

The Relationship between Digital Marketing Adoption and SMEs' Performance in the Furniture Manufacturing Sector in Johor, Malaysia

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Abstract

This study examines the relationship between the performance of small and medium-sized businesses (SMEs) in the furniture manufacturing industry in Johor, Malaysia, and their digital marketing adoption. The foundation of Malaysia's economy is made up of SMEs, and the furniture sector makes a substantial export contribution. However, obstacles to their development and competitiveness include poor digital adoption, antiquated marketing techniques, and resource limitations. The study aims to analyze the SMEs' performances, determine the extent of digital marketing adoption, and investigate the relationships between them. The study uses a quantitative methodology and surveys furniture manufacturing SME stakeholders to offer practical advice to entrepreneurs and policymakers on how to improve SMEs' performances through successful digital marketing tactics, promoting innovation, and local economic development.

1. Introduction

Companies are classified as small or medium-sized if their assets, turnover or number of employees are below a certain threshold. The manufacturing sector in Malaysia must not have more than 200 full-time employees or turnover must not exceed RM50 million (Staff, 2023). According to OECD (2022), SMEs comprised a total of 1,151,399 enterprises and 48% of the country's labour force was employed in these enterprises in 2020. 5.1% of these SMEs were in the manufacturing industry. In Malaysia, there are 1,890 registered SMEs manufacturing furniture under these industries (Ali, 2024). Small and medium enterprises (SMEs), which account for about 85% of all registered furniture manufacturing companies in the nation, dominate the furniture sector. Within Malaysia's wood-based economy, furniture manufacturing is the fastest-growing sub-sector, contributing about 1.1% to the country's GDP (Ratnasingam *et al.*, 2020).

According to Emeritus (2024), a detailed plan that describes how companies will use digital platforms, channels, and technologies to achieve their marketing objectives is called a digital marketing strategy. People rarely read newspapers and magazines these days, perhaps because they can easily get the latest information on pop culture trends and news online. Consequently, many businesses are now turning to digital marketing instead of their old, traditional marketing methods (UOW Malaysia, 2022). In 2024, a preference for certain social media platforms, a high level of internet adoption, and a diverse spectrum of online usage are characteristics of the digital marketing trend in Malaysia (Avenu, 2024). At the beginning of 2024, there were 33.59 million internet users in Malaysia, with an internet penetration of 97.4%. This shows how much the country has embraced and utilized the digital world. In January 2024, 28.68 million people in Malaysia used social media, which is 83.1% of the country's total population (Kemp, 2024).

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Adam *et al.* (2021) discuss the difficulties faced by Malaysian SMEs (small and medium-sized enterprises) during the COVID-19 pandemic, including outdated marketing techniques. Due to the disruption of operations and supply chain caused by the extended MCO, conventional marketing techniques were useless. It was difficult for SMEs to connect with customers if they relied solely on conventional techniques such as print ads and commercials. Traditional marketing is losing its competitive edge, and small and medium-sized enterprises (SMEs) need to embrace digital technologies to survive in the current climate. Furthermore, it is equally important to understand the adoption rate of digital marketing among small businesses. Contrary to expectations, the percentage of Malaysian SMEs that have successfully adopted internet marketing is only 19.7% (Nordin *et al.*, 2023). According to Idris (2021), small and medium entrepreneurs often face the problem that customers are not aware of their offerings when they first start their business. The majority promote their goods exclusively within the confines of their business. Especially during the COVID-19 crisis, when consumers are moving from traditional to online purchasing behaviour, this type of activity leads to their items becoming outdated. Some SMEs are struggling to adapt to the changing buying habits of their customers.

Khai *et al.* (2020) highlight that during the MCO era, many SMEs struggled to establish work-from-home rules because they were lack of digitalization and could not take advantage of the e-commerce opportunities that arose during the pandemic. This was often because the owners or founders did not recognize the importance and value of technology, especially for borderless commerce. Although sometimes overlooked, serious games that utilize digital technologies for learning can potentially improve SMEs' knowledge and skills. Furthermore, one of the issues SMEs currently struggle with is engagement in digitalization. Large companies can usually muster the resources required for digitalization. However, the challenge is to address the lack of resources and expertise in infrastructure and technology, human capital, information security concerns, top management commitment, and resistance to change to enable SMEs to participate in the Internet agenda (Wen & Atan, 2021). In addition, more than 50% of Malaysians fully utilize their smartphones to access the Internet. Due to these internet access capabilities, many things have undoubtedly changed from analog to digital or online. Therefore, even though most small businesses do not pay enough attention to digitizing their business operations, SMEs must continue to work effectively to be competitive in the market and engage with Industry 4.0. Digital marketing strategies play a crucial role in this regard. Unlike other countries, only 29% of Malaysian SMEs have a website, and only 32% use digitalization for business activities (Hasbolah *et al.*, 2022).

Tajudin *et al.* (2021) discusses the problems of customer shortage faced by micro-entrepreneurs in Malaysia due to the Movement Control Order (MCO). The restriction of freedom of movement led to a sharp decline in business activities. The decline in customers even affected essential businesses, while some managed to adapt by offering services in their stores or shopping online. According to Razak *et al.* (2018), SMEs in Malaysia also struggle to build marketing networks and lack knowledge about the available platforms for marketing. The main problems faced by small and medium enterprises (SMEs) in Malaysia include unfamiliarity with branding, exporting, marketing strategies and customer loyalty, as well as the lack of strong relationships with domestic and foreign companies. SMEs' inability to reach the target market and their lack of experience in managing customer relationships have also made it difficult for them to retain potential customers (Lim & Teoh, 2021). The branding problems of SMEs also include inferior goods and services, weak marketing network, lack of accreditation, poor plan, and inadequate advertising (Rani *et al.*, 2022).

In addition to limited technology resources, SMEs often struggle with financing and resource constraints such as finance operations, marketing the product, and providing sufficient funds for staff training. The situation is similar to that of SME financing, especially for developing and marketing their product. SMEs need sufficient funding to compete in the current highly competitive business climate. For the industry to remain highly competitive, research must be conducted regularly to meet customer demands (Raihana *et al.*, 2017). In addition, small and medium-sized enterprises only have average sales and lower market shares due to financing restrictions. Therefore, SMEs cannot engage in marketing, advertising, research and development, appealing packaging, etc. SMEs usually have less capital and insufficient financial resources, so they sell their goods nearby. They must pay more for transportation costs to reach customers who live far away (Faizal *et al.*, 2019).

Therefore, to achieve the research objectives the level of digital marketing adoption among SMEs in the furniture manufacturing sector and the level of SMEs' performances in the furniture manufacturing sector in Johor, Malaysia are identified. Furthermore, the relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector in Johor, Malaysia is studied.

2. Literature Review

The definition of Small and Medium Enterprises (SMEs) in Malaysia has been updated to reflect higher thresholds for turnover and employment in the manufacturing and services sectors. Under the revised definition, a business falls into the SME category if its turnover is below RM50 million or if it employs less than 200 full-time employees in manufacturing, or if its turnover is below RM20 million or if it employs less than 75 full-time employees in services and other sectors (Whah & Lim, 2021). Despite challenges like the COVID-19 crisis impacting SME employment, these businesses play a significant role in Malaysia's economy, contributing 38.3% to the GDP in

2018 (Kamarolzaman *et al.*, 2023). SMEs are recognized as vital drivers of economic growth and job creation, with 907,000 registered SME owners in 2020 (Fadzil & Rashid, 2022). However, access to funding remains crucial, with personal loans, loans from friends and family, and support from government programs being the primary sources of financial assistance for SMEs (Ali *et al.*, 2022).

