Effectiveness of E-Marketing Strategies on Consumers' Purchase Intention

Yip Pui Yan[1], Mohd Rosli Abdul Ghani[2], Dayang Hasliza Muhd Yusuf[3], PhD and Muhammad Shahar Jusoh[4], PhD

[1234]Faculty of Applied and Human Sciences
Universiti Malaysia Perlis, Kangar, Perlis

Abstract: The aim of this research is to analyze the effectiveness of e-marketing strategies on consumers' buying behavior. Many previous research had indicated that Search Engine Marketing (SEM), Social Media Marketing (SMM) and Virtual Reality Marketing (VRM) have positive significant effect on the consumers' purchasing behavior. The importance of digitization in tourism industry has been growing and this had been highlighted by many parties like the government, United Nations' World Tourism Organization (UNTWO) and World Bank Group. This matter drives this research to be conducted. This research finding can be used as a source of reference on some of the factors that the businesses should focus on to improve their trading sites popularity, visibility, and connectivity in order to meet the consumers' purchasing behavior. The targeted context of this research is the UniMAP students aged from 18 to 25 years old. The convenient sampling was used and a total of 263 questionnaires were answered. Based on the analysis conducted through SPSS, it showed that only Search Engine Marketing (SEM) and Social Media Marketing (SMM) have significant positive relationship with the consumers' buying behavior whereas Virtual Reality Marketing (VRM) has positive but not significant relationship with the consumers' buying behavior. In conclusion, the marketers need to put more efforts towards enhancing the search engine ranking and also social media advertising in order to increase the consumers' purchase intention in Malaysia. As for the Virtual Reality Marketing (VRM) are not encouraged to invest more due the Virtual Technology emergence is still low in Malaysia.

Keywords: *Search Engine Marketing (SEM), Social Media Marketing (SMM), Virtual Reality Marketing (VRM), Consumers' Purchase Intention, Tourism Industry*

INTRODUCTION

The Star Online on the 22nd of March 2019 stated the Malaysia tourism industry is having a very big difficulty in maintaining the number of tourists to come to Malaysia. With the source obtained from Tourism Malaysia, Singaporean is the top tourists of Malaysia, which ranked 1st and the number arrivals had started to decline since year 2016. It had dropped since year2016. In conjunction with that, the article had stated that digital marketing effort had to be focused to improve the target arrivals [1]. Therefore, it is a very important field to be studied. Furthermore, there are a lot that can be done to enhance the marketing. The opportunities and the push to study it further explained below.

As published in the Daily Express on the 8th of November 2018, the significance of getting more engaged into the new platform in businesses in the upcoming 10 years have been highlighted by the President of Asean Traders Association, Datuk Moehamad Izat Emir in the Asean Digital Forum 2018. A few speakers were invited to the forum to address on how to sustain in e-business platform using digital marketing. The speaker sent were all the representatives from the government agencies like Malaysia Digital Economy Corporation (MDEC), academia, MATRADE and local business community. Datuk Moehamad Izat Emir also said that the urge to keep updated and improved towards digital marketing is parallel to government's targeted achievement, that is to boost up the digital economy which is especially beneficial for SME companies. The digital transformation was expected to outstretch to RM400 billion by the year of 2025, as this digital field had successfully contributed a lot (18.2%) to the Malaysia's Gross Domestic Product (GDP). Furthermore, the Finance Minister of Malaysia, Lim Eng Guan Eng even proposed an allocation which amounted to RM1 billion for digital economy development (Bernama, 2018).

Based on the issues highlighted earlier, tourism industry was the scope of study selected to be zoomed in. The news published by the New Straits Times with the title "Future Proof: When the Tourism Industry Goes Digital" on the 12th of

Corresponding Author: Mohd Rosli Abdul Ghani, Faculty of Applied and Human Sciences, Universiti Malaysia Perlis, Kangar, Perlis, Malaysia, 0192435295

October 2018 had inspired this study to focus on tourism industry.

Tourism plays a really major role in many countries as it brings a lot of benefits to the destination country and host communities. According to United Nations' World Tourism Organization (2017), the international tourism arrivals had even achieved a new record of more than 1.3 billion. This industry grew persistently for 8 consecutive years and supported 1 out of 10 job opportunities of the whole world. The World Bank Group had even published 2 reports that had pointed out on the importance of digital transformation to the tourism industry.

The New Straits Times highlighted that tourism industry makes a significant contribution to Malaysia's economy, which is 14.9% in year 2017. The Chief Statistician of Malaysia (Datuk Seri Dr Mohd Uzir Mahidin) had said that the figures he had obtained had shown there is an average yearly growth rate of 11.2% for 12 consecutive years, from year 2005 to 2017. Tourism industry had successfully increases the Gross Domestic Product (GDP) value of Malaysia and also enlarges the number of employment. The GDP had raised from RM76.6 billion in 2016 to RM82.6 billion in 2017. Whereas the number of labor forces get themselves involved into the tourism sector also had an increment of 1.9 million from year 2005 to 2017, from 1.5 million to 3.4 million. Furthermore, retail contribute the most in tourism sector, then followed by the accommodation and then transportation, whereby it generated a total revenue of RM26.8 billion, RM20.7 billion and also RM15 billion respectively in year 2017 (Bernama, 2018).

