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INTENTION OF USING QR CODES AS MARKETING
COMMUNICATION TOOL**

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DETERMINANTS INFLUENCING BEHAVIORAL INTENTION OF USING QR
CODES AS MARKETING COMMUNICATION TOOL

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A research project submitted in partial fulfilment of the requirements for the degree of
Bachelor of Technology Management (High Technology Management)

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JUNE 2019

DECLARATION

“I hereby declare that this project report is based on my original work except for citation and quotations which have been duly acknowledged. I also declare that it has not been previously and concurrently submitted for any other degree or award at UTeM or other institutions. ”

Signature :.....

Name :.....

Date :.....

DEDICATION

This research project is dedicated to my beloved family and friends for their endless support and encouragement in the progress of completing this research project.

Besides, I would like to dedicate this research to my supervisor, Prof. Dr. Ahmad Rozelan Yunus who guide me and encourage me when I conducting this research.

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ABSTRAK

Quick Response codes (QR) kini banyak digunakan oleh syarikat sebagai alat komunikasi pemasaran untuk menyampaikan maklumat dan berinteraksi dengan pengguna. Walaupun *QR codes* adalah satu alat yang mengurangkan kesusahan semasa memperolehi maklumat, tetapi ia tidak dapat dilaksanakan dengan berkesan kerana kesedaran tentang teknologi ini sangat rendah. Dalam kajian ini, penentu seperti peramalan prestasi (PE), peramalan usaha (EE) dan pengaruh sosial (SI) yang mempengaruhi tingkah laku pengguna untuk menggunakan *QR codes* sebagai alat komunikasi pemasaran akan dianalisis. 400 soal selidik telah dikumpulkan dengan menggunakan *Google form* dalam kajian ini tetapi hanya 391 daripadanya boleh digunakan. Teknik analisis deskriptif telah digunakan untuk profil demografi. Manakala *Reliability Test*, *Normality Test* dan *Multiple Regression Analysis* telah dianalisis dengan penggunaan SPSS. Keputusan menunjukkan data yang dikumpul adalah *normally distributed* dan boleh dipercayai. Selain itu, PE, EE dan SI mempunyai hubungan positif dengan tingkah laku pengguna untuk menggunakan *QR codes* sebagai alat komunikasi pemasaran

ABSTRACT

Quick Response (QR) codes are now being widely used by companies as a marketing communication tool to deliver information and interact with consumers. Although QR codes are convenient and ease the difficulty of access information, but it cannot perform effectively since the awareness of this technology is very low. In this study, the determinants that influence consumers' behavioral intention to use QR codes as marketing communication tool will be analyzed such as performance expectation (PE), effort expectation (EE) and social influence (SI). Data was collected through Google form with total 400 questionnaires but only 391 are usable. Descriptive analysis has conducted to use for demographic profile. While Reliability Test, Normality Test and Multiple Regression Analysis conducted with SPSS in this research. The results show that the data collected are normally distributed and reliable. Besides, the independent variables, PE, EE and SI have positive relationship with behavioral intention of consumers to use QR codes as marketing communication tool.

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LIST OF SYMBOLS AND ABBREVIATIONS

SMS	=	Short Message Service
QR	=	Quick Response
URLs	=	Uniform Resource Locators
3D	=	Three Dimensional
XTS	=	X-Series Touring Sedan
BI	=	Behavioral Intention
PE	=	Performance Expectation
EE	=	Effort Expectation
SI	=	Social Influence
SAS	=	Statistical Analysis System
USA	=	United States of America
H1, H2, H3	=	Hypothesis 1, 2 and 3
SPSS	=	Statistical Package for the Social Sciences
β	=	Beta
ε	=	Error Term
%	=	Percentage
μ	=	Mean
σ	=	Standard Deviation

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CHAPTER 1

INTRODUCTION

1.0 Introduction

This chapter serves as an introduction where it includes the background of research, problem statement, research objectives, research questions, scope of study, limitation of study and the outline of study. These will give the reader a precise understanding towards the study.

1.1 Research Background

Marketing is a process of management that mainly focus on move the concept of goods and services to the customers. It includes the planning of the four main elements in marketing that considered as marketing mix strategies to fulfill satisfaction of customers and even the goals of organizations. The development of products, pricing determination,

distribution channel to reach customers' hand and lastly the implementation of promotional strategy.

Promotional strategy as known as the marketing communication tool is the method to implement for company to promote or advertise their products and services. Most of the company have a particular department for marketing communications for planning and developing those tools for brand building and indirectly increasing sales of products. There are five types of marketing communication tools which are advertising, sales promotion, public relations, direct mail and sponsorship.

Advertising as one of the marketing communication tool that being used by almost all of the company for promoting their products. The objective of advertising is to reach large audiences with messages that consist of information of the products that company desire to deliver. There are few types of method for company to do so, but nowadays as the rapid grow of high technology, company tend to use mobile marketing as their tools to reach more audiences quicker. Mobile marketing able to reach audiences through their smartphones, tablets or other electronic devices via websites, email, SMS, social media and apps.

Quick Response (QR) code is being used in interactive advertising as a new technology that able to deliver information and interact with consumers in a short time accurately (Ela Sibel, 2013). It is now widely used as mobile marketing that enables consumers to access information such as URLs in the shortest time with electronic devices. QR code is being used in interactive advertising as a new technology that able to deliver information and interact with consumers in a short time accurately (Ela Sibel, 2013). Information of particular company or products can be accessed by just scanning the QR codes create and provide by company themselves with the internet required.