2.1 Furniture Manufacturing SMEs

Ratnasingam *et al.* (2021) highlight the pivotal role of small and medium enterprises (SMEs) in propelling the growth of Malaysia's furniture sector. SMEs form the backbone of this labor-intensive industry, providing the necessary flexibility in design and production demanded by the global market. Despite Malaysia's status as a top furniture exporter, the sector faces challenges such as stagnant growth rates and limited innovation, leading to low competitiveness internationally (Yi *et al.*, 2021). Nevertheless, the industry remains a significant contributor to Malaysia's economy, employing thousands and generating billions in foreign exchange annually (Ratnasingam *et al.*, 2018). However, the onset of the COVID-19 pandemic has exacerbated challenges for SMEs, disrupting supply chains and financial stability. Addressing these issues necessitates exploring new avenues such as internet distribution channels to enhance market share and resilience (Hasin *et al.*, 2021; Ratnasingam *et al.*, 2023).

2.2 Digital Marketing

Digital marketing, as described by Bala & Verma (2018), is the utilization of technology to bolster marketing efforts with the goal of comprehensively understanding customer needs and preferences. This approach is particularly recognized in developed economies, where companies integrate traditional marketing tactics with online platforms to better serve their clientele. Kannan & Alice (2017) emphasize that in modern digital landscapes, value is crafted through customization facilitated by digital tools, fostering innovative customer experiences and interactions. Dastane (2020) highlights how digital marketing has transformed the marketing paradigm, supplanted traditional methods and enabled more effective customer engagement in the era of e-commerce. Moreover, Wu *et al.* (2024) underscore the strategic importance of digital marketing in harnessing digital technologies to glean insights into consumer behaviour and market trends, facilitating informed business decisions. Ultimately, digital marketing encompasses a spectrum of practices across various digital channels, originating from website development to targeted advertising, leveraging the internet as a pivotal platform for commerce (Minculete & Olar, 2018).

2.3 Digital marketing adoption among SMEs in the furniture manufacturing sector

The furniture industry, traditionally reliant on physical showrooms and trade fairs, saw a significant shift towards digital marketing strategies, catalyzed further by the COVID-19 pandemic. Even before the pandemic, large manufacturers were leveraging digital marketing, but the crisis forced smaller players to follow suit. The cancellation of major events like the Malaysian International Furniture Fair (MIFF) and EFE in 2020 prompted furniture manufacturers to explore alternative marketing avenues.

Digital marketing became a lifeline for these manufacturers, facilitated by governmental support. This shift can be observed across various digital marketing strategies. Search Engine Optimization (SEO) and Search Engine Marketing (SEM) became crucial for enhancing online visibility and driving traffic (Noviana & Darma, 2020). Content Marketing emerged to engage and inform potential customers, utilizing platforms like blogs and social media (Noviana & Darma, 2020). Meanwhile, Affiliate Marketing offered opportunities for collaboration and expanding reach through partnerships (Noviana & Darma, 2020). Social Media Marketing (SMM) played a pivotal role in brand promotion and lead generation, with platforms like Facebook, Twitter, and Instagram serving as key channels (Desai, 2019). Pay-Per-Click (PPC) advertising facilitated targeted outreach and increased website traffic through platforms like Google AdWords and social media ads (Desai, 2019).

Marketing Automation streamlined repetitive tasks, including email newsletters and lead nurturing, enhancing efficiency (Desai, 2019). Native Advertising seamlessly integrated promotional content with non-paid material, ensuring a native user experience (Desai, 2019). Display Advertising utilized visual elements to build brand recognition and drive conversions (Putri, 2021). Email Marketing remained effective for regular communication and customer engagement, with businesses leveraging subscriber lists for targeted campaigns (Montoya, 2023). Website Marketing focused on optimizing websites to attract and retain customers throughout the purchasing journey (Gezu, 2024). Online Public Relations (Online PR) became essential for maintaining brand reputation and fostering online engagement (Bala & Verma, 2018). Lastly, Web Analytics provided invaluable insights into online business activities, aiding marketers in understanding customer behaviour and optimizing strategies for improved ROI and conversions (Bala & Verma, 2018). Through these diverse digital marketing avenues, furniture manufacturers adapted to the new normal, ensuring their continued relevance and growth in an increasingly digital landscape.

2.4 SMEs' performances in the furniture manufacturing sector

Digital marketing significantly influences the performance of small and medium-sized enterprises (SMEs) in the new century, particularly in countries like Malaysia, where the government supports ICT integration. This shift began in the 1990s, transforming business operations and marketing strategies. Digital marketing offers five key benefits: reducing marketing costs, ensuring company revenues, providing equitable opportunities, fostering business growth, and enhancing customer trust and loyalty. It is cost-effective, allowing firms to reach vast audiences with minimal capital (Madan, 2021). Digital marketing supports traditional marketing principles, driving sales and customer satisfaction (Veleva & Tsvetanova, 2020). It levels the playing field for businesses of all sizes, enabling SMEs to compete fairly and efficiently (Nguyen *et al.*, 2020). Effective digital marketing is crucial for business growth, helping companies stand out in a competitive digital landscape (Victoriani *et al.*, 2024). It also enhances customer engagement, allowing marketers to understand consumer needs better and build trust through targeted and authentic advertisements (Moncey, 2020).

2.5 Relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector

The performance of small and medium-sized businesses (SMEs) in the furniture manufacturing industry is greatly impacted by the use of digital marketing. Although the majority of the literature currently available on digital marketing is on large corporations, studies show that SMEs are increasingly realising the advantages of digital marketing, especially in highly competitive industries like furniture manufacturing (Ritz *et al.*, 2019; Gao *et al.*, 2023).

Adoption of digital marketing helps SMEs get past the drawbacks of traditional marketing, increasing their capacity to enter larger, global markets. SMEs are better positioned to increase product sales, market penetration, and brand awareness when they employ tactics like social media, search engine optimisation (SEO), and data-driven marketing (Chaffey & Chadwick, 2024). However, well-defined marketing objectives are necessary for successful implementation. SMEs that prioritise customer advocacy, brand awareness, and brand building typically beat those that only concentrate on sales-oriented strategies (Malesev & Cherry, 2021).

SMEs still face several obstacles to adopting digital marketing, despite its benefits. Inadequate IT infrastructure, scarce resources, and a shortage of qualified staff are among the difficulties (Thaha *et al.*, 2021). For example, in Malaysia's value-added wood products industry, 96% of companies stated that a major barrier to the implementation of digital marketing was a lack of skilled personnel (Ratnasingam *et al.*, 2021). Furthermore, despite their recognition of the significance of digital marketing, many SMEs are unsure of how to properly utilise it due to the fast advancement of technology.

In conclusion, the implementation of digital marketing gives SMEs in the furniture manufacturing industry a competitive edge, allowing them to improve performance and reach a wider audience. However, in order for SMEs to effectively profit from digital marketing, they must overcome skill shortages, resource limitations, and technology concerns.

3. Research Methodology

3.1 Research Design

A quantitative research technique that deals with quantifying and analyzing variables is used to gain insights. It involves the use of statistical methods to analyze numerical data to provide answers to the questions of who, what, where, when, how many, and how. Explaining a problem or event by collecting numerical data and analyzing it using mathematical techniques, especially statistics, is also known as quantitative research methods (Apuke, 2017). The researcher has used a quantitative approach (survey) to collect the research data. The questionnaire was distributed online in the form of a survey with questions rated on a scale of 1 to 5 to determine the respondents' level of agreement. At the end of the study, the report can provide evidence for the research questions. A correlation analysis was also conducted between the independent and dependent variables of the study.

The scope of the research is confined to furniture manufacturing SMEs in Johor, providing a targeted and detailed analysis of this specific market segment. Moreover, Johor was chosen for the study because furniture manufacturing in Johor plays a critical role in contributing to Malaysia's exports of wood products, accounting for 60 percent of the export value (Malaysian Investment Development Authority, 2024). The study targets company owners, marketing managers, marketing executives, or marketing assistants in small and medium enterprises from the furniture industries in Johor, Malaysia. This study utilizes quantitative methods to ensure a smooth flow. The researchers will distribute the questionnaires to company owners, marketing managers, marketing executives, or marketing assistants through survey forms.

