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# Facebook's Influence on the Effectiveness of Digital Advertising among Malaysian Youths

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# ABSTRACT

The growth of advanced technology has contributed to the digital advertising industry as Facebook's users are easily connected, and purchasing behaviours will be developed with the content of the products promoted in digital advertising. The older generation prefers traditional advertising due to technology's security and privacy aspects, leading to fewer choices in purchasing products. This study aimed to identify the relationship between the influence of Facebook and the effectiveness of digital advertising among Malaysian youth in Klang Valley. It was anticipated that this research would provide helpful information to the public and assist researchers in the future based on the findings of this topic area. Data was collected using a Google Form and distributed via social media like WhatsApp. The targeted respondents are between 15 and 34 years old and are located in the Klang Valley area. Statistical Package for the Social Sciences (SPSS) version 27 system was used to determine digital advertising characteristics electronically. T-test and ANOVA tests were applied in this study to examine the demographic factors that affect the relationship between the variables, as different backgrounds influence the perspectives and behaviours of the users. The findings show that the independent variable, the influence of Facebook, has a strong correlation with the dependent variable, the effectiveness of digital advertising among Malaysian youth in Klang Valley (r=0.770). Socio-demographic factors such as age and educational level had an effect on the relationship between the variables. The effectiveness of digital advertising is influenced by the number of likes, comments, and shares by Facebook users.

Keywords: Facebook, digital advertising, socio-demographic, Malaysian youth, Klang Valley

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# Introduction

The effectiveness of digital advertising is important for local companies in Malaysia to obtain the preferable responses or feedback from the customers. Thus, digital advertising is used widely by local companies in Malaysia to promote their services or products on social media. Digital advertising is the



platform of communication between customers and organisations. Based on the study by Low et al. (2020), the total digital advertising cost spent in Malaysia was around RM 1.5 billion.

In Malaysia's digital advertising market segment, 46% of advertisement spending will be produced through smartphones in 2027, and around 90% of digital advertising revenue will be created (Jocelyn, 2022). Grab uses digital advertisements as their marketing strategy, which they promote via social media and other activity campaigns to make the customers feel that Grab has a high standard to bring convenience to the users. Grab Malaysia provides RM 2.5 million in digital advertising space to local businesses and helps to build personalised advertisements on the Grab platform itself (Tan, 2020).

Besides, the effectiveness of digital advertising is crucial as it can bring exposure to the brand on social media. The study by Mehra (2020) stated that one of the successful digital advertisements launched on Facebook is Tata Housing, which became the leading property developer in India. Tata Housing launched the latest structure of online purchasing houses via Facebook only, bringing more than 14,000 leads from the Facebook platform (Srinivasan, 2018). This successful digital advertising on Facebook gives expressiveness to other brands to boost sales on Facebook and improve awareness among social media users. It could be seen that Facebook's influence affects the effectiveness of digital advertisements.

However, the concept of the effectiveness of digital advertising on Facebook is not known by some of the companies and Facebook's users (Galan et al., 2019). The older generation prefers to use traditional advertisements, and the younger generation prefers to use digital advertising. The younger generation has grown up surrounded by technology and knows how to use social media and the Internet to browse websites, social media and online banking (Szymkowiak et al., 2021). The study by Wilson et al. (2021) showed that some older generations are afraid to use digital technology, which impacts the use of technology for digital advertising. The older generation is worried about losing their privacy and security as their information will be exposed on social media, and their account will be hacked by someone (Wilson et al., 2021). This situation shows that the older generation prefers to use traditional advertising due to the security and privacy aspects of technology, leading to fewer choices in purchasing products.

The previous study by Nusei (2018) has shown that companies prefer to use traditional purchase methods such as newspapers or brochures before contacting social media. Some companies do not use digital advertising to promote their products and prefer to stick with traditional advertising, such as newspapers and brochures (Nusei, 2018). For example, Border Group faced bankruptcy in 2011 due to the growth of electronic retailing (Hooper & Rawls, 2014), as the company did not follow up on this trend (Thangavelu, 2020). Border Group did not respond to this trend as they retained their physical sales instead of switching to online sales. Many physical sales have started to be affected because most customers make online purchases. Amazon follows the technology trend as it decreases the sales of physical retail stores and expands the market into the digital market (Statt, 2018). It can be seen that digital media influences the sales of products or services.

According to the statistics from Marino (2022), digital advertising enhances 80% of brand awareness, and roughly 70% of customers prefer to purchase products from displayed advertisements on social media. Customers will feel interested in finding the specific brands or products after they have been exposed to the displayed advertisements on social media. These statistics reveal that digital advertising is more effective in promoting products than traditional media. Despite the increasing number of users using Facebook for online buying, the influence of Facebook and the effectiveness of digital advertising remain largely unexplored among Malaysian youth. Hence, this paper aims to fill the gap by investigating the relationship between the influence of Facebook and the effectiveness of digital advertising advertising among Malaysian youth.

#### **Literature Review**

# Theoretical Framework

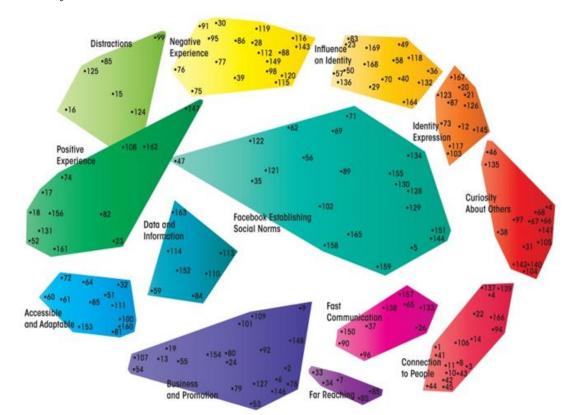
Social media platforms provide a variety of information worldwide, and it can be communicated via texts, pictures and videos to attract users to read the content posted on social media (Abkenar et al.,

2021). Facebook provides good experiences to users as it provides entertainment at any time, and updates from Facebook users can give information to other people as references (Schwartz & Mahnke, 2021). Clearly, this study has shown that Facebook's users use these references to analyse the quality of the products, which influences the users to purchase the products based on other users' information, and this situation will further influence the effectiveness of digital advertising. Facebook.

Viewing the perspective of Facebook's influence within the 13 clusters model, Facebook makes connections among Facebook users as it allows far-reaching, instant communication, business and promotion purposes. Facebook makes bonds across distances and cultures, and it can get people in touch with other people from different age groups, locations, and economic levels (Sinanan & Gomes, 2020). Facebook users feel connected as they are able to receive updates from Facebook friends instantly to know what they are doing in their daily lives, although the distance is far from them. In the business and promotion aspects, companies can instantly plan influential activities on Facebook to make users participate and feel interested in buying the latest products (Karppi, 2018). This model can be utilised in digital advertising as it involves business and promotion purposes on Facebook to make the advertisement more effective.

An example of the study that applied the Facebook influence model by Hussein and Mahrous (2016) stated that the Internet experience depends on the hours of spending on the Internet. This is related to the frequency of using social media, the activity that is done online and the time spent on social media. The customer segment can be analysed through the activity done by social media users online as users on Facebook utilise the liking feature, and the companies can use these features to observe their customers' behaviours to improve the relationship between customers (Hussein & Mahrous, 2016). It has been established that companies improve the content of digital advertising based on the customers' liking profiles via Facebook in order to attract users and make them interested in products or services.

