-perspective framework', *International Journal of Information Management*, Vol. 36, No. 5, pp.711–723.
- Ministry of Technology and Communications (2019) *Statistical Report on Technology and Communication* [online] <https://www.mpt.gov.la> (accessed 10 May 2022).
- Ministry of Technology and Communications (2021) *Statistical Report on Technology and Communication* [online] <https://www.mpt.gov.la> (accessed 26 September 2023).
- Ministry of Technology and Communications (2023) *Vision 2040 and National Digital Economy Strategy 2021-2030* [online] <https://mtc.gov.la/index.php?r=site/contents&id=15>.
- Mishra, C. (2020) *Digital Marketing: Scope Opportunities and Challenges*, Vol. 115, IntechOpen, London.
- NapoloenCat (2022) *Facebook users in Laos* [online] <https://napoloencat.com/stats/facebook-users-in-laos/2022/04> (accessed 11 May 2022).
- Nuseir, M. and Refae, G. (2022) 'The effect of digital marketing capabilities on business performance enhancement: mediating the role of customer relationship management (CRM)', *International Journal of Data and Network Science*, Vol. 6, No. 2, pp.295–304.
- Nuseir, M.T. (2018) 'Digital media impact on SMEs performance in the UAE', *Academy of Entrepreneurship Journal*, Vol. 24, No. 2, pp.1–13.

- Obeidat, A.M. (2021) 'E-Marketing and its impact on the competitive advantage', *Ilkogretim Online*, Vol. 20, No. 5, pp.196–207.
- Pagani, M. and Pardo, C. (2017) 'The impact of digital technology on relationships in a business network', *Industrial Marketing Management*, Vol. 67, pp.185–192.
- Ponde, S. and Jain, A. (2019) 'Digital marketing: concepts and aspects', *International Journal of Advanced Research*, Vol. 7, No. 2, pp.260–266.
- Popa, D.C.S., Popa, D.N., Bogdan, V. and Simut, R. (2021) 'Composite financial performance index prediction—a neural networks approach', *Journal of Business Economics and Management*, Vol. 22, No. 2, pp.277–296.
- Porter, M.E. and Millar, V.E. (1985) 'How information gives you competitive advantage', *Harvard Business Review*, Vol. 63, No. 4, pp.2–13.
- Pulizzi, J. and Barrett, N. (2009) 'Get content get customers—turn prospects into buyers with content marketing', *Saxena NSB Management Review*, Vol. 2, No. 2, pp.98–100.
- Ramon-Jeronimo, J.M., Florez-Lopez, R. and Araujo-Pinzo, P. (2019) 'Resource-based view and SMEs performance exporting through foreign intermediaries: the mediating effect of management controls', *Sustainability*, Vol. 11, No. 12, p.3241.
- Ringle, C.M., Sarstedt, M., Sinkovics, N. and Sinkovics, R.R. (2023) 'A perspective on using partial least squares structural equation modelling in data articles', *Data in Brief*, Vol. 48, p.109074.
- Saleh, H. (2020) 'Enhance small medium enterprise (Smes) family business in Malaysia through E-marketing strategies', *International Journal of Scientific and Technology Research*, Vol. 9, No. 2, pp.3374–3377.
- Santos, J.B. and Brito, L.A.L. (2012) 'Toward a subjective measurement model for firm performance', *BAR-Brazilian Administration Review*, Vol. 9, No. 6, pp.95–117.
- Shah, M. (2018) 'Impact of digital marketing in business and politics', *International Journal of Scientific and Engineering Research*, Vol. 9, No. 2, pp.10–14299.
- Shivalingaiah, D. and Naik, U. (2008) 'Comparative study of Web 1.0, Web 2.0 and Web 3.0', Paper presented at the in *6th International CALIBER 2008*, University of Allahabad, Allahabad [online] <http://www.ftsm.ukm.my/ss/book/Comparative%20Study.pdf> (accessed 10 May 2022).
- Singh, A. (2021) *Big Data Analytics for Improved Accuracy, Efficiency, and Decision Making in Digital Marketing*, ed., IGI Global, Punjab.