3.2 Research Population and Sample

A sample is the selection of a subset of the population for further investigation, where the population can be defined as all individuals or objects one is trying to capture (Rahi, 2017). Therefore, furniture manufacturing SMEs in Johor, Malaysia, are the target population of this research. Johore Furniture Manufacturers and Traders Association (JFA) has around 700 members (JFA, 2024). According to Krejcie & Morgan (1970) as shown in Table 1, the sample size for this study is 248 furniture manufacturing SMEs in Johor, Malaysia.

Table 1 Determining sample size method Krejcie and Morgan (1970)

| <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> | <i>N</i> | <i>S</i> |
|----------|----------|----------|----------|----------|----------|
| 10 | 10 | 220 | 140 | 1200 | 291 |
| 15 | 14 | 230 | 144 | 1300 | 297 |
| 20 | 19 | 240 | 148 | 1400 | 302 |
| 25 | 24 | 250 | 152 | 1500 | 306 |
| 30 | 28 | 260 | 155 | 1600 | 310 |
| 35 | 32 | 270 | 159 | 1700 | 313 |
| 40 | 36 | 280 | 162 | 1800 | 317 |
| 45 | 40 | 290 | 165 | 1900 | 320 |
| 50 | 44 | 300 | 169 | 2000 | 322 |
| 55 | 48 | 320 | 175 | 2200 | 327 |
| 60 | 52 | 340 | 181 | 2400 | 331 |
| 65 | 56 | 360 | 186 | 2600 | 335 |
| 70 | 59 | 380 | 191 | 2800 | 338 |
| 75 | 63 | 400 | 196 | 3000 | 341 |
| 80 | 66 | 420 | 201 | 3500 | 346 |
| 85 | 70 | 440 | 205 | 4000 | 351 |
| 90 | 73 | 460 | 210 | 4500 | 354 |
| 95 | 76 | 480 | 214 | 5000 | 357 |
| 100 | 80 | 500 | 217 | 6000 | 361 |
| 110 | 86 | 550 | 226 | 7000 | 364 |
| 120 | 92 | 600 | 234 | 8000 | 367 |
| 130 | 97 | 650 | 242 | 9000 | 368 |
| 140 | 103 | 700 | 248 | 10000 | 370 |
| 150 | 108 | 750 | 254 | 15000 | 375 |
| 160 | 113 | 800 | 260 | 20000 | 377 |
| 170 | 118 | 850 | 265 | 30000 | 379 |
| 180 | 123 | 900 | 269 | 40000 | 380 |
| 190 | 127 | 950 | 274 | 50000 | 381 |
| 200 | 132 | 1000 | 278 | 75000 | 382 |
| 210 | 136 | 1100 | 285 | 100000 | 384 |

Note.—*N* is population size. *S* is sample size.

Source: Krejcie & Morgan, 1970

3.3 Sampling Method

In this research, a convenience sampling method was used in this study. According to Sullivan (2012), convenience sampling is the technique of gathering data from a study population that the researcher can easily access. Convenience sampling is a sampling method that necessitates the researchers asking people to participate, as opposed to probability sampling. Convenience sampling may be used in practically any research since it allows researchers to use a sample that is easily accessible and readily available. Because of the differences in the target group, this sampling strategy allows the researcher to complete interviews or get responses cost-effectively, although it may also be criticized for selection bias.

3.4 Data Collection

Data collection is the act of systematically collecting and measuring information about variables to enable the answering of predetermined research questions, the testing of hypotheses, and the evaluation of results (Kabir, 2016). For research, data is collected from both primary and secondary data.

3.4.1 Primary Data

Kabir (2016) defines primary data as first-hand information. The original, more trustworthy, accurate, and unbiased data has not yet been published. The four primary sources are individuals, focus groups, panels, and non-intrusive techniques. The researcher has used individual primary sources such as questionnaires. The researcher distributes the questionnaire to the owners of small and medium furniture manufacturing companies, marketing managers, marketing managers, or marketing assistants through an online form (Google Form). Subsequently, the data obtained will be analyzed using the statistical analysis technique of the Statistical Packaged for Social Science (SPSS) application, and the results will be extracted for further discussion in later chapters.

3.5 Pilot Study

A pilot study, as described by Ismail *et al.* (2018), precedes a final research study, serving to test procedures and gauge potential success. It helps refine research questions, determine effective approaches, and estimate resource needs. Through pilot testing, researchers identify and address issues like questionnaire comprehension and

validity. Data cleaning and reliability analysis ensure questionnaire suitability. Cronbach's alpha coefficient values above 0.70 signify acceptance for the study's items.

3.6 Research Instrument

The instrument used to collect data from the respondents is the questionnaire, which consists of several questions and using a five-point Likert scale of 1 to 5 to determine the respondents' level of agreement. The questionnaire consists of three parts: Part A, B and C as shown in Table 2.

Table 2 Construct Measurement Table

| Section | Variables | Measurement | Scale of Measurement | References |
|----------------------|--------------------------------|-------------------|----------------------|-------------------|
| A | Demographics of the respondent | Nominal and Ratio | - | - |
| Independent Variable | | | | |
| B | Digital Marketing Adoption | Nominal | 5-point Likert Scale | (Dharmappa, 2019) |
| Dependent Variable | | | | |
| C | SMEs' Performances | Nominal | 5-point Likert Scale | (Salayi, 2020) |

3.7 Data Analysis

After the respondents completed the questionnaire, the researcher uses SPSS to analyse the data obtained from the questionnaire. Researchers can use SPSS, a program that helps with data analysis and the creation of tables and graphs. To enable a better understanding of the data obtained by the researcher from the target respondents for this research study, SPSS tables will be used.

3.7.1 Reliability Analysis

The value of Cronbach's Alpha as shown in Table 3 has been used to determine the reliability or internal consistency of the data in this study. In theory, Cronbach's Alpha values should range from 0 to 1, however, it can potentially have a negative value, indicating inaccurate data. A Cronbach's alpha of 0.70 or higher is generally considered to be an acceptable value, 0.80 or higher is considered a good value, and 0.90 or higher is considered an excellent value.

Table 3 Cronbach's Alpha

| Cronbach's Alpha | Internal Consistency |
|---------------------------|-----------------------|
| $\alpha \geq 0.90$ | Excellent |
| $0.80 \leq \alpha < 0.89$ | Good |
| $0.70 \leq \alpha < 0.79$ | Acceptable |
| $0.60 \leq \alpha < 0.69$ | Moderately acceptable |
| $0.50 \leq \alpha < 0.59$ | Poor |
| $\alpha < 0.50$ | Unacceptable |

3.7.2 Descriptive Analysis

Table 4 shows the level of mean measurement. The measures of central tendency (mean, median, mode), dispersion (range, standard deviation, variance, minimum and maximum), as well as kurtosis and skewness are all determined using descriptive analysis. Continuous variables are best described using this method (McLaughlin Library, 2022).

Table 4 Level of Mean Measurement

| Mean | Level |
|-----------|--------|
| 1.00-2.33 | Low |
| 2.34-3.67 | Medium |
| 3.68-5.00 | High |

3.7.3 Spearman's Correlation Analysis

The Spearman correlation analysis is the correlation coefficient, which has values ranging from -1 to +1, and is the final product of a correlation analysis as shown in Table 5. When two variables are perfectly related in a positive way, the correlation coefficient is +1; when two variables are perfectly related in a negative way, the correlation coefficient is -1; and when there is no linear relationship between the two variables under study, the correlation coefficient is zero (Gogtay & Thatte, 2017).