Since that the shopping made the largest contribution in the tourism sector, this study tends to focus on the retailing, especially on e-commerce. The number of youngsters adopting to the Internet had led to the high expectations for online sellers, especially those who aged between 18 to 25 years old who participated a lot in online purchasing activities [2]. They were the group of online shoppers that is expected to bring strong influence on the online market in the future. They also stated that there are more than 8 million Malaysians who had participated into the online purchase in their research paper. They said that the buying intention of online buyers and the factors influencing their intention is important to be discovered. This could be able to assist the online retailers to stay competitive. As a matter of fact, level of significance of increasing the quality of the online sites in order to sustain in online market have been handled well in the transformation of e-commerce [2].

Overall, the digitization is a quite catchy area to be studied especially in the tourism industry. Based upon all the current news extracted from reliable Online News publishers, like New Straits Times and Daily Express, Malaysia new government were showing an obvious intention to improve the nations' economical condition through digital marketing. Same goes to the United Nations' World Tourism Organization (UNTWO) and also World Bank Group. All these efforts of them to launch various kind of presses and even producing reports are just to draw the attention of the world to get themselves paced in-line with the era of modernization, especially to the entrepreneurs. The issue of the Singaporean tourists coming to Malaysia is declining is the drivers of this research to be done too. The main movers of these kind of alerts needed to be addressed to entrepreneurs were the consumers. They move wildly towards the technological pathway without realizing and getting more dependent on it. Thus, their purchase intention would have to be the main thing to focused on. The higher the purchase intention, the higher the possibility of buying, the higher the rate of economic growth.

Based upon all the journals that have been studied, the dependent variable, consumers' purchase intention have been observed a lot in the fields like social media, shopping in retail store, clothing, online shopping, foreign good products, airlines, organic food products and organic personal care products [3]; [5]; [5]; [6]; [7]; [9]; [9]; [10]; [11]. However, there is not many further explorations on purchase intention in the tourism field. In addition to that, the consumers' purchase intention in tourism sector have been explored in other countries like Singapore and Finland, but in Malaysia had not been tested on. Since there is a research gap, we would like to find out more about it.

All the Search Engine Marketing (SEM) journals studied, there are not any studies that had touched on the effects of Search Engine Marketing (SEM) on customers' purchase intention. The paper that supported this research is one [13] and still it is not on the tourism field. All the other journals studied, there are more than 5 journals also explore on how to increase web popularity only and there are also more than 5 journals studied on the role and the structures of Search Engine Optimization (SEO) systems. All the papers only work qualitatively.

There was a research investigated the impacts of social media marketing on the brand loyalty and buying intention among gen-Y and the sample of population was very narrow as it was carried out in Universiti Malaysia Sabah only due to time constraint [13]. Moreover, they also suggested the

future research to figure out more on the effects of social media marketing to the Gen-Y in a particular or even a few organizations. This indicated that they recommended the future research to be conducted in a wider range. There was a study suggested that the future research on examining the role of social media on intention to buy and also perceived usefulness should be done in a different areas (other than London, United Kingdom that he had studied) [15].

There are a few journals that have recommended that Virtual Reality (VR) should be studied further. One of the studies conducted on the people attitudes towards VR marketing only in Sweden and it would be interesting to explore if there are any differences in attitudes in different countries [15]. Other study stated that the performance of companies are reliable on the demands and actions of consumers and thus it is very important to get in depth knowings on the factors that affect the usage of VR in order to increase the utilization of technology [16]. Other than that, they also said that it would be interesting if we get to know and understand what the benefits is can be gained from the consumers with the usage of VR marketing.

LITERATURE REVIEW

The theory used for this study is the Technology Acceptance Model (TAM). This model has been approved as a theoretical structure to clarify consumption behavior in PC-mediated environments. TAM was designed to evaluate a person's acceptance on information technology, hypothesizing that perceived usefulness and perceived ease of use decide a person's mentality towards the utilization of information technology. Looking at customers' emotional and intellectual reactions to visit a Web-based store, TAM can be used to comprehend behavioral intentions to come back to the webpage and the probability of purchasing, showing that the perceived usefulness of the website influences customers' intentions to return. Likewise, the hypothetical framework of TAM can be utilized to comprehend the travelers' on the usage of information technology in making a decision on going for a trip and their intentions to travel to that particular spot.

Customer Purchase Intention as Dependent Variable

[9]; [18]; [7]; [10] There are four studies set that buying intention as the dependent variable of their journals. But they had test on different independent variables that may affect to the dependent variable. One of the above studies also stated that self-awareness to importance of health, concern towards environment, influence of reference group and awareness are the independent variables that are major factor that effect on buying behaviour [9]. These four independent variables have been assumed that it would give significant impact on buying behaviour in the hypotheses section. After test, the result had shown that only health consciousness and awareness has significant impact on buying behaviour while concern towards environment and influence from reference group has no significant impact on buying behaviour. This research has done in Sri Lanka which survey from 400 customers in the Western Province in Sri Lanka that 200 respondents were from Colombo (from Kaluthara and Gampaha districts).