# Figure 1



#### Facebook Influence Within 13 Clusters Models

#### Facebook as a Social Connection Platform

Facebook provides a communication channel to engage the audience and advertise products and services. There are many features of Facebook that can be used for advertising purposes, such as fan pages, groups and posts (ElAydi, 2018). Facebook is a powerful platform for companies as it enables them to make connections with their customers or targeted audiences via Facebook brand pages (Lipyanina et al., 2020). Facebook brand pages have specific features that enable companies to create a considerable amount of content. The influence of Facebook pages affects the attitudes of Facebook users toward digital advertising and the specific brands for the products or services (Wang et al., 2020). Kaur et al. (2018) studied that Facebook allows their users to create their own specific groups, and they can share and leave comments under the posts or brand pages that they feel interested in or connected with the current issues that are concerns around the world. Facebook users can edit their privacy settings by sharing specific posts on their profile that can be accessed by certain groups of Facebook friends (Docherty, 2020). Facebook users can view the brand pages to learn more about the details of the products or services by looking through the posts and comments before they purchase the products (Yang et al., 2019). Facebook has a live streaming feature (Thomas et al., 2018), as users can view and ask questions directly during the livestream. The livestream recordings will be posted to Facebook's page so their followers can rewatch the videos. In context, the companies have utilised Facebook's features to promote their products effectively. Facebook users also help promote the products on Facebook when they have good experiences after trying them. These features influence the effectiveness of digital advertising on Facebook.

The features of Facebook attract more users to use the platform and are willing to provide their different personal details about themselves on Facebook (Marengo et al., 2021), such as username, birthdate, email address, gender, location, education level, relationship status, hobbies and interests. The demographic of Facebook users is varied, and the advertisements can be targeted based on the specific demographic to reach the targeted audiences effectively (Rosenzweig et al., 2020). The total number of monthly active users is 24 million, and 97.3% of Malaysians have Facebook accounts (Lokithasan et al., 2019). The average number of followers that are ranked based on the top twenty brands in Malaysia was 1.5 million on Facebook in 2018 (John et al., 2018). Facebook is a popular platform in Malaysia, and the demographic details of Facebook's users will be used to promote the advertisement effectively, which makes users feel interested based on their demographic details.

Facebook is trying to analyse and evaluate the needs of its users as it collects data on them, and the collected data will help to recommend some videos that particular Facebook users may be interested in (Shreedhar, 2021). It will create a connection between users, and they will interact with each other when Facebook knows the needs of their audience (Meese & Hurcombe, 2021). Content creators also need to know the audience's needs via Facebook and consider the required sources, as it can help creators create and share more relevant videos with their subscribers (Klonick, 2020). Besides, they motivate their audiences to like, share and comment on their videos for improvements or ideas (Fraser et al., 2019). The creators can interact with their subscribers by responding to their comments, as it motivates and encourages the audiences to respond more to the videos. It can create a strong connection between Facebook's users, and it will help to create the interaction topics discussed by users on Facebook. This study discusses that the connection on Facebook is important as it can influence users' thoughts when they feel connected with the products when they face the same experiences or feelings promoted on the Facebook platform.

#### Influence of Facebook

On average, Facebook users spend 33 minutes per day and 19.6 hours per month on the social media platform (Shvartsman, 2022). It can be seen that social media users are very active on Facebook, and it can be one of the platforms that can reach the highest potential results for advertisements. This statement has been proven; as Martin and Mayan (2022) stated, the total advertising audience has reached 2.11 billion Facebook users.

Facebook has like and comment features (Sulflow et al., 2019) for all users, and users can give their personal responses or feedback to their friends' posts. The number of likes, shares, and comments on Facebook can influence the visibility of the posts, and the comment action helps engage with the audiences to make closer relationships with the targeted audiences on Facebook (Eberl et al., 2020). Audience responses can represent how much they like the content or pictures posted on Facebook. The higher likes, shares and comments can motivate the users to upload more useful information to the public and exchange their thoughts with each other (Qin, 2020). This shows that companies can use these features to know how much people like these products and the effectiveness of the advertisements based on the number of likes, comments, and shares by Facebook users.

#### Socio-Demographic Factors

Socio-demographic factors have been applied to analyse the background of social media users, especially Facebook users. Socio-demographic factors include educational level, age, gender and household income (Formplus, 2022). Age, gender and educational level were found to have a crucial impact on social media usage. Socio-demographics helps to categorise social media users into subgroups in order to get a deeper understanding of the audiences (Bardina et al., 2020). Socio-demographic factors, the representative population data for the range purposes, are necessary to calculate the individuals in a specific study (Koiranen et al., 2020). The research of Dominici et al. (2021) showed that the socio-demographic factors affect the online purchasing behaviours on e-grocery as the customers of e-grocery are women in Australia, and women and younger prefer e-grocery in China. This study critically examines age and location as the socio-demographic factors related to social media.

Kemp (2020) determined that Facebook has reached 65.8 per cent of the total population in Malaysia in the year 2022. 45.7 per cent of Facebook users in Malaysia are female, and males make up 54.3%. The Facebook platform's competitors are Instagram and YouTube. In 2022, the number of users on Instagram in Malaysia reached 15.55 million, and the number of users on YouTube reached 23.60 million (Kemp, 2020). On the YouTube platform, 47.5 per cent of YouTube's users are female, and 52.5 per cent are male. Besides that, the female users on the Instagram platform are measured at 56.4 per cent, and 46.3 per cent are male (Kemp, 2020). It can be seen that female users in Malaysia prefer using Facebook and Instagram than males, while male users in Malaysia prefer using the YouTube platform. This can be related to the fact that the companies utilise digital advertising on Facebook and Instagram based on gender categories.

According to the statistics from the Department of Statistics Malaysia (2022, July 29), the latest population in Malaysia is 30.2 million citizens, where Bumiputera represents 69.9 per cent, while the Chinese and Indians represent 22.8 per cent and 6.6 per cent, respectively. The three highest populations in Malaysia by state are Selangor, 21.6%, Johor, 12.3%, and Sabah, 10.4%. The lowest populations in Malaysia are Wilayah Persekutuan Labuan and Putrajaya, which are at 0.3 per cent and 0.4 per cent, respectively (Department of Statistics Malaysia, 2022, July 29). The age group in Malaysia in 2022 is recorded as the 15 - 64 years group at 69.5 per cent and the 65 and above group at 7.3 per cent. These results showed that the Selangor population in Malaysia and the age group between 15 and 64 years old are the highest compared to other groups. In terms of advertising, Facebook has reached 21.7 million users in Malaysia, and the biggest age group is 25 to 34 years old (AsiaPac, 2022). These socio-demographic statistics play an important role as they influence the usage of social media platforms and the effectiveness of digital advertising.