Table 5 Rules of Thumb

| Coefficient Range | Strength of Association |
|-------------------------------|-------------------------|
| 0.91 to 1.00 (-0.91 to -1.00) | Very Strong |
| 0.71 to 0.90 (-0.71 to -0.90) | Strong |
| 0.51 to 0.70 (-0.51 to -0.70) | Moderate |
| 0.31 to 0.50 (-0.31 to 0.50) | Weak |
| 0.00 to 0.30 (0.00 to -0.30) | None |

3.8 Research Flow Chart

A full research study must include the research technique as a crucial element. There are several stages in the research process flowchart. The initial stage in the research procedure was developing a study title about the relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector in Johor, Malaysia. In the next step, create the problem statement relevant to the topic and provide research questions and objectives. After that, the researcher needs to conduct a literature review of previous studies. Next, the online survey is given to the targeted respondents of the research. Data analysis will use SPSS to get the research data. Lastly, the researcher will conduct the results and conclusion. Below is the flow chart of the research:

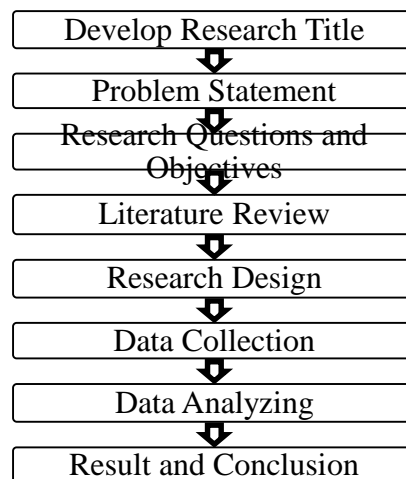


Fig. 1 Flow chart of this study

4. Data Analysis and Findings

4.1 Survey Return Rate

The study's respondents are the owners, marketing managers, marketing executives, or marketing assistants from small and medium-sized furniture manufacturing companies located in Johor, Malaysia. In all, 248 individuals were requested to answer questions in the study's questionnaire. However, only 151 responders provided the answers to all the questions. As a result, the study's response rate is 60.9%. Table 6 shows the response rate of respondents to the questionnaire.

Table 6 Survey return rate

| Population | Sample Size | Questionnaires Distributed | Return Questionnaires | Percentage (%) |
|------------|-------------|----------------------------|-----------------------|----------------|
| 700 | 248 | 248 | 151 | 60.9% |

4.2 Reliability Analysis of the Study

4.2.1 Pilot Test for the Study

Table 7 shows the reliability of the pilot test for this study. Cronbach’s Alpha value of digital marketing adoption is 0.979, while the value of SMEs’ performances is 0.989. Both variables have excellent Cronbach's Alpha values. As a result, the outcome was trustworthy and acceptable.

Table 7 Pilot test for the study

| Variable | Cronbach’s Alpha | Number of Items in Scale | Number of Respondents |
|----------------------------|------------------|--------------------------|-----------------------|
| Digital Marketing Adoption | 0.979 | 13 | 30 |
| SMEs’ Performances | 0.989 | 25 | 30 |

4.2.2 Reliability Test for the Actual Study

Table 8 indicates the actual reliability test of this study. The Cronbach’s Alpha value for digital marketing adoption is 0.954, while the Cronbach’s Alpha value for SMEs’ Performances is 0.988. The Cronbach's Alpha results for both variables are excellent. The outcome was both acceptable and appropriate.

Table 8 Reliability test for the actual study

| Variable | Cronbach’s Alpha | Number of Items in Scale | Number of Respondents |
|----------------------------|------------------|--------------------------|-----------------------|
| Digital Marketing Adoption | 0.954 | 13 | 151 |
| SMEs’ Performances | 0.988 | 25 | 151 |

4.3 Demographic Analysis

4.3.1 Gender of Respondents

The number of respondents who have been classified by gender is displayed in Table 9. In this research, 73 of them are male and 78 are female, representing 48.3% and 51.7% respectively. Thus, it shows that more women than men took part in this survey as responders.

Table 9 Gender of Respondents

| Gender | Frequency | Percentage (%) |
|--------|-----------|----------------|
| Male | 73 | 48.3 |
| Female | 78 | 51.7 |
| Total | 151 | 100 |

4.3.2 Age of Respondents

The frequency and percentage of age are displayed in Table 10. 151 respondents in all were divided into four age groups for this study: 18–20 years old, 21–25 years old, 26–30 years old, and 30 years old and above. 33.8% of respondents, or 51 people, are between the ages of 26 and 30. The next largest group of respondents are between the ages of 21 and 25 and 30 and older, who have 47 and 44 respondents, respectively. There were just nine responders who were between the ages of 18 and 20.

Table 10 Age of Respondents

| Age | Frequency | Percentage (%) |
|--------------|-----------|----------------|
| 18-20 | 9 | 6% |
| 21-25 | 47 | 31.1% |
| 26-30 | 51 | 33.8% |
| 30 and above | 44 | 29.1% |
| Total | 151 | 100 |

4.3.3 Current Designation of Respondents

Table 11 shows the current designation of respondents. According to Table 11, with 80 responses, marketing executives have the largest number of responders, followed by marketing assistants with 34 and marketing managers with 26 as well. Lastly, just 11 of the respondents are business owners.

Table 11 *Current Designation of Respondents*

| Current Designation | Frequency | Percentage (%) |
|----------------------|-----------|----------------|
| Company Owners | 11 | 7.3% |
| Marketing Managers | 26 | 17.2% |
| Marketing Executives | 80 | 53% |
| Marketing Assistants | 34 | 22.5% |
| Total | 151 | 100 |

4.3.4 Range of the Marketing Budget of the Furniture Manufacturing Company that was spent in 2023

Table 12 shows the range of the marketing budget of the furniture manufacturing company that was spent in 2023. Most participants in this study (43.7%) had a marketing budget of between RM15000 and RM50000, while 41.1% had a marketing budget of RM50000 or more. In addition, 15% of those surveyed had a marketing budget between RM5000 and RM15000. Just 5.3% of those surveyed had a marketing budget between RM1000 and RM5000.

Table 12 *Range of the marketing budget of the furniture manufacturing company that was spent in 2023*

| Range of the marketing budget of the furniture manufacturing company that was spent in 2023 | Frequency | Percentage (%) |
|---|-----------|----------------|
| RM1000-RM5000 | 8 | 5.3% |
| RM5000-RM15000 | 15 | 9.9% |
| RM15000-RM50000 | 66 | 43.7% |
| RM50000 and above | 62 | 41.1% |
| Total | 151 | 100 |

4.3.5 Current Digital Marketing Strategies for the Furniture Manufacturing Company

Table 13 shows the frequency and percentage of defined digital marketing strategies for the furniture manufacturing company at present. In this research, 147 respondents admit that they already have a defined digital marketing strategy in their furniture manufacturing company at present (97.4%), but 4 respondents do not have a defined digital marketing strategy in their furniture manufacturing company (2.6%).

Table 13 *Current digital marketing strategies for the furniture manufacturing company*

| Current digital marketing strategies for the furniture manufacturing company | Frequency | Percentage (%) |
|--|-----------|----------------|
| Yes | 147 | 97.4% |
| No | 4 | 2.6% |
| Total | 151 | 100 |

4.4 Descriptive Analysis of the Level of Digital Marketing Adoption among SMEs in the Furniture Manufacturing Sector in Johor, Malaysia

With the highest mean score of 4.8477 and the lowest standard deviation (0.39578), social media marketing (SMM) is widely and consistently adopted by firms, as shown in Table 14. With corresponding mean ratings of 4.4834 and 4.2914, Website Marketing and Marketing Automation both scores highly, demonstrating their crucial significance in modern marketing strategies. Email marketing (2.8609) and content marketing (3.6424) have medium adoption levels. Although these technologies continue to be useful, their greater standard deviation of utilization points to possible obstacles such as a lack of resources or a misaligned strategy. The standard deviation of 1.12797 and the overall average score of 4.0321 highlight how important digital marketing is for gaining a competitive edge and indicate a typically high level of adoption.