There was a study mentioned that integrated marketing communication is the independent variable that will affect on consumer buying behaviour [18]. For the objective is to analyze the relationship between integrated marketing communication and consumer behaviour. After done the analysis, the integrated marketing communication shows a positive influence with consumer behaviour. This research was co-financed from the European Social Fund through Sectoral Operational Programme Human Resources Development 2013-2020, project number POSDRU 159/1.5/S/142115 "Performance and excellence in doctoral and postdoctoral research in Romanian economics science domain"

The attitudes toward LCCs (low cost carrier), subjective norms, perceived behavior control and passenger buying intention are the factor that will effect passenger buying behavior [7]. For the hypothesis, these four independent variables were predicted to have positive influence on passenger buying behavior. In addition, they also had done the hypothesis that perceived behavioral control positively influences passengers' buying intention toward LCCs. After test, the results shown that all the independent variables have positive influence on passenger buying behavior except the test between the perceived behavioral control and passengers' buying intention show that the perceived behavioral control does not influences passengers' buying intention toward LCCs. This research had done in Thailand with a survey from 791 passengers.

The personality, cultural, shopping enjoyment tendency, materialism, and impulsive buying tendency are the factor that will effect impulsive buying behavior [10]. For the hypothesis, the personality has separate to 5 types of personality which is emotional, agreeableness, extraversion, conscientiousness, and openness. Only openness and extraversion show a significant positive effect

on impulsive buying behaviour while others show the significant negative on impulsive buying behavior. For the cultural, it has separated to 2 types which are collectivism and individualism. These two types of cultural show a significant positive on impulsive buying behavior. For shopping enjoyment tendency, materialism, and impulsive buying tendency also show a significant positive on impulsive buying behavior. After test, the result was showing same with the listing hypothesis. This research was done in India with responses from 508 consumers in the different parts of India's National Capital Region.

Independent Variables

Search Engine Marketing (SEM)

SEM is the phenomenon that includes all search and visibility marketing techniques on the Internet. It is extremely important from a business point of view to be visible on the Internet especially in search engines [19]. Search Engine Marketing is currently the most popular Internet marketing method [13]. It is divided mainly into two ways: model pay-per-click and optimization of the search engine (SEO). Pay-per-click means that when customers use search engines to search for different keywords, the advertising links that match the keywords are on the right top side of the search results. The company will advertise the product or service according to the keywords so that potential customers can search for it. Search engine optimization (SEO) means that maximizing the number of visitors to a specific website by ensuring that the website appears high on the search engine results list because searchers will pay more attention to the top ten websites that appear in the search results. SEO is a good long - term investment. A successful marketing strategy for search engines can generate steady traffic on the website, great investment returns and increase brands and vendors ' awareness [19].

There are lots of research that examines on how to achieve higher ranking in the search engine for the benefits of the entrepreneurs. The research titled "The Role of Search Engine Optimization in Search Marketing" investigates the effect of search engine optimization (SEO) on the organic and sponsored search results competition between advertisers [20]. The results indicate that a positive level of optimization of the search engine can improve the ranking quality of the search engine and hence the satisfaction of its visitors.

Past study also reviewed on numerous types of optimization techniques for the whole website and individual webpages to enable they become more search engine friendly [21]. This research provides

a few tips to enhance the ranking of the website, which are by using the "Panda" update designed by the Google to improve the experience of the users, frequent sharing in social media, the old websites should be updated progressively instead of uploading new websites because the search engines do indexation on the old websites more often, the high-quality sites have to be linked more, check consistently on the ranking of websites, traffic data and other information such as from Alexa and a few more technical recommendations.

There was also research focuses on how to increase the webpages visibility [23]. This research had reviewed on literature from only three classes, that are from the advice published by search engine companies, research community empirical studies and a lot of SEO practitioners experience-based collective wisdom and sometimes empirical studies. It stated that the visibility of the websites was all affected by three parties, that are the search engine organizations like Google and Bing, the SEO practitioners and the users themselves. At the end of this research, the researchers said that the ranking algorithms must be changed frequently to keep the website up-to-date and to avoid the rankings to fall.

There's another research titled "A Study on the Relationship between Search Engine Optimization Factors and Rank on Google Search Result Page" that examines on the relationship between search engine factors again but with different independent variables (Backlinks, Keywords, Site Structure and etc) with the rank in the search paging [23]. Johansson (2016) analyzed on the relationship between keywords and the ranking of website in Google Search, practically on the 'long-tail' keywords because they have the higher potential to increase web visibility and rank due to its large fraction of keywords [25]. The main purpose of the research was to find the best keyword to be used and to know where they should be placed on the page. He had found out that the keywords should have focused on the titles, headlines, and the URL but not only on the body text.

There was a study on what steers organic traffic to retail sites [25]. They use a data set built from over 12,000 keywords and 2 million users to clearly identify the organic click drivers received in August 2012 by the top 759 retailers from search engines. They found out that the direct effect of higher ranking on Google result page stems from the consumers behavior whereas the indirect effect is the search engines tend to place higher quality or review sites on top.