Recently QR codes can be considered common as it can be seen around us, on a flyer, advertisement billboard, product itself or even in the company's retail shops. There are a lot of companies or brands applied QR codes for few marketing purposes for achieve few benefits. The benefits of QR codes are increase brand awareness, increase brand advocacy through word-of-mouth, increase sales and cost saving for marketing cost (Isaac & Daisy, 2015).

Table 1.1: Examples of companies employed QR code for marketing purposes
(Source: Isaac & Daisy, 2015)

Brand/Company	Objective	Execution
Emart (South Korea)	For boosting the revenue during lunch time.	A large 3D sculpture were placed in Korea Emart and between 12pm to 1pm it will display a QR codes that provide discount coupon to who scan the QR code.
Cadillac (North America)	Provide more information of new XTS model and reach to audiences.	Consumers will be redirected to a mobile landing page to view videos and photos of XTS model when they scan the QR codes.
Kraft	Promotion of their cheeses.	QR codes being placed on different cheese products and consumers could get the recipe with using that particular cheese product after scan the codes.
McDonald's	Increase awareness of customers about products' nutrition and diet information.	All take-away bags and cups are printed with QR codes on the packaging, consumers may scan and access the information of nutrition about the food.

From the table above shows that some examples of companies that used QR codes for marketing purpose and mainly for providing information of products to consumers. Some of them are giving out discount coupons for boosting their sales during peak hours. While there are still a lot of others companies using QR codes as marketing communication tool and it seems like every effective and efficient to reach as much as possible consumers with using this high technology mobile marketing.

These proved that high technology are currently being widely apply in daily life which could almost being seen everywhere. Mobile marketing such as QR codes as a new technology nowadays become one of the favorite strategy used by companies that considered as a trending in whole world. As the rapid development of QR codes in marketing area, it is worth for examining the reasons that able to influence consumers to use this trending technology in current market.

1.2 Problem Statement

According to Elif H., et al. (2015), this technology, QR code is new in the market and not much research had done before about it, almost all the researches just study the literature of QR codes and the innovative uses of this technology. There are limited information about QR codes applying in marketing aspect. So, studies about the effectiveness of QR codes have to be done in the future and it is worth for researching about this matter.

Besides, nowadays companies tend to apply new technology for their advertising and promotion activities. However, they do not know how much messages will be delivered through this mobile marketing and how effective it is with the perception of consumers. Based on Isaac and Daisy (2015) stated in their study, 95% of the respondents that heard of QR codes had been used this technology to access information of products

but some of them stated the disappointment after find out the information accessed are not valuable.

Although QR codes are convenient and ease the difficulty of access information, but it cannot perform effectively due to the lack of knowledge of consumers about it since the awareness of this technology is very low (Müge Klein, 2014). This research will find out how consumers think and position QR code and even analyze what influences them to use QR code as a platform for accessing information about a company or a product. From the result, we can know the reasons affect the acceptance of consumers towards mobile marketing, QR code.

1.3 Research Objectives and Questions

1.3.1 General Objective and Question

The general objective of research had been decided in the beginning for avoiding run out of topic when doing the research. This research is all about the determinants of consumers affect their behavioral intention to use QR codes as marketing communication tool.

Table 1.3.1: General Objective and Question

(Source: Developed for the research)

General Objective	General Question
To investigate the determinant that most effect on behavioral intention of using QR codes as marketing communication tool for consumers.	Which determinant that most effect on behavioral intention of using QR codes as marketing communication tool for consumers?

1.3.2 Specific Objectives and Questions

The specific objectives will be the determinants that influence consumers' to use QR codes as marketing communication tool. The three determinants are performance expectation, effort expectation and social influences.

Table 1.3.2: Specific Objectives and Questions

(Source: Developed for the research)

Specific Objectives	Specific Questions
To study the relationship between behavioral intentions for using of QR code as marketing communication tool with consumers' performance expectation.	Does consumers' performance expectation has significant relationship with their behavioral intention to use QR codes as marketing communication tool?
To examine the relationship between efforts expectation of using QR codes as marketing communication tool and consumers' behavioral intention to access information about the advertisement.	Is there a significant relationship between effort expectation required of using mobile marketing like QR codes as marketing communication tool with consumers' behavioral intention to use it?
To determine the relationship between social influences with consumers' behavioral intention to use QR codes as marketing communication tool for accessing more information.	Does social influence has significant relationship with consumers' behavioral intention of using QR codes as marketing communication tool for accessing more information?

1.4 Scope of Study

The main of this study is to investigate the determinants that affect the behavioral intention of using QR codes as marketing communication tool for consumers. In this study, the three determinants are suggested from researcher which affect the consumers' behavioral intention to use QR codes as marketing communication tool. Researcher believe that the three determinants have strong relationship with the usage of QR codes as marketing purpose. The determinants are consumers' performance expectation towards QR codes, effort expectation of using QR codes and social influence their behavioral intention.

1.5 Limitation of Study

Limitations of study are the designs or methodologies that affect the explanation of the findings from the research (Price, et al., 2004). Limitations are beyond research control such as the restriction of researcher methodology and conclusions.

The limitation of this research is cannot cover all areas which researcher was limited to reach few areas only. This research is only focusing on the behavioral intention of consumers to use QR codes as marketing communication tool. Researcher only emphasizing one of the function of QR codes which it can be used in other purposes. Since there will be other determinants and QR codes not only can be adopt for marketing communication tool, therefore, the results of the study cannot considered as opinions of all areas.

Besides, QR codes considered as a new technology for current market for applying in marketing strategy, so there will be limited academic study about QR codes can be