Table 14 *The Mean, Standard Deviation, and Mean Measurement of the level of digital marketing adoption among SMEs in the furniture manufacturing sector in Johor, Malaysia*

| No. | Item | Mean | Std. Deviation | Level |
|-----|-------------------------------------|--------|----------------|--------|
| 1. | Search Engine Optimization (SEO) | 3.9007 | 1.32038 | High |
| 2. | Search Engine Marketing (SEM) | 4.0331 | 1.28279 | High |
| 3. | Content Marketing | 3.6424 | 1.28242 | Medium |
| 4. | Affiliate Marketing | 4.0000 | 1.29099 | High |
| 5. | Social Media Marketing (SMM) | 4.8477 | 0.39578 | High |
| 6. | Pay-Per-Click (PPC) | 3.8212 | 1.32708 | High |
| 7. | Marketing Automation | 4.2914 | 1.08683 | High |
| 8. | Native Advertising | 4.0199 | 1.20261 | High |
| 9. | Display Advertising | 4.2781 | 1.07181 | High |
| 10. | Email Marketing | 2.8609 | 1.43313 | Medium |
| 11. | Website Marketing | 4.4834 | 0.92271 | High |
| 12. | Online Public Relations (Online PR) | 4.2185 | 0.98586 | High |
| 13. | Web Analytics | 4.0199 | 1.06126 | High |

4.5 Descriptive Analysis of the Level of SMEs' Performances in the Furniture Manufacturing Sector in Johor, Malaysia

In Table 15, the highest mean value, 4.5298, indicates that "reducing the cost of marketing" is a critical component of SMEs' performance in Johor, Malaysia's furniture manufacturing sector. This demonstrates that SMEs in this sector place a high priority on and gain a great deal from tactics that successfully lower marketing costs, which might raise profitability and operational effectiveness. With an overall average mean of 4.4230 and a standard deviation of 0.76282, respondents generally have a very good and high opinion of how digital marketing affects SMEs' success.

Table 15 *The Mean, Standard Deviation, and Mean Measurement of the level of SMEs' performances in the furniture manufacturing sector in Johor, Malaysia (Major SMEs' performances)*

| No. | Item | Mean | Std. Deviation | Level |
|-----|--|--------|----------------|-------|
| 1. | Reducing The Cost of Marketing | 4.5298 | 0.65045 | High |
| 2. | Guaranteeing Company Revenues | 4.3669 | 0.79604 | High |
| 3. | Accessing Equitable and Varied Opportunities | 4.4026 | 0.81859 | High |
| 4. | Fostering Business Growth | 4.3152 | 0.90384 | High |
| 5. | Enhancing Customer Trust and Loyalty | 4.5007 | 0.64516 | High |

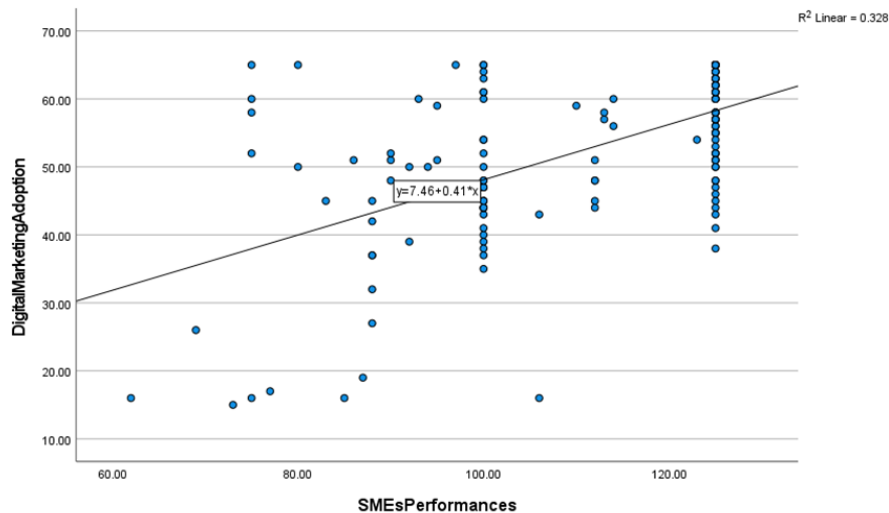
4.6 Spearman's Correlation Analysis of the Study

The Spearman's correlation between SMEs' performance and digital marketing adoption is displayed in Table 16 and Figure 2. According to the results in Table 16, Spearman's rho correlation coefficient at $p = 0.516$ has a significant value of 0.000, indicating that $p < 0.01$. It shows that digital marketing adoption has a positive and moderate relationship with SMEs' performances. This shows that the hypothesis of this study was accepted, that digital marketing adoption is positively related to SMEs' performances

Table 16 Spearman's Correlation Analysis for the relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector in Johor, Malaysia

| | Digital Marketing Adoption | SMEs' Performances |
|----------------------------|----------------------------|--------------------|
| Spearman's rho | 1.000 | .516** |
| Digital Marketing Adoption | Correlation Coefficient | .516** |
| | Sig. (2 tailed) | .000 |
| | N | 151 |
| SMEs' Performances | Correlation Coefficient | 1.000 |
| | Sig. (2 tailed) | .000 |
| | N | 151 |

The scatter plot in Fig. 2 examines the relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector in Johor, Malaysia. The plot shows a positive linear relationship, as indicated by the upward-sloping trend line. This suggests that higher levels of digital marketing adoption are associated with better SME performance. The R^2 value is 0.32, indicating that approximately 32% of the variance in SME performance can be explained by the level of digital marketing adoption. While this reflects a moderate correlation, other factors may also affect SME performance. The points are somewhat scattered around the trend line, showing the variation in the data. There is a group of SMEs with high-performance scores (above 100), but their digital marketing adoption levels also vary. The equation ($y = 7.46 + 0.41x$) suggests that for every one-unit improvement in SME performance, digital marketing adoption increases by approximately 0.41 units on average. The plot demonstrates a positive correlation between digital marketing adoption and SME performance in this industry, highlighting the potential importance of digital strategy to business success. However, the moderate R^2 value suggests that factors other than digital marketing adoption significantly affect SME performance.

**Fig. 2** Spearman's correlation analysis for the relationship between digital marketing adoption and SMEs' performances in the furniture manufacturing sector in Johor, Malaysia.

5. Conclusion

The purpose of the study was to determine how widely SMEs in Johor, Malaysia's furniture manufacturing industry were using digital marketing. As shown in Table 2.5 of Chapter 4, the results showed a high degree of acceptance of digital marketing. This high degree of adoption highlights how important digital marketing is for giving businesses a competitive edge and overcoming the drawbacks of traditional marketing. The study supports earlier studies showing that SMEs are increasingly using digital marketing to compete with bigger businesses and access international markets, especially in industries like furniture manufacture (Chaffey & Chadwick, 2024). The idea that the pandemic greatly hastened the use of digital marketing and allowed companies of all sizes to continue promoting during difficult times is further supported by research by Ratnasingam *et al.* (2021). Search engines, social media, and other online platforms are used by these SMEs' digital marketing tactics to collect data and interact with consumers. The transformational influence of the Internet as a commercial platform is shown in the

expedited commerce procedures enjoyed by businesses with high adoption rates of digital marketing (Dastane, 2020).

The purpose of the study was to investigate the performance levels of small and medium-sized businesses (SMEs) in Johor, Malaysia's furniture manufacturing industry. According to the Level of Mean Measurement study, the results show that SMEs in this industry perform well. The influence that digital marketing has on improving SME performance was strongly perceived by the respondents. The findings are consistent with other research showing that digital marketing is a cheap and efficient way for companies to connect with big audiences. For example, Madan (2021) highlighted how digital marketing tactics are affordable, allowing companies to reach a wider audience with less money. In a similar vein, Veleva and Tsvetanova's (2020) study highlighted how digital marketing enhances sales income, customer happiness, and profitability, hence complementing traditional marketing strategies. Nguyen *et al.* (2020) provided additional support for this study by pointing out that digital marketing gives firms equal possibilities and aids SMEs in increasing performance and efficiency. In a competitive, digitally linked world, Victoriani *et al.* (2024) emphasised its function in promoting corporate success by enhancing consumer interaction, visibility, and sustainable development. Furthermore, via efficient pre-sale and post-sale services, digital marketing transforms brand perception and improves consumer experiences, as demonstrated by Moncey (2020).