There was a study in 2018 with the objective to improve the content of the website for customer

engagement and also lead generation for B2B customers [27]. In this thesis, it stated that it is very important for the B2B online marketers to scrutinize on the customer's behavior changes so that they can help out their target customers to overcome the issues occur during purchase decision making and it is impossible for the marketers to conduct an effective marketing plans without understand deeper into their customers' behavior. The issues will be faced in the B2B purchasing decisions are comparably more than the B2C due to the high risks in the process of choosing suppliers and products with poor quality. As an ending of this thesis, it stated that it is necessary for the companies to upgrade their websites to follow up and gain more supports from customers and to be more search engine friendly. This research had made lots of literature reviewing and analysis critically on how the search engine works, that's the process, effort and a lot. The figure below shows one of the findings he had figured out and it can be seen clearly that keywords appeared throughout the whole website are all very important. The information appeared on the webpage can be referred to as codes and can be read by the search engine algorithms and also be evaluated, and then ranked.

Social Media Marketing (SMM)

There was a study stated that social media marketing can be interpreted through online social media as a new field and a new business practice involving the advertising of goods, services, information, and ideas [27]. Social media marketing is based on each platform's inherent content, community, and technology. As such, companies need to be active in space by developing customized content and coming into contact with customers in a way that is best suited to that particular technology to make it successful. One of social media marketing's defining characteristics is that it allows companies to create and track a range of metrics that assess customer responses to marketing actions.

There was a study that examined the social media marketing as the dependent variable. The study investigated on the attitudes, beliefs and behavioral responses of the young social media users toward social media advertising and also the purchase intention toward luxury products [28]. The questionnaires were being distributed through online survey method and only 306 of them are usable out of 347 that have been collected. The respondents are all college students of various races like American Indian, Asian, African American, Caucasian, Hispanic or Latino and also others. Product Information Beliefs, Falsity Beliefs, Value Corruption Beliefs and Brand Consciousness were found to be having positive and significant

relationship with social media advertising except for the Materialism Beliefs.

The journal titled "Factors Influencing SMEs Adoption of Social Media Marketing" investigates on the factors that steer the Small Medium Enterprises to adopt the social media marketing [27]. This research were done qualitatively and had found out that the factors are end users, organizational needs, technological emergence, requests from top management and also business environment like the government implements policies to encourage on the adoption of social media marketing.

There was a study on social media marketing which investigates on how persuasive messages like argument quality, post attractiveness and post popularity will usher the users of the internet to click like and also share the posts in the social media (Facebook) [29]. It mentioned that the users will have different kind of communicating behaviors and suitable for different kind of message characteristics. It also recommended the marketing managers to invite the popular individuals to connect with the page as a way to promote and attract the users. From this research, we could have learned that in order to get the attention and positive responses, the efforts to master up the right way to capture more users is necessary. This journal is similar to what I have to study. This research wants to get more attention, like and sharing of the posts whereas this paper aims to get the idea on how to get more consumers to purchase the products or services (which e-marketing strategies are effective).

There is a study explores on how the social media marketing activities will affect the brand equity and consumer behavior practically on the luxury brands such as Dior, Gucci, Burberry, Hermes and Louis Vuitton [30]. The study was conducted based on the distribution of questionnaire to 845 luxury brand consumers, which consists of the Indian, Chinese, French and also Italian. This research categorizes the social media marketing activities into 5 aspects, entertainment, interaction, trendiness, customization and word of mouth. It had also proven that the social media efforts have a positive and significant relationship with brand equity (brand awareness and brand image) and consumer behavior.

There is also a study on social media marketing activities as the independent variable. The brand loyalty, value consciousness and brand consciousness as the dependent variables [32]. This research was done quantitatively through the dissemination of self-administered questionnaire to a total of 346 undergraduate students. The findings

had shown that the perceived social media marketing efforts to help the marketers to gain brand loyalty, brand consciousness and also the value consciousness.

Virtual Reality Marketing (VRM)

Virtual Reality alludes to the replication of real-life to 3D environment generated by using computer software [33]. This newly replicated three-dimensional environment used to interact by using special physical tools like VR Gear. Virtual reality blocks visual access to the present reality by literally covering the eyes and ears of users with non-transparent digital screens. Due to the potential of the technology to impact how stories are told, different brands are increasingly experimenting with and implementing them in order to reach a wider audience, and possibly use it as a future tool to improve marketing and try to manipulate consumer impact. Virtual Reality are becoming an essential part of people's marketing tactics and many avenues of advertising have remained undiscovered [33].

There is a study on virtual reality to figure out whether virtual reality helps consumers learn about the products and whether consumers will feel comfortable using virtual reality [34]. It was a qualitative research and the scope of the study was the students and lecturers of University of Boras. The respondents only consists of 10 to 15 people. Their study was based upon the concept of IKEA VR Experience. They wanted to prove that consumers will be more interested to buy the products if they had accessed and felt it through VR than looking it on a catalog. The results obtained were proportionally directed to the study hypotheses. The participants spent more time on VR, remembered and can recall more items through VR and more interactive with the VR environment than the online catalog.