# Effectiveness of Digital Advertising on Facebook Among Malaysians

The effectiveness of digital advertising can be measured by the number of likes, comments and views of the posts as it indicates the customers who prefer the products or services that are displayed in the digital advertising. Based on the studies from Brettel et al. (2015), the results showed that the number of likes affects the effectiveness of digital advertising as it reflects the positive contributions on sales and depends on the level of engagement with the social media users. The higher the number of likes, the higher the attention received by the audiences, which means that it will bring extra exposure to the posts and will have impressive effects on the sales and the effectiveness of digital advertising (Brettel

et al., 2015). According to the statistics of Gorman (2022), 39% of the customers preferred to buy the products when the shop had vouchers or promotions, 33% of social media users preferred to purchase the products online based on reviews of other customers, and 22% of customers observed the higher numbers of likes and positive comments on the posts. This showed that the effectiveness of digital advertising can be measured by the number of likes and comments and that it influences product sales.

Based on the study by Melovic et al. (2020), higher usage of the Internet will influence the company in ways related to the expansion of revenue, improvement of relationships, and the reduction of time and additional costs on advertising. The findings also showed that Facebook is one of the valuable tools for organisations to analyse the level of social media usage based on the exposure, interactivity and distribution of the information (Melovic et al., 2020). It can be seen that the usage of Facebook influences the effectiveness of digital advertisement by analysing the factors of Facebook's influence based on the engagement rat

In addition, electronic word of mouth in social media is one of the aspects that can affect the effectiveness of digital advertising. Electronic word of mouth (Chu & Kim, 2018) is defined as the positive and negative perspectives about the products or services which are provided by the customers online. Electronic word of mouth involves customers exchanging information online about the products and services (Bhaiswar et al., 2021). This method is always applied on product review sites, discussion boards, and social media sites like Facebook. In order to understand the role of digital advertising and social media usage, this study discusses how electronic word of mouth can influence customers' perspectives on buying products via social media.

One of the successful cases of applying digital advertising in Malaysia is Estee Lauder Malaysia. Estee Lauder Malaysia boosted the sales of their products by collaborating with Facebook advertisements. Estee Lauder Malaysia is a beauty brand, and the brand applied Facebook collaborative advertisement in Malaysia, which cooperated with the e-commerce platform Lazada to boost sales during COVID-19 (Lauder, 2020). The advertisement of Estee Lauder is displayed automatically to Facebook users who likely feel interested in the products based on their previous purchasing behaviours (June, 2022). It can be seen that the advertisement is effective and successful as Estee Lauder Malaysia obtained a 4.25X return on spending the costs on digital advertisement (Lauder, 2020). The evidence highlights that Facebook's usage influences the effectiveness of digital advertising in Malaysia.

# **Conceptual Framework**

Based on the past studies mentioned above, this study hypothesizes that:

Hypothesis 1:

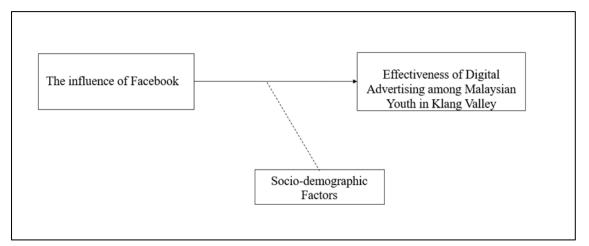
Ha: Proper usage of Facebook is positively associated with the effectiveness of digital advertising among Malaysian Youth.

#### Hypothesis 2:

Ha: There is a difference in Facebook usage and the effectiveness of digital advertising among Malaysian youth based on socio-demographic factors

# Figure 2

Conceptual Framework



Drawing from the literature review, the conceptual framework was produced to describe the relationship between the independent and dependent variables. in this context, the independent variable is 'the influence of Facebook', and the dependent variable is 'effectiveness of digital advertising among Malaysian youth in Klang Valley'. the line from the independent variable to the dependent variable is the relationship between the two variables. This research model is derived from an observation in the previous chapter, which is the literature review. The independent variable highlights 'the influence of Facebook'.

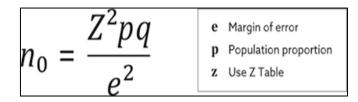
# Methods

The research employed a quantitative technique to collect the necessary data, specifically choosing to use a survey questionnaire. This approach was selected due to its suitability for handling a large sample size, which was crucial for this study since the analysis focused on the general public. The survey involved posing a series of questions to respondents, thereby collecting a wealth of information. The data obtained were then analysed quantitatively, enabling the derivation of numerical insights. These results were instrumental in establishing a correlation between the effectiveness of digital advertising and user perceptions of Facebook usage

The sampling method applied in this study is snowball sampling, which helped to make the responses easier as the target market includes Malaysian youths from all walks of life, making them easily available and accessible. The instrument that was used to conduct this research was a questionnaire, as Google Forms was created and distributed to the targeted population, which is 384 respondents. Google Forms was chosen as it helped to collect the data efficiently through social media platforms by sending the link.

# Figure 3

Cochran Formula



The Cochran Formula, as shown in Figure 3, was used in this study to measure an absolute sample size provided a required level of accuracy, required confidence level, and the estimated proportion of the assigned present in the population (Stephanie, 2021). Based on the formula above (Stephanie, 2021), the 'n' is the sample size and the 'p' is the estimated proportion of the attribute present in the population as 'q' is 1-p. The 'e' is the required level of accuracy. The z-value is shown in Table 1, which is a Z table, as it is based on the confidence level. With a confidence level of 95%, the Z values are 1.96, and the required level of accuracy is  $\pm$  5%. Every respondent was provided with a similar questionnaire to ensure that the responses received from the respondents would be reliable. Klang Valley in Malaysia has a population size of 9.1 million, and the targeted sample size for the research is 385.

#### Table 1

Confidence Level	Critical (z) Value	
50%	0.67449	
75%	1.15035	
90%	1.64485	
95%	1.95996	
97%	2.17009	
99%	2.57583	
99.9%	3.29053	

Z-value Table (Stephanie, 2021)

The instrument used to conduct this research is a questionnaire, as Google Forms was created and distributed to the targeted population. Google Forms was chosen as it helped to collect the data efficiently through social media platforms by sending the link. Most people know how to use Google Forms during the pandemic as they are required to use Google Forms to fill and check the details of specific locations. This instrument was chosen since survey questionnaires allow for much more comprehensive data. Besides, a survey questionnaire could be delivered to countless people simultaneously. Therefore, it is more affordable and saves more time than interviewing. The questionnaire consisted of three sections: Section 1 was demographic background, and Section 2 included 23 statements related to the influence of Facebook that were given to the respondents to identify the level of Facebook usage and behaviours of Malaysians. Section 3 contained another 23 statements for the respondents in order to identify the effectiveness of digital advertising.

The questionnaire was distributed mainly on social media platforms such as WhatsApp, Facebook, Instagram, and Messenger. Participants needed to select their desired answers from numbers 1-5, which, using the Likert scale as the scale-based questions, allowed respondents to rate their level of agreement from 1 (Strongly Disagree) to 5 (Strongly Agree). The targeted respondents of this study are Malaysian youth in Klang Valley aged between 15 and 30 years old, as the Amendment Bill about the youth age range was approved by the Dewan Rakyat in 2019 (Zulkifle et al., 2021). The biggest age group that uses Facebook is 25 to 34 years old, which is 30%, and 22 % of the users are between 18 and 24 years old (Department of Statistics Malaysia, 2022, July 29).