The performance of small and medium-sized businesses (SMEs) in the furniture manufacturing industry in Johor, Malaysia, is examined in connection to the use of digital marketing as the third study aim. Supporting the idea that digital marketing adoption improves SME performance, Spearman's correlation analysis, as shown in Fig 2, shows a positive and moderate association between digital marketing adoption and SMEs' performance. The results are consistent with earlier research showing that SMEs are more likely to embrace digital marketing when it provides benefits above conventional approaches and fits in with their IT infrastructure and business culture. Despite this, many SME owners are frequently ignorant of how to completely utilise digital marketing for business growth due to the quick improvements in technology (Thaha *et al.*, 2021). With companies adopting tactics like data science and Internet marketing to boost sales, brand recognition, and market penetration, digital marketing is seen as a tool that may enhance profits, which is in line with earlier studies like Suroso & Rafinda (2021) (Gao *et al.*, 2023). In contrast to major organisations, which can afford to recruit outside experts for complex digital marketing strategies, small firms frequently experience difficulties because they lack the necessary resources and skills (Ritz *et al.*, 2019). Despite the change from conventional to digital channels brought on by the pandemic, digital marketing is still underutilised in Malaysia's value-added wood product industry. The industry's price-based competitiveness, which restricts the cost of sophisticated marketing activities, and a shortage of qualified digital marketing specialists are two major obstacles (Ratnasingam *et al.*, 2021). Additionally, although digital marketing can be more effective and less expensive than traditional techniques, its success relies on well-defined marketing goals. Research indicates that companies that prioritise customer loyalty, brand quality, and awareness outperform those that only prioritise sales and earnings (Malesev & Cherry, 2021). This emphasises how crucial it is for SMEs to have focused marketing plans in order to maximise their marketing initiatives and results.

The performance of SMEs in the furniture manufacturing industry in Johor is examined in this study in relation to the use of digital marketing. Improvements in cost reduction, revenue, market potential, growth, and customer trust are all shown to have a positive and moderate link. Notwithstanding drawbacks such as a small sample size and a narrow regional focus, the results highlight how crucial internet marketing is becoming for SMEs. For more generalisability, future research should increase the sample size and enhance the questionnaire design.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: **study conception and design:** Lam Wei Liu, Anim Zalina Azizan; **data collection:** Lam Wei Liu; **analysis and interpretation of results:** Lam Wei Liu.; **draft manuscript preparation:** Lam Wei Liu, Anim Zalina Azizan. All authors reviewed the results and approved the final version of the manuscript.

References

- Adam, A., Hassan, R., & Abdullah, H. (2021). Maintaining The Survival of Malaysian SMEs During Covid-19 Outbreak : Challenges and Suggestion for Management. *ASEAN Entrepreneurship Journal*, 7(1), 27–33. <https://ir.uitm.edu.my/id/eprint/46906/1/46906.pdf>
- Ali, I., Khatoon, A., Imam, A., Baig, A., & Olarewaju, O. M. (2022). An Analysis of Malaysian SMEs ' Access to Public Financial Assistance. *Universal Journal of Accounting and Finance*, 10(1), 131–136. <https://doi.org/10.13189/ujaf.2022.100114>
- Ali, S. (2024). *Effect Of Green Human Resource Management Practices On Firm Environmental Innovativeness In The Malaysian Furniture Industry* (Issue November 2021) [Universiti Sains Malaysia]. <https://doi.org/10.13140/RG.2.2.31872.61440>
- Apuke, O. D. (2017). Quantitative Research Methods: A Synopsis Approach. *Arabian Journal of Business and Management Review (Kuwait Chapter)*, 6(10). <https://doi.org/10.12816/0040336>
- Avenu, I.-C. (2024). *Digital Marketing Trends in Malaysia 2024*. [https://www.icat.co.th/en/blog/digital-marketing-trends-malaysia-2024/#:~:text=In conclusion%2C Malaysia's digital marketing,for specific social media platforms.](https://www.icat.co.th/en/blog/digital-marketing-trends-malaysia-2024/#:~:text=In%20conclusion%2C%20Malaysia's%20digital%20marketing,for%20specific%20social%20media%20platforms.)
- Bala, M., & Verma, D. (2018). A Critical Review of Digital Marketing. *International Journal of Management, IT & Engineering*, 8(10), 321–339. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3545505
- Chaffey, D., & Chadwick, F. E. (2024). Digital Marketing: Strategy, Implementation and Practice. In *Digital Marketing Technologies*. https://doi.org/10.1007/978-981-97-0607-5_3
- Dastane, O. (2020). Impact of Digital Marketing on Online Purchase Intention: Mediation Effect of Customer Relationship Management. *Journal of Asian Business Strategy*, 10(1), 142–158. <https://doi.org/10.18488/journal.1006.2020.101.142.158>
- Desai, V. (2019). Digital Marketing : A Review. *International Journal of Trend in Scientific Research and Development (IJTSRD)*, March, 196–200. https://d1wqtxts1xzle7.cloudfront.net/90185943/ijtsrd23100-libre.pdf?1661336613=&response-content-disposition=inline%3B+filename%3DDigital_Marketing_A_Review.pdf&Expires=1717259212&Signature=ctmdjkMoubVGoClr4JFDOEDkBE51kKtRGrQE~9hTIXeL99N7w8U0Ah3INjwvD1zp
- Dharmappa, S. K. (2019). *Study Of The Effectiveness Of Online Marketing On Integrated Marketing Communication* [Selinus University of Sciences and Literature]. [https://www.uniselinus.education/sites/default/files/2021-06/Tesi Dharmappa.pdf](https://www.uniselinus.education/sites/default/files/2021-06/Tesi%20Dharmappa.pdf)
- Emeritus. (2024). *What is Digital Marketing Strategy? Your Guide to Effective Online Campaigns*. Emeritus. <https://emeritus.org/in/learn/what-is-digital-marketing-strategy-and-why-it-is-needed/>
- Fadzil, S. M., & Rashid, M. F. (2022). A design framework for SMEs resilience in Malaysia. *IOP Conf. Series: Earth and Environmental Science*. <https://doi.org/10.1088/1755-1315/1082/1/012006>
- Faizal, D. R., Ashhari, Z. M., Kamarohim, N., & Nassir, A. M. (2019). Impact of Product Costing for Branding and Business Support on Small and Medium Enterprises in Malaysia. *Pertanika J. Soc. Sci. & Hum*, 27, 59–74. [http://psasir.upm.edu.my/id/eprint/68677/1/IJSSH Vol. 27 %28T1%29. 2019 %28View Full Journal%29.pdf#page=73](http://psasir.upm.edu.my/id/eprint/68677/1/IJSSH%20Vol.%2027%28T1%29.%202019%28View%20Full%20Journal%29.pdf#page=73)
- Gao, J., Siddik, A. B., Abbas, S. K., Hamayun, M., Masukujjaman, M., & Alam, S. S. (2023). Impact of E-Commerce and Digital Marketing Adoption on the Financial and Sustainability Performance of MSMEs during the COVID-19 Pandemic: An Empirical Study. *Sustainability* 2023, 15(2), 1594. <https://www.mdpi.com/2071-1050/15/2/1594>
- Gezu, B. (2024). *The Effect of Digital Marketing on the Purchase Intention: The Case of Habesha Brewery* [St Mary's University]. [http://repository.smuc.edu.et/bitstream/123456789/7890/1/The_Effect_of_Digital_Marketing_on_the_Purchase_Intention_The_Case %281%29 %284%29.pdf](http://repository.smuc.edu.et/bitstream/123456789/7890/1/The_Effect_of_Digital_Marketing_on_the_Purchase_Intention_The_Case%281%29%284%29.pdf)
- Hasbolah, H., Sidek, S., Abdullah, A., Rosnah, R., & Daud, R. (2022). The Digital Marketing Practices Towards SMEs Performance In Cyber Entrepreneurship. *Journal of Information System and Technology Management*, 7(27), 289–299. <https://doi.org/10.35631/IJSTM.727023>
- Hasin, H., Jamil, A., Johari, Y. C., & Kasim, E. S. (2021). COVID-19 and its Impact on Small and Medium Enterprises : Evidence from Malaysia. *International Journal of Academic Research in Accounting Finance and Management Sciences*, 11(3), 719–739. <https://doi.org/10.6007/IJARAFMS>
- Hayes, A. (2023). *Simple Random Sampling: 6 Basic Steps With Examples*. Investopedia. <https://www.investopedia.com/terms/s/simple-random-sample.asp>
- Idris, J. (2021). Marketing Mix 4cs : Impact On Small And Medium Entrepreneurs (SMEs) Marketing Performance. *International Conference on Management and Muamalah 2021 (ICoMM 2021)*, 2021, 221–226. <https://conference.uis.edu.my/icomm/8th/images/021-113.pdf>
- Ismail, N., Kinchin, G., & Edwards, J.-A. (2018). Pilot Study , Does It Really Matter ? Learning Lessons from Conducting a Pilot Study for a Qualitative PhD Thesis. *International Journal of Social Science Research*, 6(1), 1–17. <https://doi.org/10.5296/ijssr.v6i1.11720>
- JFA. (2024). *Profile for Federation of Johor Furniture Manufactures and Traders Association*.