Relationship between Search Engine Marketing (SEM) and Customer's Purchase Intention

The study on the use of search engines and unplanned online purchases showed that search efforts increase visiting and buying intentions of retailers' websites [35]. They did the research for consumer Internet research and had been referred to a total sample of 942 articles that were published from year 1993 to year 2012. They had identified on 8 categories of online consumer behavior from the largest to the smallest, that are cognitive issues, user-generated content, demographics and segmentation of the Internet, online use, cross-cultural, online forums and networks, tactical use and results, and Internet search for consumers. This

study findings showed that the consumers react positively towards search engine marketing.

Based upon the strong relations between Search Engine Marketing (SEM) and consumer purchase intention shown by the paragraphs above (all results are positive and significant), therefore, the second hypothesis is developed:
H1: Search Engine Marketing (SEM) will influence the customers' purchase intention.

Relationship between Social Media Marketing (SMM) and Customer's Purchase Intention

The study on the impact of the social media marketing medium towards the buying intention also covers brand loyalty among Gen-Y in Universiti Malaysia Sabah [13]. The targeted respondents were the students and 150 data were collected. The social media medium used for the research were E-WOM, online communities and online advertisements. The results had indicated that the social media marketing medium have effect on both brand loyalty and customer purchase intention. Therefore, the marketing managers should use the social media as their marketing tool to capture the attention of the emerging young consumers that will overtake the future.

There is study examined on the effectiveness of social media advertising in improving the consumers' buying behavior [36]. Brand Image and Brand Equity were acted as the mediating variable in this research. The sample used for the study was 100 undergraduate students from the Cypriot University and the relationship between social media advertising (Facebook) and consumers' purchase intention were all proven positively affected and also significant.

There is a study on the impact of social media on the consumer decision process discusses on the new consumer decision journey with similar examples from all areas of the travel industry and explains how the social media engagement benefits savvy tourism marketers [36]. This research analyzes qualitatively and had discovered that the social media marketing can drive the purchasing intentions of the consumers as it creates awareness and positively spread overtime through word of mouth. Some of the tourism companies are not embracing the consumers in a meaningful way and this will be the only factors that cause some companies fail to attract the consumers.

Based upon the strong relations between Social Media Marketing (SMM) and consumer purchase intention shown by the paragraphs above (all results

are positive and significant), therefore, the second hypothesis is developed:
H2: Social Media Marketing (SMM) will influence the customers' purchase intention.

Relationship between Virtual Reality Marketing (VRM) and Customer's Purchase Intention

There is a study on virtual reality that obtained a highly positive results for their second sub-question, that is whether the VR experience will increase the desire of the consumers to book or trip [38]. This research had conducted both consumer survey and interview. The number of samples obtained for interview were 3 to 5 business representatives and 15 to 20 individual consumers. There were also 37 Singaporean respondents for the survey.

Another study reveals the impact of the Virtual Reality technology on customers' buying intention through brand recall and sense of presence, which means they focuses on two routes [38]. The study was conducted in the beer, water and wine areas in the physical supermarkets. The sample size was 178. In two virtual environments, one with a navigable sequence of 360 ° images (90 subjects) and the other with free 3D navigation (58 subjects), the physical supermarket was recreated identically.The results had shown that there are significant relationship between these two elements of VR towards the customer purchase intention.

Based upon the strong relations between Virtual Reality Marketing (VRM) and consumer purchase intention shown by the paragraphs above (all results are positive and significant), therefore, the third hypothesis is developed:
H3: Virtual Reality Marketing (VRM) will give effect to the customers' purchase intention.

METHODOLOGY

Conceptual Framework
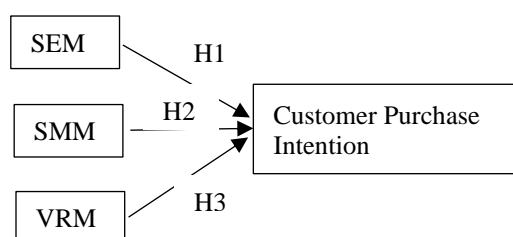
Conceptual Framework for the effectiveness of E-Marketing Strategies [Search Engine Optimization (SEO) and Social Media Marketing (SMM) and Virtual Reality Marketing (VRM)] on the Customer Purchase Intention

H1: Search Engine Marketing (SEM) will influence the customers' purchase intention.

H2: Social Media Marketing (SMM) will influence the customers' purchase intention.

H3: Virtual Reality Marketing (VRM) will gives effect to the customers' purchase intention.

There are three independent variables, which are Search Engine Optimization (SEO) and Social Media Marketing (SMM) and Virtual Reality Marketing (VRM) whereas the dependent variable is the Customer Purchase Intention. This research will examine the relationships between these three independent variables and customer purchase intention.

Research Design

Research design is the general plan for testing a specific hypothesis or research question. There are 2 scientific methods of gathering data needed for a research, which are qualitative and quantitative research. The methods can be used combined or separate, depending on the purpose of the study.