The data was collected to gather the real information from the questionnaire as researchers utilised Statistical Package for the Social Sciences (SPSS) software. Descriptive statistical analysis was applied in this study in order to analyse and summarise the data collected from Google Forms in the ways of illustration and interpretation. Means, standard deviations, and frequencies were used to assess and analyse the respondents' perspectives on the study's issue. The mean was used to show the centre's data,

and the standard deviation was used as the guide to approximate the total variation of the data processing (Mishra et al., 2019). The high standard deviation represents that the data is more distributed. The descriptive statistical analysis was applied in sections 2 and 3 of the questionnaire.

Besides, the inferential analysis, which is called Pearson's correlation analysis and t-test, was also applied in this study. A T-test was used to establish the significant difference between the means of the variables. It is a measure to test the hypothesis as the null hypothesis indicates that the difference between means is zero, and the alternate hypothesis indicates that the difference between means is different from zero, which shows that the data is accurate (Gerald, 2018).

Pearson's correlation analysis was evaluated to analyse the strength and the position of the relationships between variables, which are independent variables and dependent variables (Schober et al., 2018). In Pearson's correlation analysis, the results of 0 represent no relationship between variables as the correlation data is never lower than -1 and higher than 1. Thus, there is a positive relationship between variables if the results are near 1, and there is a negative relationship between variables if the results are -1.

The significant value in SPSS indicates whether the variables have a significant correlation with other variables. There is no correlation between variables if the sig (2-tailed) is greater than .05, and there is a significant correlation between the two variables if the sig (2-tailed) is lower than or equal to .05 (Schober et al., 2018). This analysis was used in section 4 of the questionnaire. The responses to the questionnaire were generated, and the relationship between the variables in this study could be determined.

The insight of Cronbach's Alpha was utilised to determine this investigation's reliability. The reliability test as shown in Table 2 was done in this study to ensure the consistency and stability of the data that could be gained from the instrument (Surucu & MASLAKÇI, 2020). Cronbach's alpha was used in this study to test whether Likert-scale surveys are reliable (Shrestha, 2021). The higher alpha value indicates that the reliability of the data is higher (Zapf et al., 2016). The minimum value of Cronbach's alpha must be 0.7 and above to show that the section in the questionnaire is reliable. The Cronbach alpha tested for this pilot study is 0.985 from an aggregate of 30 respondents.

For the findings of validity, the KMO value for the independent variable, which is the Influence of Facebook, has a value of 0.782. The dependent variable's validity, the Effectiveness of Digital Advertising among Malaysians, has a KMO value of 0.714.

# Table 2

The Reliability Test and Validity Test of All Items Cronbach's Alpha (a) and KMO Value

Variable	Significant
Reliability (Cronbach Alpha, a)	0.985
the Influence of Facebook (KMO)	0.782
Effectiveness of Digital Advertising among Malaysians (KMO)	0.714

# Results

# Correlation Analysis on the Influence Of Facebook and the Effectiveness of Digital Advertising Among Malaysian Youth in Klang Valley

In this section, Pearson's correlation is employed to examine the relationship between the independent variable, the influence of Facebook, and the dependent variable, the effectiveness of digital advertising

among Malaysian youths in Klang Valley. The findings of the correlation between the independent variable and the dependent variable are summarised and presented in Table 3.

The correlation analysis stated that under the significance (1-tailed) value, there is a correlation between the influence of Facebook and the effectiveness of digital advertising among Malaysian youths in Klang Valley since the value is 0.000, which is below 0.05. According to the extracted findings, the Pearson Correlation value is 0.770\*\*.

According to the Guildford Rule of Thumb, the correlation level is considered strong. In conclusion, the Influence of Facebook has a strong correlation with the effectiveness of digital advertising among Malaysian youths in Klang Valley. As a result, this illustrates that there is a significant relationship between Facebook usage and the effectiveness of digital advertising among Malaysian Youth.

The effectiveness of digital advertising on Facebook can be affected by the engagement between companies and users and the amount of liking, commenting, and sharing by Facebook's users, as these aspects can help the advertisement be more visible to other users. The purchasing behaviour of Facebook users is affected by the perspectives of their friends or family when they see the comments and posts about the products uploaded by their Facebook friends.

#### Table 3

The Pearson Correlation Test between the Influence of Facebook and Effectiveness of Digital Advertising among Malaysian Youth in Klang Valley

Variable	Effectiveness of Digital Advertising among Malaysian Youths in Klang Valley				
	Pearson Correlation	Sig. (1-tailed)			
The Influence of Facebook	0.770**	0.000			

# Socio-Demographic Factors

The results on differences in the influence of Facebook and effectiveness of digital advertising among Malaysian Youth in Klang Valley based on the socio-demographic seem to have a significant difference as both the independent variables and dependent variables in terms of age, educational level and marital status have the p-value below the 0.05 alpha value. However, gender did not have a difference in the influence of Facebook and the effectiveness of digital advertising among Malaysian youths in Klang Valley.

# Anova: Age

The Analysis of Variance (ANOVA) on age highlights the socio-demographic factors that affect or do not affect the respondents' responses. In this data analysis, the specific socio-demographic is age. Based on Table 4, the socio-demographic factor of age makes a difference in the respondents' response on the questionnaire for the first independent variable, which is the influence of Facebook, as the significance (p-value) is lower than 0.05 with a value of 0.000.

On the other hand, the socio-demographic age factor also makes a difference for the dependent variable, which is the effectiveness of digital advertising among Malaysian Youth in Klang Valley, as the significance (p-value) is 0.002. It can be concluded that the socio-demographic age factor affects the response to the questionnaire.

# Table 4

Variable		Sum of Squares	df	Mean Square	F	Sig.
Influence of Facebook	Between groups	8.436	2	4.218	9.718	0.000
	Within groups	165.808	382	0.434		
	Total	174.244	384			
Effectiveness of Digital	Between groups	5.081	2	2.541	6.284	0.002
Advertising among Malaysian Youth in Klang Valley	Within groups	154.425	382	0.404		
	Total	159.506	384			

ANOVA on Age for All Variables

#### Anova: Educational Level

The Analysis of Variance (ANOVA) on the educational level highlights the socio-demographic factors that affect or do not affect the respondents' responses. In this data analysis, the specific socio-demographic is educational level. Based on Table 5, the socio-demographic factor of educational level makes a difference in the respondents' response on the questionnaire for the first independent variable, which is the influence of Facebook, as the significance (p-value) is lower than 0.05 with a value of 0.001. On the other hand, the socio-demographic factor of the educational level also makes a difference for the dependent variable, which is the effectiveness of digital advertising among Malaysian youth in Klang Valley, as the significance (p-value) is 0.004. It can be concluded that the socio-demographic factor of educational level makes a difference towards the response to the questionnaire.

#### Table 5

ANOVA on Educational level for all variables

Variable		Sum of Squares	df	Mean Square	F	Sig.
Influence of Facebook	Between groups	8.041	4	2.010	4.596	0.001
	Within groups	166.203	380	0.437		
	Total	174.244	384			
Effectiveness of Digital Advertising among	Between groups	6.404	4	1.601	3.973	0.004
Malaysian Youth in Klang Valley	Within groups	153.103	380	0.403		
	Total	159.506	384			

#### Anova: Marital Status

The Analysis of Variance (ANOVA) on marital status highlights the socio-demographic factors that affect or do not affect the respondents' responses. In this data analysis, the specific socio-demographic is the marital status.