- <https://welcome.johorfurniture.org/en/profile>
- Kabir, S. M. S. (2016). *Methods of data collection* (First, Issue July 2016). Book Zone Publication. https://www.researchgate.net/publication/325846997_methods_of_data_collection
- Kamarolzaman, N., Rashid, I. M. A., Noor, N. H., Husain, N. A., & Ismail, M. (2023). A Review from the Malaysian Perspective on Factors Influencing Sustainable Entrepreneurship in Small and Medium-Sized Enterprises ((SMEs). *Information Management and Business Review*, 15(4), 275–283. <https://ojs.amhinternational.com/index.php/imbr/article/view/3601/2328>
- Kannan, P. K., & Alice, H. (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing*, 34(1), 22–45. <https://doi.org/10.1016/j.ijresmar.2016.11.006>
- Kemp, S. (2024). *DIGITAL 2024: MALAYSIA*. DATEREPORTAL. <https://datareportal.com/reports/digital-2024-malaysia#:~:text=The state of digital in Malaysia in 2024&text=There were 33.59 million internet,percent of the total population.>
- Khai, K. G., Onn, Y. W., Zulkifli, R. B., Kandasamy, S., & Ahmad, A. B. (2020). The necessity to digitalize smes business model during the covid-19 pandemic period to remain sustainable in malaysia. *Journal of Education and Social Sciences*, 16(1), 73–81. <https://www.jesoc.com/wp-content/uploads/2020/12/JESOC16-032.pdf>
- Krejcie, R. V., & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*, 30(3), 607–610. https://www.kenpro.org/sample-size-determination-using-krejcie-and-morgan-table/#google_vignette
- La Trobe University. (2024). *Descriptive Statistics*. <https://latrobe.libguides.com/ibmspss/descriptive>
- Lim, C. H., & Teoh, K. B. (2021). Factors influencing the SME business success in Malaysia. *Annals of Human Resource Management Research (AHRMR)*, 1(1), 41–54. <https://www.sentral.edu.my/wp-content/uploads/2021/01/380-Article-Text-1228-6-10-20210120.pdf>
- Madan, P. (2021). Digital Marketing: A Review. *International Journal of Exclusive Management Research*, 11(09), 1–6. <https://ijemr.in/wp-content/uploads/2021/11/Digital-Marketing-A-Review.pdf>
- Mahidin, D. S. D. M. U. (2020). *Small and Medium Enterprises (SMEs) Performance 2020*. Department of Statistics Malaysia. https://v1.dosm.gov.my/v1/index.php?r=column/cthemByCat&cat=159&bul_id=KzdrS25pRTZ1VGfkcTlNY0FEczBYUT09&menu_id=TE5CRUZCbh4ZTZMODZlBmk2aWRRQT09
- Malaysian Investment Development Authority. (2024). *The Wood-Based Industry in Malaysia: The Impact of COVID-19 and the Movement Control Order (MCO)*. <https://www.mida.gov.my/the-wood-based-industry-in-malaysia-the-impact-of-covid-19-and-the-movement-control-order-mco/>
- Malesev, S., & Cherry, M. (2021). Digital and Social Media Marketing - Growing Market Share for Construction SMEs. *Construction Economics and Building*, 21(1), 65–82. <https://epress.lib.uts.edu.au/journals/index.php/AJCEB/article/view/7521>
- McLaughlin Library. (2022). *Analyze Data: SPSS*. <https://guides.lib.uoguelph.ca/c.php?g=525348&p=5273035>
- Minculete, G., & Olar, P. (2018). Approaches to the Modern Concept of Digital Marketing. *International Conference KNOWLEDGE-BASED ORGANIZATION, XXIV(2)*, 63–69. <https://doi.org/10.1515/kbo-2018-0067>
- Moncey, A. A. (2020). Digital Marketing Analytics: Building Brand Awareness and Loyalty in UAE. *EEE International Conference on Technology Management, Operations and Decisions (ICTMOD)*, 1–8. <https://doi.org/10.1109/ICTMOD49425.2020.9380579>
- Montoya, L. T. (2023). *Digital marketing strategies for Nonprofit organizations* [POLITECNICO DI TORINO]. <https://webthesis.biblio.polito.it/26545/1/tesi.pdf>
- Nguyen, H., Ngoc, N. M., Anh, D. B. H., Huong, N. D., Huong, N. T. T., & Phuong, T. N. M. (2020). Development opportunities for digital marketing in post Covid-19 period in Vietnam. *International Journal of Multidisciplinary Research and Growth Evaluation*, 1(5), 95–100. https://www.researchgate.net/publication/353402789_Development_opportunities_for_digital_marketin_g_in_post_Covid-19_period_in_Vietnam
- Nordin, N. M., Koe, W.-L., Mohamed, N. A., & Rahman, S. A. A. (2023). Factors Influencing the Adoption of Online Marketing among Malaysian SMEs. *Business Management and Strategy*, 14(1), 93–102. <https://doi.org/10.5296/bms.v14i1.20954>
- Noviana, P. T., & Darma, G. S. (2020). Exploring Digital Marketing Strategies during the New Normal Era in Enhancing the Use of Digital Payment Article Sidebar. *Jurnal Mantik*, 4(3), 2257–2262. <https://iocscience.org/ejournal/index.php/mantik/article/view/1084/775>
- OECD. (2022). *Financing SMEs and Entrepreneurs 2022: An OECD Scoreboard*. OECD ILibrary. <https://www.oecd-ilibrary.org/sites/3bc2915c-en/index.html?itemId=/content/component/3bc2915c-en#>
- Omar, F. I., Munirah, U., Mohamad, S., Azlili, N., & Ibrahim, I. (2020). *Digital Marketing: An Influence towards Business Performance among Entrepreneurs of Small and Medium Enterprises*. 1(9), 126–141. <https://doi.org/10.6007/IJARBS/v10-i9/7709>
- Putri, D. R. (2021). *Digital Marketing Strategy to Increase Brand Awareness and Customer Purchase Intention (Case Study : Ailesh Green Consulting)*. 6(5). <https://www.ejbmr.org/index.php/ejbmr/article/view/1063>