This research uses the causal research which is to test whether a variable causes a change in another variable [39]. For example, variables A causes variable B, if variable B is changed, adjusted or deleted, the variable B problem is solved. It covers the research of causes and effects of the relationship between Search Engine Optimization (SEO) and Social Media Marketing (SMM) and Virtual Reality Marketing (VRM) with the customer purchase intention of students in UniMAP.

This study is based on survey questionnaire. Surveys allow an accumulation of a lot of data from a substantial population, and it can be carried out in a very economical way. The questionnaire enables the simple data comparing by standardization, and survey methodology can give great control to the researcher over the research procedure. Nonetheless, so as to succeed, to the designing and piloting procedures of the survey and furthermore to test determination a rich measure of time ought to be utilized. Likewise ought to be taken into notice that it can be time consuming to analyze the data.

In this study, the survey forms will be self-administered questionnaire which will be distributed on the web (Facebook and email) and will be finished by respondents voluntarily.

Target Population

The target population of this research is the students of UniMAP which were enrolled in year 2018 because they are the generation who get adopted to the internet the most and had led to the high expectations for online sellers, especially them whom aged between 18 to 25 years old [2]. According to the information provided by the UniMAP Registration Department staff (2018), the total number of students enrolled in year 2018 is 11189. The unit of analysis of this study is UniMAP students who do online shopping such as through Shopee, LAZADA, TaoBao, Hermo and other online platforms.

Sample of Study

There are two main sampling methods that can be used in the survey research, that are probability and non-probability sampling. The probability sampling consists of simple random sampling, stratified sampling, cluster sampling and and systematic sampling. Probability sampling method has its own condition upon application, that is a complete sampling frame must be available. Contact information of the entire population should be on hand. Next, all person will have an equal chance of being selected for the survey without missing out entire portions of the audience. Probability sampling method is more expensive and time consuming than convenience or purposive sampling.

Non-probability sampling consists of convenience sampling, quota sampling, judgement sampling and snowball sampling. Non-probability sampling techniques are used in the situation whereby there is not an exhaustive population list available. There is no way of knowing the size and effect of sampling error (missed person, unequal representation, etc). Then, it is more convenient and less costly (Surbhi, 2016). The convenience sampling was chosen because it is accessible to researcher, easy to recruit, easiest, cheapest and least time consuming. The questionnaire was addressed only to UniMAP students who involves in online shopping and members of the Facebook groups, Third year, Second year and First year students groups. This method was chosen because the students' presence on this type of groups shows their interest on being constantly informed in Facebook and purchase online.

Sample Size

The population for the research is composed by all students attending daily classes at Universiti Malaysia Perlis (UniMAP).

There are two reasons that lead to the use of Cochran's technique to calculate for the sample size. One of it is that the if the Krejcie and Morgan table were selected to be used, the sample size that I required to collect will be 370 in total. This will be a very hard task to be completed due to time constraint. The second reason is that there are quite a number of research papers related to my field of study that uses Cochran's formula. Cochran (1977) developed a formula to calculate a representative

$$n_0 = \frac{z^2\,pq}{e^2}$$

sample for proportions as $\quad$ where, n is the sample size, z is the selected critical value of desired confidence level, p is the estimated proportion of an attribute that is present in the population, q = 1- p and e is the desired level of precision. This sampling formula will be used when we want to calculate a sample size of a large population whose degree of variability is not known.

Sample Size of the Study (Survey Monkey, 2018)

Therefore, with a population size of 11189, 90% level of confidence and 5% margin of error, a total of 263 sample size should be obtained. (Survey Monkey, 2018).

Research Instrument and Measurement

The instrument used for this study is questionnaire. The questionnaire consists of a set of structured and unstructured questions designed by researchers to obtain data from the respondents. No research is better than its questionnaire and a faulty questionnaire means faulty research. Hence, a questionnaire designed must be valid, reliable and must not be bogus so that the data collected can validate the research.

The measurement is done by using the 5-point likert scale (1-Strongly Disagree; 2-Disagree; 3-Neutral; 4-Agree; 5-Strongly Agree). The ratio among respondents are also categorized, for instance, between male and female (1- male; 2-female). All the demographic and non-demographic items are all

being transformed into ratio scaling (raw data in Microsoft Excel). The data are then being entered into the SPSS system for analysis. SPSS Statistics is a software package used for interactive, or batched, statistical analysis.

ANALYSIS

The reliability values of all variables were more than 0.7, which means that all the items in the questionnaire were proved to be reliable and valid. There were 263 respondents participated into this study. Furthermore, the next element or aspect used to analyze the variables will be the significant or can be called as the p-value, Pearson Correlation value and the Standardized Beta values. Figure 5.1.1 and Table 5.1.1 shows the summary of the results obtained from the SPSS.