Based on Table 6, the socio-demographic factor of marital status makes a difference in the respondents' response on the questionnaire for the first independent variable, which is the influence of Facebook, as the significance (p-value) is lower than 0.05 with a value of 0.006. Besides, the socio-demographic factor of marital status also makes a difference for the dependent variable, which is the effectiveness of digital advertising among Malaysian youth in Klang Valley, as the significance (p-value) is 0.001. It can be concluded that the socio-demographic factor of marital status makes a difference towards the response to the questionnaire.

# Table 6

Variable		Sum of Squares	df	Mean Square	F	Sig.
Influence of Facebook	Between groups	4.597	2	2.298	5.175	0.006
	Within groups	169.647	382	0.444		
	Total	174.244	384			
Effectiveness of	Between groups	5.600	2	2.800	6.949	0.001
Digital Advertising among Malaysian	Within groups	153.907	38	0.403		
Youth in Klang Valley	Total	159.506	384			

# ANOVA on Marital Status for All Variables

# **T-Test:** Gender

The T-test analysis on gender highlights the socio-demographic factors that affect or do not affect the respondents' responses. In this data analysis, the specific socio-demographic is gender. Based on Table 7, the socio-demographic factor of gender does not make a difference in the respondents' response on the questionnaire for the independent variable, which is the influence of Facebook, as the significance (p-value) is not lower than 0.05 with a value of 0.089.

Besides, the socio-demographic factor of gender also does not make a difference in the response of the respondents for the dependent variable, which is the effectiveness of digital advertising among Malaysian youths in Klang Valley as the significance since the significance (p-value) is not lower than the value of 0.05 with the value of 0.185. It can be concluded that the socio-demographic factor of gender makes no difference towards the response to the questionnaire.

# Table 7

Variable	Gender	Ν	Mean	Std.D	F	Sig.
Influence of Facebook	Male	173	4.526	0.633	2.900	0.089
	Female	212	4.471	0.704		
Effectiveness of Digital	Male	173	4.601	0.597	1.764	0.185
Advertising among Malaysian Youth in Klang Valley	Female	212	4.570	0.681		

# **T-test on Gender for all Variables**

# Discussion

As a whole, this research aimed to identify the relationship between the influence of Facebook and the effectiveness of digital advertising among Malaysian Youth in Klang Valley. The research questions and objectives needed to be answered and completed to identify the relationship between the variables. The role of Facebook is important among Malaysian youth as Malaysian youth prefer to use Facebook because the information on Facebook is always up-to-date, and users can know the latest news by just clicking the link that is shared on Facebook. Facebook's users can know more about the latest products and information effectively as the posts on Facebook will be shared widely by users, and it helps to target the audiences accurately.

Besides, the respondents (N=181) strongly agree, and other respondents (N=151) agree that the image advertisement as an advertisement strategy increases the effectiveness of digital advertising among Malaysian Youth. As a result, this illustrates that the effectiveness of digital advertising among Malaysian youths is proven to be high. The interesting content of the advertisement helps to catch the attention of the targeted audiences, and Facebook users will feel the desire to know more about the products after they have been attracted by the advertisements. They will consider purchasing the products when they have been influenced by the advertisement that was posted on Facebook.

In addition, there is a significant relationship between Facebook usage and the effectiveness of digital advertising among Malaysian youth. The reason is that the correlation analysis signifies that the significance (1-tailed) has a value of 0.000, which means there is a correlation since the value is below 0.05. Based on Guilford's Rule of Thumb, the value falls under the category of a strong correlation, as Pearson's correlation value is 0.770\*\*. As a result, this illustrates that there is a significant relationship between Facebook usage and the effectiveness of digital advertising among Malaysian Youth. The effectiveness of digital advertising and users and the amount of liking, commenting and sharing by Facebook's users. It can help the advertisement become more exposed to other users as more users will feel interested in the advertisement. The purchasing behaviour of Facebook users is affected by the perspectives of their friends or family when they see the comments and posts about the products uploaded by their Facebook friends.

Lastly, the findings indicate a difference between the influence of Facebook and the effectiveness of digital advertising among Malaysian Youth in Klang Valley based on socio-demographic factors. According to the findings, age, race, educational level, living area, living situation, marital status, monthly income, and active social media accounts make a difference in the respondents' responses to the questionnaire. These findings showed that age, race, educational level, living area, living situation, marital status, monthly income, and active social media account affect how the respondents respond to the questions. As a result, this illustrates that there are differences between the influence of Facebook and the effectiveness of digital advertising among Malaysian Youth in Klang Valley based on socio-demographic factors. Malaysian youths with different backgrounds have different perspectives, which

can affect the influence of Facebook and the effectiveness of digital advertising among them in Klang Valley. Monthly income and active social media usage influence users' purchasing behaviour as they decide what they want to purchase based on their expected expenses and different advertising strategies from various social media platforms. Users have different thoughts and decisions, which make them able to think by themselves to support the products based on the advertisements on Facebook.

#### Influence of Facebook

Nguyen & Nguyen (2020) stated that Facebook is a useful tool to communicate with friends and family members about product details. This literature can be supported and backed up by the findings. Based on the findings, the average mean value of Facebook usage as a communication tool to share information with family or friends is 3.93. The question was asked based on the influence of Facebook and how the thoughts of Facebook's users were affected. Since the average mean value is 3.93, this indicates that the respondents agree that Facebook usage is a valuable communication tool for sharing information. The Facebook feature enables users to share information with their friends and family by mentioning their account name under Facebook's posts or forwarding the posts to other users. Users can gain more product information from their family and friends via Facebook. In conclusion, this literature review supports the previous research.

Besides, the statement from Chakraborty (2019) studied that Facebook is a useful platform to search and collect information about products. This literature can be supported and backed up by the findings. The respondents strongly agree with this matter. According to the findings, the average mean value of searching the products' information on Facebook is 4.17. The question was asked regarding using Facebook to search for information related to the products. Since the average mean value is 4.17, this evidently indicates that the respondents strongly agree and support the point. Facebook is a platform to search for and purchase products. Facebook's users are able to know more about the details of products by searching the relevant posts and reviews of other users on Facebook. It can improve users' knowledge and influence their perspectives about the products via electronic word of mouth. It can be concluded that this literature review supports Chakraborty's (2019) study.

The following statement from Bui (2022) concluded that peer influence is one of the efficient ways to influence purchasing behaviour, and this has been supported and backed up by the findings. According to the findings, the average mean value of the importance of purchasing by gaining inspiration from family or friends on Facebook is 4.18. Since the average mean value was 4.18, this evidently indicates that the respondents strongly agree that paying attention to the content that family or friends share on Facebook is essential in gaining inspiration about the products. Users are more faithful with their family and closest friends as they can provide valuable opinions and experiences about the products, and users prefer to listen to their family and friends. They exchange their ideas when they communicate during their free time, which can influence product purchasing decisions.