- Rahi, S. (2017). Research Design and Methods : A Systematic Review of Research Paradigms , Sampling Issues and Instruments Development. *International Journal of Economics & Management Sciences*, 6(2). <https://doi.org/10.4172/2162-6359.1000403>
- Raihana, N., Sallem, M., Ku, C., Che, H., & Kassim, K. (2017). Small and Medium Enterprises : Critical Problems and Possible Solutions. *International Business Management*, 11(October). <https://doi.org/10.3923/ibm.2017.47.52>
- Rani, N. Z. A. A., Ismail, M. K., Kumaran, V. V., Muhamad, M. Z. bin, & Shaupi, N. S. A. (2022). Analysing the Challenges in Adopting Digitalisation among Smes: A Case Study in Malaysia. *Social Science Journal*, 12(4), 499–509. <https://resmilitaris.net/index.php/resmilitaris/article/view/1730>
- Ratnasingam, J., Ark, C. K., Latib, H. A., Subramaniam, H., & Khoo, A. (2018). Innovation in the Malaysian Furniture Industry: Drivers and Challenges. *BioResources*, 13(3), 5254–5270. <https://bioresources.cnr.ncsu.edu/resources/innovation-in-the-malaysian-furniture-industry-drivers-and-challenges/>
- Ratnasingam, J., Jegathesan, N., Latib, H. A., Ioras, F., Mariapan, M., & Liat, L. C. (2021). Digital Marketing during the COVID-19 Pandemic: A Case Study of its Adoption by Furniture Manufacturers in Malaysia. *BioResources*, 16(2), 3305–3307. https://bioresources.cnr.ncsu.edu/wp-content/uploads/2021/03/BioRes_16_2_3304_Ratnasingam_JLIML_Digital_Marketing_COVID_19_Study_Furniture_18632.pdf
- Ratnasingam, J., Khoo, A., Jegathesan, N., Wei, L. C., Latib, H. A., Thanasegaran, G., Liat, L. C., Yi, L. Y., & Othman, K. (2020). How are Small and Medium Enterprises in Malaysia's Early Evidences from a Survey and Recommendations. *BioResources*, 15(3), 5951–5964. https://bioresources.cnr.ncsu.edu/wp-content/uploads/2020/06/BioRes_15_3_5951_Ratnasingam_KJWLTYOA_How_SMEs_Furniture_Industry_Coping_COVID19_Pandemic_17573.pdf
- Ratnasingam, J., Latib, H. A., Liat, L. C., Jegatheswaran, N., Amir, M. A., & Othman, K. (2023). Environmental, social, and governance adoption in the Malaysian wood products and furniture industries: Awareness, adoption, and challenges. *BioResources*, 18(1), 1436–1453. <https://doi.org/10.15376/biores.18.1.1436-1453>
- Ratnasingam, J., Latib, H. A., Mariapan, M., Othman, K., Mohd Afthar Amir, & Liat, L. (2021). Success Factors of Small and Medium Enterprises in the Malaysian Furniture Industry: Discerning the Growth of Entrepreneurs. *BioResources*, 16(3), 5586–5600. https://bioresources.cnr.ncsu.edu/wp-content/uploads/2021/06/BioRes_16_2_5586_Ratnasingam_LMOAL_Factors_SMEs_Furniture_Industry_Growth_18820.pdf
- Razak, D. A., Abdullah, M. A., & ERSOY, A. (2018). Small medium enterprises (smes) in turkey and malaysia a comparative discussion on issues and challenges. *International Journal of Business, Economics and Law*, 15(3), 1–10. <https://www.ijbel.com/wp-content/uploads/2018/05/ECON-4.pdf>
- Ritz, W., Ritz, W., & Mcquitty, S. (2019). Digital marketing adoption and success for small businesses: The application of the do-it-yourself and technology acceptance models. *Journal of Research in Interactive Marketing*, 13(2), 179–203. <https://doi.org/10.1108/JRIM-04-2018-0062>
- Salayi, K. R. A. (2020). *The Role Of Digital Marketing In International Business Growth: Perceptions Of Marketing Professionals In Northern Iraq* [Near East University]. <http://docs.neu.edu.tr/library/9295028400.pdf>
- Sathiyaseelan, & M.Sc, M. (2015). Research Instruments. *Indian Journal of Continuing Nursing Education*, 16(2), 57–60. https://journals.lww.com/ijcn/fulltext/2015/16020/research_instruments.8.aspx
- Snyder, H. (2019). Literature review as a research methodology : An overview and guidelines. *Journal of Business Research*, 104(July), 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Staff, E. (2023). *SME Malaysia: Everything You Need To Know SMEs in Malaysia*. Walk Production. <https://www.walkproduction.com/blog/sme-malaysia/>
- Suroso, A., & Rafinda, A. (2021). Motivation of SME adopt Digital Marketing. *International Journal of Innovation, Creativity and Change*, 15(9). https://www.researchgate.net/profile/Ascaryan-Rafinda/publication/353997066_Motivation_of_SME_adopt_Digital_Marketing/links/611df7061e95fe241adff7ff/Motivation-of-SME-adopt-Digital-Marketing.pdf
- Tajudin, P. N. M., Rahim, N. A. A., Idris, K., & Arshad, M. M. (2021). Weathering the Economic Impact of COVID-19 : Challenges Faced by Microentrepreneurs and Their Coping Strategies during Movement Control Order (MCO) in Malaysia. *Pertanika J. Soc. Sci. & Hum*, April. <https://doi.org/10.47836/pjssh.29.s1.15>
- Thaha, A. R., Maulina, E., Muftiadi, R. A., & Alexandri, M. B. (2021). Digital Marketing and SMEs : A Systematic Mapping Study. *Library Philosophy and Practice (e-Journal)*, 2–8. <https://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=9450&context=libphilprac>
- Turney, S. (2022). *Pearson Correlation Coefficient (r) | Guide & Examples*. Scibbr. [https://www.scribbr.com/statistics/pearson-correlation-coefficient/#:~:text=The Pearson correlation coefficient \(r,the relationship between two variables.&text=When one variable changes%2C the,changes in the same direction.](https://www.scribbr.com/statistics/pearson-correlation-coefficient/#:~:text=The Pearson correlation coefficient (r,the relationship between two variables.&text=When one variable changes%2C the,changes in the same direction.)
- UOW Malaysia. (2022). *Digital Marketing Course Malaysia*. <https://www.uow.edu.my/blog/digital-marketing->

course-malaysia/

- Veleva, S. S., & Tsvetanova, A. I. (2020). Characteristics of the digital marketing advantages and disadvantages. *IOP Conf. Series: Materials Science and Engineering*. <https://doi.org/10.1088/1757-899X/940/1/012065>
- Victoriani, Edmond, D., Raihana, S., & Junaedi, P. (2024). Successful Digital Marketing Techniques for Business Development. *Startuppreneur BusinessDigital (SABDA)*, 3(1), 19–25. <https://journal.pandawan.id/sabda/article/view/429/408>
- Wen, T. K., & Atan, S. A. (2021). SME Readiness Towards Digitalization in Malaysia. *Research in Management of Technology and Business*, 2(1), 361–375. <https://publisher.uthm.edu.my/periodicals/index.php/rmtb/article/view/1858>
- Whah, C. Y., & Lim, E. S. (2021). Policies and Performance of SMEs in Malaysia. *Journal of Southeast Asian Economies*, 35(3), 470–487. <https://doi.org/10.1355/ae35-3i>
- Wolde, D. (2023). *Using concepts related to research design while writing thesis and dissertation at universities: questioning the status quo*. 1–5. https://www.academia.edu/106192737/Using_concepts_related_to_research_design_while_writing_thesis_and_dissertation_at_universities_questioning_the_status_quo
- Wu, C., Botella-carrubi, D., & Blanco-gonz, C. (2024). The empirical study of digital marketing strategy and performance in small and medium-sized enterprises (SMEs). *Technological Forecasting & Social Change*, 200. <https://doi.org/10.1016/j.techfore.2023.123142>
- Yi, L. Y., Latib, H. A., Ratnasingam, J., Mariapan, M., Liat, L. C., Othman, K., Amir, M. A., & Jegatheswaran, N. (2021). Readiness for and Adoption of Industry 4.0 among Small and Medium Sized Enterprises in the Malaysian Furniture Industry. *BioResources*, 16(4), 8289–8308. <https://bioresources.cnr.ncsu.edu/resources/readiness-for-and-adoption-of-industry-4-0-among-small-and-medium-sized-enterprises-in-the-malaysian-furniture-industry/>