SPSS Results Summary

Hypotheses	SPSS Analyses	Relationship
H1: Search Engine Marketing (SEM) will influence the customers' purchase intention.	Sig = 0.000 R = 0.716 B = 0.441	✓ Accepted ✓ Strong ✓ Positive
H2: Social Media Marketing (SMM) will influence the customers' purchase intention.	Sig = 0.000 R = 0.675 B = 0.320	✓ Accepted ✓ Strong ✓ Positive
H3: Virtual Reality Marketing (VRM) will gives effect to the customers' purchase intention.	Sig = 0.088 R = 0.573 B = 0.094	✓ Rejected ✓ Strong ✓ Positive

The p-value for H1 is 0.000 and the Beta value is 0.441, which means that there is a positive and significant relationship between Search Engine Marketing (SEM) and customers' purchase intention. The Pearson Correlation value is 0.716, that is greater than 0.5 whereby it signifies that the relationship between these two variables are strong. Thus, H1 is accepted and supported. This hypothesis is also supported by Cummins et al. (2016). This research explores on the online consumer behavior in various aspects and one of the the findings was that the search engine efforts will

increase the traffic and at the same time drives up the buying intentions of consumers.

The p-value for H2 is 0.000 and the Beta value is 0.320, which means that there is a positive and significant relationship between Social Media Marketing (SMM) and customers' purchase intention. The Pearson Correlation value is 0.675, that is greater than 0.5 whereby it signifies that the relationship between these two variables are strong. Thus, H2 is accepted and supported. This hypothesis were supported by many journals [28] [13] [27] [15] [36]. All the journals had obtained results of the Social Media Marketing (SMM) will directly and also indirectly affect the customers' purchase intention.

The p-value for H3 is 0.088 and the Beta value is 0.073, which means that there is a positive but not significant relationship between Virtual Reality Marketing (VRM) and customers' purchase intention. The Pearson Correlation value is 0594, that is greater than 0.5 whereby it signifies that their relationship between these two variables are strong. Thus, H3 is rejected.

All the literature reviewed with regarded to this hypothesis had shown positive results [38] [38] [41]. However, all these studies were carried out in other more developed countries like Singapore, Germany and also Spain. The main reason that makes Virtual Reality Marketing (VRM) found to be positive but not significant to the customers' purchase intention may be due to the usage of VR is not wide enough in Malaysia yet and even the students in UniMAP. The popularity of Virtual Reality Technology is weak was proven by the Digital News Asia articles published on the 25th of May 2018. It stated that the year of Augmented Reality (AR) and Virtual Reality (VR) is not here yet. Malaysia have to be prepared for this long-term investment. It also mentioned that there are lots of challenges faced throughout these years by Malaysia to import more AR and VR products. The first is the price of the VR and AR hardware too high. There are already market for VR to expand in the gaming sector but yet most of the people in Malaysia had not been noticed of this technology yet especially in the education sector, training sector and also property selling sector. The awareness of the technology has not been started for long and thus causing this hypothesis found to be not significant even though is positive.

CONCLUSIONS

There are lots of limitations in this study. First, the time range is too limited. The study is less than 1 year which is just a cross-sectional study. This

reason made this study hard to expand the scope to a larger population. The population tested is too small which is only limited to the students. The study also only limited three independent variables. Finally, one of the independent variables in this study is proven to be rejected, which is the Virtual Reality Marketing (VRM). The technology advancement is not in Malaysia yet. The study had tested way too early.

The longitudinal study should be used in the future study because marketing should have a longer duration of study due to it examines on the behavior (which is a rapid changing element in the world). It requires long time observation to capture a more accurate result. Next, more variables should have been tested on because there are more marketing strategies emerging in the world such as the Augmented Reality Marketing and Guerilla Marketing. It is believed to have more strategies invented in the future. The Virtual Reality Marketing is also have to be tested in the future when the technology in Malaysia have been enhanced. Other than that, the scope of study to more age groups should be enlarged to the younger population because they were born in the technological era too.

REFERENCES

[1] R. Ahmad, *Putting the shine back in Malaysia's tourism industry,* 2019.

[2] T. Lee, M. Ariff, N. Zakuan, Z. Sulaiman and M. Saman, "Online sellers' website quality influencing online buyers' purchase intention," 2016.

[3] J. Son, B. Jin and B. George, *Consumers' purchase intention toward foreign brand goods.*

[4] A. A. Alalwan, "Investigating the impact of social media advertising features on customer purchase intention," *International Journal of Information Management,* pp. 65-77, 2018.

[5] F. Gudonaviciene and S. Alijosiene, "Visual merchandising impact on impulse buying behavior," *In Procedia - Social and Behavioral Sciences,* vol. 213, pp. 635-640, 2015.

[6] G. Bighiu, A. Manolica and C. Roman, *Compulsive buying behavior on the internet,* 2015.

[7] T. Buaphiban and D. Truong, "Evaluation of passengers' buying behaviors toward low cost carriers in Southeast Asia," *Journal of Air Transport Management,* pp. 124-133, 2017.

[8] K. D. L. R. Kapuge, *Determinants of organic food buying behavior: Special reference to organic food purchase intention of Sri Lankan Customers,* 2016.

[9] A. Singh and P. Verma, "Factors influencing Indian consumers' actual buying behaviortowards organic food products," *Journal of Cleaner Production,* pp. 473-483, 2017.