In addition, the statement from Naeem (2019) listed that Facebook is a useful platform for sharing information and buying experiences about products. This literature can be supported and backed up by the findings of this study. According to the findings, the average mean value of sharing purchase experiences on Facebook is 3.57. The question was asked based on the utilisation of Facebook for sharing buying experiences. Since the average mean value was 3.57, this evidently indicates that the respondents agree that Facebook is a useful communication tool to share information and experiences about products or services. Facebook's users are passionate about sharing their daily lives via vlogs or blogs in order to interact with their friends on Facebook. Facebook's users prefer to share what they have bought and how they feel about the products. Positive comments and feedback from other users affect product sales as users prefer to search for the perspectives of other users when they consider purchasing the products.

# Effectiveness Of Digital Advertising Among Malaysian Youth in Klang Valley

The first statement from Mishra et al. (2019) pointed out the importance of visual content when advertising products on Facebook, as it can influence the effectiveness of digital advertising. This literature can be supported and backed up by the findings. According to the findings, the average mean

value of the importance of visual content when advertising products on Facebook is 4.30. The question was asked based on the importance of visual content when advertising products on Facebook. Since the average mean value was 4.30, this evidently indicates that the respondents strongly agree that visual content is important as they will feel interested in the products when they are attracted by the image of the advertisements. The interesting content of advertisements can catch the audiences' attention, and they will desire to know more about the products by clicking the relevant posts on Facebook.

On the other hand, the study by Illescas-Manzano et al. (2021) stressed that the level of satisfaction of customers will affect the effectiveness of digital advertising on social media platforms. This literature can be supported and backed up by the findings. According to the findings, the average mean value of repurchasing the products if they are satisfied with the previous purchase is 4.45. The question was asked about customer satisfaction in digital advertising. Since the average mean value was 4.45, this evidently indicates that the respondents strongly agree that the effectiveness of digital advertising will be influenced by the level of satisfaction of the customers. Customers are willing to reorder the products when they enjoy a better experience. Positive comments about the products influence the effectiveness of digital advertising as users will do more research before they purchase the products. Hence, customer satisfaction is a determinant factor in repurchasing products via Facebook.

The third study from Demiray and Burnaz (2019) stated that digital advertisements on Facebook help customers to know more about new products. This literature can be supported and backed up by the findings that showed the average mean value of digital advertisements on Facebook helps customers to explore new products is 4.38. The question was asked based on the exploration of new products from digital advertisements on Facebook. Since the average mean value was 4.38, the respondents strongly agree that digital advertising helps Facebook users to explore new products. Users who have a strong curiosity definitely want to learn more and gain more knowledge about the products when they see them for the first time; thus, they are willing to listen and watch the advertisements posted on Facebook.

Lastly, the final statement from Hughes et al. (2019) emphasises that celebrities affect customers' purchase intention by being influencers for certain brands on Facebook. According to the findings, the average mean value of the influence of celebrities on Facebook towards the effectiveness of digital advertising is 3.50. Since the average mean value was 3.50, this evidently indicates that the respondents agree that their purchase intention is influenced by celebrities on Facebook. Facebook users will purchase products that show that they support their favourite celebrity, and they believe that the products promoted by their favourite celebrity are more credible and safer. Most companies invite celebrities to promote their products, which can help the company boost product sales.

# Conclusion

In this study, the relationship between the influence of Facebook and the effectiveness of digital advertising among Malaysian youth in Klang Valley can provide innumerable contributions. One of the main contributions is that it provides deeper insights to the readers about the influence of Facebook in digital advertising. This study and its instrument can be replicated by other researchers in future. Researchers can obtain some useful information and understanding by studying the analysis and findings of this research in order to enhance their own literature and methodology parts further. They could also further study Facebook's influence model, which is applied in this study.

The study contributes practically to companies and social media users discovering different advertising strategies for increasing businesses' sales and how social media affects the effectiveness of digital advertising. This could assist companies who have teenagers to young adults as a target audience. Companies can find ways to improve their online marketing strategies and understand their targeted audience's preferred needs or desires in the marketing and advertising industries. The improvement could be based on how Facebook's users perceive the brand image, what the purchasing behaviours of Facebook's users are, or how people discover online retailers via Facebook.

This study has some limitations that can be solved in future research. First, this study focuses on only one popular social media platform - Facebook. Future research can be done on other social media platforms, such as Instagram and Twitter, as the characteristics and purposes of other social media usage

are different. It can get broader perspectives of Facebook's users about the influence of other social media platforms. Besides, the present study is targeted at the Klang Valley area, and future research can consider collecting the data in different locations such as Peninsular Malaysia and East Malaysia. This is because people from different locations have different social media platform usage and purchasing behaviours that are influenced by digital advertising.

The research concluded that it would clarify some advertising strategies that the companies apply and give a further understanding of Facebook's influence and digital advertising. The information gained from this research will improve how brands promote themselves effectively through social media and how people can understand how their purchasing behaviours will be influenced on Facebook. Besides, the research aimed to bring solutions and answers to the fields that are related to the influence of Facebook and the effectiveness of digital advertising from the perspective of the retailer or the perspective of Malaysian youth in the Klang Valley area.

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#### **Conflict of Interest**

The authors have declared that no competing interests exist.

#### **Author Contribution Statement**

All authors contributed to the conception, design, writing, and revision of the manuscript.

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This article adheres to the ethical standards set by the Committee on Publication Ethics (COPE).

#### References

- Abkenar, S. B., Kashani, M. H., Mahdipour, E., & Jameii, S. M. (2021). Big data analytics meets social media: A systematic review of techniques, open issues, and future directions. *Telematics and Informatics*, 57, 101517. https://doi.org/10.1016/j.tele.2020.101517
- AsiaPac. (2022, August 3). Malaysia Digital Marketing 2022: Insight: AsiaPac Digital Marketing Agency Asia. *AsiaPac*. Retrieved from https://www.asiapacdigital.com/digital-marketing-insight/malaysia-digital-marketing-2022
- Bardina, M., Vaganov, D., & Guleva, V. (2020). Socio-demographic features meet interests: On subscription patterns and attention distribution in online social media. *Procedia Computer Science*, 178, 162-171. https://doi.org/10.1016/j.procs.2020.11.018