- Singh, S., Singh, G. and Dhir, S. (2022) 'Impact of digital marketing on the competitiveness of the restaurant industry', *Journal of Foodservice Business Research*, Vol. 27, No. 2, pp.109–137.
- Smid, S.C. and Rosseel, Y. (2020) 'SEM with small samples: two-step modeling and factor score regression versus Bayesian estimation with informative priors', in *Small Sample Size Solutions*, pp.239–254, Routledge, New York.
- Southiseng, N. and Walsh, J. (2010) 'Competition and management issues of SME entrepreneurs in Laos: evidence from empirical studies in Vientiane Municipality, Savannakhet and Luang Prabang', *Asian Journal of Business Management*, Vol. 2, No. 3, pp.57–72.
- Sunkpho, J., Ramjan, S. and Ottamakorn, C. (2018) 'Cybersecurity policy in ASEAN countries', *Paper Presented at the 17th Annual Security Conference*.
- Suryani, T., Fauzi, A.A. and Nurhadi, M. (2022) 'What should companies do to improve brand awareness through Instagram? The lens of signalling theory', *Asian Journal of Business and Accounting*, Vol. 15, No. 2, pp.247–279, DOI:10.22452/ajba.vol15no2.9.
- Tadesse, D. and Pettersson, T. (2019) *Small Enterprises' Marketing Strategy in the Digital Era* (Master Master), GAVLE, GAVLE [online] <https://www.diva-portal.org/smash/get/diva2:1327656/FULLTEXT01.pdf>.
- Taiminen, H. and Karjaluoto, H. (2015) 'The usage of digital marketing channels in SMEs', *Small Business and Enterprise Development*, Vol. 22, No. 4, pp.633–651, DOI:10.1108/JSBED-05-2013-0073.

- Tarhini, A. (2013) 'The effects of individual-level culture and demographic characteristics on e-learning acceptance in Lebanon and England: a structural equation modelling approach', Available at SSRN 2725438.
- Tarutė, A. and Gatautis, R. (2014) 'ICT impact on SMEs performance', *Procedia-Social and Behavioral Sciences*, Vol. 110, pp.1218–1225.
- Tayibnapis, A.Z., Wuryaningsih, L.E. and Gora, R. (2018) 'The development of digital economy in Indonesia', *IJMBS International Journal of Management and Business Studies*, Vol. 8, No. 3, pp.14–18.
- Thomkaew, J., Homhual, P., Chairat, S. and Khumhaeng, S. (2019) 'Comparison of traditional market performance and electronic market of new entrepreneurs', *Journal of Computational and Theoretical Nanoscience*, Vol. 16, No. 12, pp.4991–4994.
- UNCTAD (2021) 'The UNCTAD B2C e-Commerce Index 2020', *United Nations Conference on Trade and Development (UNCTAD)*.
- Walters, P.G. (2008) 'Adding value in global B2B supply chains: strategic directions and the role of the Internet as a driver of competitive advantage', *Industrial Marketing Management*, Vol. 37, No. 1, pp.59–68.
- Wang, F. (2020) 'Digital marketing capabilities in international firms: a relational perspective', *International Marketing Review*, Vol. 37, No. 3, pp.559–577.
- Wang, Z., Rafait Mahmood, M., Ullah, H., Hanif, I., Abbas, Q. and Mohsin, M. (2020) 'Multidimensional perspective of firms' IT capability between digital business strategy and firms' efficiency: a case of Chinese SMEs', *SAGE Open*, Vol. 10, No. 4, p.2158244020970564.
- Wisdom, E. (2015) *The Impact of E-Marketing on Business Performance: a Case Study of the Midlands Meander Association Members*, (Master), Durban University of Technology, [online] https://ir.dut.ac.za/bitstream/10321/1302/1/WISDOM_2015.pdf (accessed 18 November 2023).
- Yosep, M.A., Mohamed, M., Yusliza, M.Y., Saputra, J., Muhammad, Z. and Bon, A.T. (2021) 'Does digital marketing platforms affect business performance? A mini-review approach', Paper presented at the *Proceedings of the International Conference on Industrial Engineering and Operations Management*.
- Yu, J., Wang, J. and Moon, T. (2022) 'Influence of digital transformation capability on operational performance', *Sustainability*, Vol. 14, No. 13, p.7909.