[10] A. J. Badgaiyan and A. Verma, "Intrinsic factors affecting impulsive buying behavior: Evidence from India," *Journal of Retailing and Consumer Services,* pp. 537-549, 2014.

[11] E. Ghazali, P. C. Soon, D. S. Mutum and B. Nguyen, "Health and cosmetics: Investigating consumers' value for buying organic care products," *Journal of Retailing and Consumer Services,* pp. 154-163, 2017.

[12] S. Yu, *Search engine optimization marketing research on the internet case,* 2013.

[13] B. K. P. D. Balakrishnan, M. I. Dahnil and W. J. Yi, *The impact of social media marketing medium toward purchase intention and brand loyalty among generation Y,* 2014.

[14] M. N. Hajli, "A study of the impact of social media on consumers," *International Journal of Market Research,* pp. 387-404, 2014.

[15] S. Norgren and F. Lindqvist, *Consumers attitudes towards virtual reality marketing in Sweden,* 2017.

[16] R. Risholm and J. T. Sanden, *Are you ready for a virtual reality take off? A study on Swedish companies' perception of virtual reality marketing,* 2018.

[17] O. O. E. Mihaela, *The influence of the integrated marketing communication on the consumer buying behavior,* 2015.

[18] K. Neupane, *Search engine optimization and its implicationin internet marketing,* 2013.

[19] B. -Y. Shih, C. -Y. Chen and Z. S. Chen, *An empirical study of an internet marketing strategy for search engine optimization. Human factors and ergonomics in manufacturing & services industries,* 2012.

[20] R. Berman and Z. Katona, *The role of search engine optimization in search marketing,* 2013.

[21] K. u. Rehman and M. N. A. Khan, "The foremost guidelines for achieving higher rankingin search results through search engine optimization," *International Journal of Advanced Science and Technology,* pp. 101-110, 2013.

[22] J. B. Killoran, *How to use search engine optimization techniques to increase website visibility,* 2013.

[23] T. Nasomyont and N. Wisitpongphan, *A study on the relationship between search engine optimization factors and rank on Google search result page,* 2014.

[24] D. Johansson, *Search engine optimization and the long tailof web search,* 2016.

[25] M. R. Baye, B. De los Santos and M. R. Wildenbeest, "Search engine optimization: What drives organic traffic to retail sites?," *Journal of Economics and Management Strategy,* 2016.

[26] C. Lieu, *Improving website's content for lead generation and customer engagement,* 2018.

[27] M. I. Dahnil, K. M. Marzuki, J. Langgat and N. F. Fabel, *Factors influencing SMEs adoption of social media marketing,* 2014.

[28] S. C. Chu, S. Kamal and Y. Kim, "Understanding consumers' responses toward social media advertising and purchase intentiontoward luxury products," *Journal of Global Fashion Marketing,* pp. 158-174, 2013.

[29] Y. T. Chang, H. Yu and H. P. Lu, "Persuasive messages, popularity cohesion, and message diffusion in social media marketing," *Journal of Business Research,* 2015.

[30] B. Godey, A. Manthiou, D. Pederzoli, J. Rokka, G. Aiello, R. Donvitto and R. Singh, "Social media marketing efforts of luxury brands: Influence on brand equity and consumer behavior," *Journal of Business Research,* pp. 5833-5841, 2016.

[31] A. R. Ismail, "The influence of perceived social media marketing activities on brand loyalty: The mediation effect of brand and value consciousness," *Asia Pacific Journal of Marketing and Logistics,* pp. 1-31, 2017.

[32] T. Alexander, *Virtual and augmented reality: Innovation or old wine in new bottles?,* 2019.

[33] H. Bao and A. Zhuang, *Virtual reality in marketing - An explorative study,* 2016.

[34] S. Cummins, J. W. Peltier, J. A. Schibrowsky and A. & Nill, "Consumer behavior in the online context," *Journal of Research in Interactive Marketing,* pp. 169-202, 2014.

[35] M. Dehghani and M. & Tumer, *A research on effectiveness of facebook advertising on enhancingpurchase intention of consumers,* 2015.

[36] S. Hudson and K. Thal, "The impact of social media on the consumer decision process," *Journal of Travel & Tourism Marketing,* pp. 156-160, 2013.

[37] N. Jokelainen, *Bringing Singaporeans to see northern lights - How virtual reality be utilised in travel marketing?,* 2018.

[38] J. Martinez-navarro, E. Bigne, J. Guixeres, M. Alcaniz and C. Torecilla, "The influence of virtual reality in e-commerce," *Journal of Business Research,* 2018.

[39] U. Sekaran and R. Bougie, "Research methods for business: A skill building approach (5th edition)," *International Journal of Information Technology and Managemen,* 2009.

[40] P. Tiusanen, *Virtual reality in destination marketing,* 2017.

[41] B. Moses, "Career planning mirrors social change," *The Globe and Mail,* 1999.

[42] I. Muda, A. Rafiki and M. Harahap, "Factors".

[43] P. Kannan and H. Li, "Digital marketing: A framework, review and research agenda," *International Journal of Research in Marketing,* pp. 1-80, 2016.