- Bhaiswar, R., Meenakshi, N., & Chawla, D. (2021). Evolution of electronic word of mouth: A systematic literature review using bibliometric analysis of 20 years (2000–2020). *FIIB Business Review*, 10(3), 215–231. https://doi.org/10.1177/23197145211032408
- Brettel, M., Reich, J. C., Gavilanes, J. M., & Flatten, T. C. (2015). What drives advertising success on Facebook? An advertising-effectiveness model: Measuring the effects on sales of "likes" and other social-network stimuli. *Journal of Advertising Research*, 55(2), 162-175. https://doi.org/10.2501/JAR-55-2-162-175
- Bui, H. T. (2022). Exploring and explaining older consumers' behaviour in the boom of social media. *International Journal of Consumer Studies*, 46(2), 601-620. https://doi.org/10.1111/ijcs.12742
- Chakraborty, U. (2019). The impact of source credible online reviews on purchase intention: The mediating roles of brand equity dimensions. *Journal of Research in Interactive Marketing*, 13(2), 142-161. https://doi.org/10.1108/JRIM-06-2018-0080
- Chu, S. C., & Kim, J. (2018, January). The current state of knowledge on electronic word-of-mouth in advertising research. *Taylor & Francis Online*. Retrieved from https://www.tandfonline.com/doi/abs/10.1080/02650487.2017.1407061
- Demiray, M., & Burnaz, S. (2019). Exploring the impact of brand community identification on Facebook: Firm-directed and self-directed drivers. *Journal of Business Research*, 96, 115-124. https://doi.org/10.1016/j.jbusres.2018.10.053
- Department of Statistics Malaysia. (2022, July 29). Press release: Current population estimates, Malaysia, 2022. https://www.dosm.gov.my/v1/index.php?r=column/pdfPrev&id=dTZXanV6UUdyUEQ0SHN WOVhpSXNMUT09
- Docherty, N. (2020). Facebook's ideal user: Healthy habits, social capital, and the politics of wellbeing online. *Social media*+ *Society*, 6(2), 2056305120915606. https://doi.org/10.1177/2056305120915606
- Dominici, A., Boncinelli, F., Gerini, F., & Marone, E. (2021). Determinants of online food purchasing: The impact of socio-demographic and situational factors. *Journal of Retailing and Consumer Services*, 60, 102473. https://doi.org/10.1016/j.jretconser.2021.102473
- Eberl, J. M., Tolochko, P., Jost, P., Heidenreich, T., & Boomgaarden, H. G. (2020). What's in a post? How sentiment and issue salience affect users' emotional reactions on Facebook. *Journal of Information Technology & Politics*, 17(1), 48-65. https://doi.org/10.1080/19331681.2019.1710318
- ElAydi, H. O. (2018). The effect of social media marketing on brand awareness through Facebook: An individual-based perspective of mobile services sector in Egypt. *Open Access Library Journal*, 5(10), 1-5. https://doi.org/10.4236/oalib.1104977
- Formplus. (2022, July 27). *Socio-demographic: Definition & examples in surveys*. Formplus. Retrieved from https://www.formpl.us/blog/socio-demographics
- Fraser, C. A., Kim, J. O., Thornsberry, A., Klemmer, S., & Dontcheva, M. (2019). Sharing the studio: How creative live streaming can inspire, educate, and engage. *In Proceedings of the 2019 on Creativity and Cognition* (pp. 144-155). https://doi.org/10.1145/3325480.3325485
- Galan, A. A., Cabanas, J. G., Cuevas, A., Calderon, M., & Rumin, R. C. (2019). Large-scale analysis of user exposure to online advertising on Facebook. *IEEE Access*, 7, 11959-11971. https://doi.org/10.1109/ACCESS.2019.2892237.
- Gerald, B. (2018). A brief review of independent, dependent and one sample t-test. *International Journal of Applied Mathematics and Theoretical Physics*, 4(2), 50–54. https://doi.org/10.11648/j.ijamtp.20180402.13

- Gorman, D. (2022, February 8). *How effective is advertising on social media?* GWI. https://blog.gwi.com/trends/ads-on-socialmedia/
- Hooper, W., & Rawls, M. K. (2014). Borders Group, Inc.'s Final Chapter: How A Bookstore Giant Failed In The Digital Age.
- Hughes, C., Swaminathan, V., & Brooks, G. (2019). Driving brand engagement through online social influencers: An empirical investigation of sponsored blogging campaigns. *Journal of Marketing*, 83(5), 78–96. https://doi.org/10.1177/0022242919854374
- Hussein, R. M. S., & Mahrous, A. A. (2016, February). (PDF) users engagement on Facebook: A cluster analysis. researchgate. https://doi.org/10.1504/IJBEM.2016.079790
- Illescas-Manzano, M. D., Vicente López, N., Afonso González, N., & Cristofol Rodríguez, C. (2021). Implementation of chatbots in online commerce and open innovation. *Journal of Open Innovation: Technology, Market, and Complexity,* 7(2), 125. https://doi.org/10.3390/joitmc7020125
- Jocelyn, V. (2022, June). Digital Advertising Malaysia: Statista market forecast. *Statista*. Retrieved from https://www.statista.com/outlook/dmo/digital-advertising/malaysia
- John, S., Larke, R., & Kilgour, M. (2018). Applications of social media for medical tourism marketing: an empirical analysis. *Anatolia*, 29(4), 553-565. https://doi.org/10.1080/13032917.018.1473261
- June, T. (2022). Brand loyalty of consumers on Estee Lauder (Doctoral dissertation, MERAL Portal). Retrieved from https://meral.edu.mm/record/8239/files/Thiri%20June%20,EMBAII25,%2017th.%20Bt.pdf
- Karppi, T. (2018). Disconnect: Facebook's affective bonds. University of Minnesota Press.
- Kaur, W., Balakrishnan, V., F. Rana, O., & Sinniah, A. (2018, December). Liking, sharing, commenting and reacting on Facebook: User behaviors' impact on sentiment intensity. *Telematics and Informatics*, 39, 25-36. https://doi.org/10.1016/j.tele.2018.12.005
- Kemp, S. (2020). *Digital 2020: Global digital overview. DataReportal.* Retrieved from https://datareportal.com/reports/digital-2020-global-digital-overview
- Klonick, K. (2020). The Facebook Oversight Board: Creating an independent institution to adjudicate online free expression. *Yale Law Journal*, 129(2418). https://ssrn.com/abstract=3639234
- Koiranen, I., Keipi, T., Koivula, A., & Räsänen, P. (2020). Changing patterns of social media use? A population-level study of Finland. Universal Access in the Information Society, 19(3), 603-617. https://doi.org/10.1007/s10209-019-00654-1
- Lauder, E. (2020, April). *Estée Lauder Malaysia: Boosting online sales with Facebook Collaborative Ads.* Facebook. Retrieved from https://www.facebook.com/business/success/estee-lauder-malaysia
- Lipyanina, H., Sachenko, A., Lendyuk, T., Nadvynychny, S., & Grodskyi, S. (2020, April). Decision tree-based targeting model of customer interaction with a business page. *In CMIS* (pp. 1001-1012). https://doi.org/10.32782/cmis/2608-75
- Lokithasan, K., Simon, S., Jasmin, N. Z. B., & Othman, N. A. B. (2019). Male and female social media influencers: The impact of gender on emerging adults. *International Journal of Modern Trends* in Social Sciences, 2(9), 21-30. https://doi.org/10.35631/IJMTSS.29003
- Low, S., Ullah, F., Shirowzhan, S., Sepasgozar, S. M. E., & Lin Lee, C. (2020, July 3). Smart Digital Marketing Capabilities for Sustainable Property Development: A case of Malaysia. *MDPI*. Retrieved from https://www.mdpi.com/2071-1050/12/13/5402

- Marengo, D., Montag, C., Sindermann, C., Elhai, J. D., & Settanni, M. (2021). Examining the links between active Facebook use, received likes, self-esteem and happiness: A study using objective social media data. *Telematics and Informatics*, 58, 101523. https://doi.org/10.1016/j.tele.2020.101523
- Marino, S. (2022, October 27). 165 powerful digital marketing statistics for 2022. WordStream. https://www.wordstream.com/blog/ws/2022/04/19/digital-marketing-statistics
- Martin, N., & Mayan, M. K. (2022, November). Optimisation of SMART production inventory model with E-logistics and digital advertising cost parameters together with advertising errors. In AIP Conference Proceedings (Vol. 2516, No. 1). AIP Publishing. https://pubs.aip.org/aip/acp/article-abstract/2516/1/320010/2829454
- Meese, J., & Hurcombe, E. (2021). Facebook, news media and platform dependency: The institutional impacts of news distribution on social platforms. *New Media & Society*, 23(8), 2367-2384. https://doi.org/10.1177/1461444820926472
- Mehra, D. (2020, September 9). 6 successful Facebook case studies to market your brand. *REVE Chat*. Retrieved from https://www.revechat.com/blog/6-successful-facebook-case-studies-to-market-your-brand/
- Melovic, B., Jocovic, M., Dabic, M., Vulić, T. B., & Dudic, B. (2020). The impact of digital transformation and digital marketing on the brand promotion, positioning and electronic business in Montenegro. *Technology in Society*, 63, 101425.
- Mishra, P., Pandey, C. M., Singh, U., Gupta, A., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of cardiac anaesthesia*, 22(1), 67. https://doi.org/10.4103/aca.ACA\_157\_18
- Naeem, M. (2019). Do social networking platforms promote service quality and purchase intention of customers of service-providing organisations? *Journal of Management Development*, 38(7), 561–581. https://doi.org/10.1108/JMD-11-2018-0327
- Nguyen, C., & Nguyen, N. (2020). Facebook's advertising influences on the purchase intention of millennials customers: The evidence from Vietnam. International Journal of Advanced Science and Technology, 29(5), 3979-3988.
- Nuseir, M. T. (2018). Digital media impact on SMEs performance in the UAE. Academy of Entrepreneurship Journal, 24(2), 1–13.
- Qin, Y. S. (2020). Fostering brand-consumer interactions in social media: the role of social media uses and gratifications. *Journal of Research in Interactive Marketing*. https://doi.org/10.1108/JRIM-08-2019-0138
- Rosenzweig, L., Bergquist, P., Pham, K. H., Rampazzo, F., & Mildenberger, M. (2020). Survey sampling in the Global South using Facebook advertisements. https://doi.org/10.31235/osf.io/dka8f
- Schober, P., Boer, C., & Schwarte, L. A. (2018). Correlation coefficients: appropriate use and interpretation. Anesthesia & Analgesia, 126(5), 1763-1768. https://doi.org/10.1213/ANE.0000000002864
- Schwartz, S. A., & Mahnke, M. S. (2021). Facebook use as a communicative relation: Exploring the relation between Facebook users and the algorithmic news feed. *Information, Communication* & Society, 24(7), 1041-1056. https://doi.org/10.1080/1369118X.2020.1718179
- Shreedhar, G. (2021). Evaluating the impact of storytelling in Facebook advertisements on wildlife conservation engagement: Lessons and challenges. *Conservation Science and Practice*, 3(11), e534. https://doi.org/10.1111/csp2.534

- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4–11. https://doi.org/10.12691/ajams-9-1-2
- Shvartsman, D. (2022, November 14). Facebook: The leading social platform of our times. *Investing.com.* Retrieved from https://www.investing.com/academy/statistics/facebook-meta-facts/
- Sinanan, J., & Gomes, C. (2020). 'Everybody needs friends': Emotions, social networks and digital media in the friendships of international students. *International Journal of Cultural Studies*, 23(5), 674-691. https://doi.org/10.1177/1367877920922249
- Srinivasan, R. (2018, January 22). *Tata Housing Partners Facebook for Social Selling Goa Project. The Hindu Business Line*. Retrieved from https://www.thehindubusinessline.com/news/real-estate/tata-housing-partners-facebook-for-social-selling-goa-project/article7766566.ece
- Statt, N. (2018, October 23). How Amazon's retail revolution is changing the way we shop. The Verge. Retrieved from https://www.theverge.com/2018/10/23/17970466/amazon-prime-shoppingbehavior-streaming-alexa-minimum-wage
- Stephanie, G. (2021). Sample size in statistics (how to find it): Excel, Cochran's formula, general tips. StatisticsHowTo.com. Retrieved from https://www.statisticshowto.com/probability-and-statistics/find-sample-size/
- Sulflow, M., Schäfer, S., & Winter, S. (2019). Selective attention in the news feed: An eye-tracking study on the perception and selection of political news posts on Facebook. *New media & society*, 21(1), 168-190. https://doi.org/10.1177/1461444818791520
- Surucu, L., & MASLAKÇI, A. (2020). Validity and reliability in quantitative research. *Business & Management Studies: An International Journal*, 8(3), 2694-2726. https://doi.org/10.15295/bmij.v8i3.1540
- Szymkowiak, A., Melovic, B., Dabic, M., Jeganathan, K., & Kundi, G. S. (2021). Information technology and Gen Z: The role of teachers, the Internet, and technology in the education of young people. *Technology in Society*, 65, 101565. https://doi.org/10.1016/j.techsoc.2021.101565
- Tan, J. (2020, August 11). Grab.my hands out RM2.5m ad space to SMEs, helps create personalised ads. Marketing Interactive is Asia's leading source of advertising, marketing & media news. News coverage includes Singapore, Malaysia and Hong Kong, reaching out to all marketing & advertising-related professionals. Retrieved from https://www.marketinginteractive.com/grab-my-hands-out-rm25m-ad-space-to-smes-helps-create-personalised-ads
- Thangavelu, P. (2020, June 5). *Companies that failed to innovate and went bankrupt. Investopedia.* https://www.investopedia.com/articles/investing/072115/companies-went-bankrupt-innovationlag.asp
- Thomas, R. B., Johnson, P. T., & Fishman, E. K. (2018). Social media for global education: pearls and pitfalls of using Facebook, Twitter, and Instagram. *Journal of the American College of Radiology*, 15(10), 1513–1516. https://doi.org/10.1016/j.jacr.2018.01.039
- Wang, K. Y., Chih, W. H., & Hsu, L. C. (2020). Building brand community relationships on Facebook fan pages: The role of perceived interactivity. *International Journal of Electronic Commerce*, 24(2), 211-231. https://doi.org/10.1080/10864415.2020.1715532
- Wilson, G., Gates, J. R., Vijaykumar, S., & Morgan, D. J. (2021). Understanding older adults' use of social technology and the factors influencing use. *Ageing & Society*, 43(1), 222–245. https://doi.org/10.1017/S0144686X21000490

- Yang, M., Ren, Y., & Adomavicius, G. (2019). Understanding user-generated content and customer engagement on Facebook business pages. *Information Systems Research*, 30(3), 839-855. https://doi.org/10.1287/isre.2019.0834
- Zapf, A., Castell, S., Morawietz, L., & Karch, A. (2016). Measuring inter-rater reliability for nominal data-which coefficients and confidence intervals are appropriate? *BMC Medical Research Methodology*, 16(1), 1-10. https://doi.org/10.1186/s12874-016-0200-9
- Zulkifle, A. M., Aziz, K. A., & Sarhan, L. (2021). Determinacy of the factors affecting Malaysian youth to be social entrepreneurs. *Journal of Entrepreneurship: Research & Practice*, Article ID 723247. https://doi.org/10.5171/2021.723247