## FACTORS AFFECTING CONSUMERS' ATTITUDE AND INTENTION TOWARD ONLINE AIRLINE TICKETING

YONG FAH FOO@MICHAEL YONG

ASIA e UNIVERSITY 2015

# FACTORS AFFECTING CONSUMERS' ATTITUDE AND INTENTION TOWARD ONLINE AIRLINE TICKETING

## YONG FAH FOO @ MICHAEL YONG

A Dissertation Submitted to Asia e University in

Fulfilment of the Requirements for the Degree of

Doctor of Business Administration

March 2015



#### **ABSTRACT**

The internet and advancement of information technology have radically altered the ways consumers perform many everyday activities and brought about changes to the workings of the travel industry in terms of the provision of services. Along with this paradigm shift is the changing consumer purchasing habits when it comes to buying their airline tickets. Consumers now have the option of buying online.

Design/methodology/approach/findings- This cross sectional study undertaken to examine the casual relationships between the various constructs. Data collection was through questionnaire survey. Conceptual Model incorporated the Theory of reasoned action (TRA), Theory of planned behaviour (TPB) and Technology acceptance model (TAM) and Intuition to examine causal relationships between the independent variables and dependent variables and for hypotheses testing. Current study found amongst others, constructs such as control, convenience, price, trust, security and the new construct, value for money had no impact on consumers' attitude and intention but PU and PEOU are still significant and subject norms, education and income levels have significant impact on consumers' attitude and intention and that behavioural control affects the intention of consumers.

Limitations of research and directions for future research- Limitations included; not considering factors that may influence consumers and business such as pandemic diseases and terrorism threats. Incorporating two constructs of basic TAM might have some drawbacks, and issues associated with choice of location for conducting the questionnaire surveys.

**Keywords** - Online airline ticketing, Theory of reasoned action, Theory of planned behaviour, Technology acceptance model, Intuition, Attitude, Intention

#### APPROVAL

I certify that I have supervised/read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in quality and scope, as a thesis for the fulfilment of the requirements for the degree of Doctor of Business Administration.

Prof Dr Juhary Ali, S.D.K

Supervisor

Prof Dr Osman Mohamad

External Examiner 1

Dr R./Jegatheesan A/L V. Rajadurai

Internal Examiner 1

Dr Samsudin Wahab

External Examiner 2

Dr Oo Yu Hock

Chairman, Examination Committee

This dissertation was submitted to Asia e University and is accepted as fulfilment of the requirements for the degree of Doctor of Business Administration.

Assoc, Prof. Dr R Jegatheesan

A/L V Rajadurai,

Dean, School of Management

Prof Dr Siow Heng Loke

Dean, School of Graduate Studies

**DECLARATION** 

I hereby declare that this thesis submitted in fulfilment of the DBA degree is my own

work and all contributions from any other persons or sources are properly

acknowledged and duly cited. I further declare that the material has not been

submitted either in whole or in part, for a degree at this or any other university. In

making this declaration, I understand and acknowledge any breaches in this

declaration constitute academic misconduct, which may result in my expulsion from

the programme and/or exclusion from the award of the degree.

Name: Yong Fah Foo@ Michael Yong

Date: 29<sup>th</sup> March, 2015

Copyright by Yong Fah Foo @ Michael Yong and Asia e University

## **ACKNOWLEGDEMENT**

First of all, I thank God for the blessings and with God's grace I was able to embark on this doctoral journey and finally to complete it despite the many challenges. I am glad to arrive at the destination safely, a journey made possible by so many and to whom I am so indebted. I would like to thank all who have contributed and also to those whose names I am unable to include here.

I thank my family specially my wife, Georgina, and my loving two sons; Mostyn and

Marcellus for their love, unfailing support, help, patience and encouragement.

I am thankful to Professor Dr Juhary Ali, my Supervisor. Under Professor's able supervision and guidance along with his insightful comments and expert advice, I was able to progress and thus expedited the completion of this doctoral research. Thank You, Prof.

I would like to record my sincere gratitude and thanks to Prof Icek Ajzen, Prof Dr Juergen Gnoth, Prof Dr Viswanath Venkatesh, Prof Dr Ernest Cyril De Run, Dr Andrew Tiong and Dr Nazatul Shima for enlightening me during the initial stages of my research.

I would like to thank Prof Dato Dr Sayed Hussain, Prof Dr Siow Heng Loke, Prof Dr Osman Mohamad, Dr Samsudin Wahab, Assoc Prof Dr R. Jegatheesan A/L V.Rajadurai and Dr Oo Yu Hock, for their guidance, advice and their invaluable contributions to my research.

Thank you to the International Federation for IT, Travel and Tourism (IFITT) and to the PhD Workshop Chairs, ENTER 2014 and the four reviewers who reviewed and accepted my research proposal; Rodolfo Baggio, Marianna Sigala, Alessandro

Inversini and Juho Personen. The revised paper was presented at the ENTER 2014

PhD Workshop and participated in the poster presentation in connection with the

PhD Workshop held in Dublin, Ireland on the 21stt to 24th January, 2014. This

experience has enriched my research tremendously.

Last but not least, my sincere gratitude and thanks to the fifteen participants of the

interviews at the initial phase of the research and the twenty one contact persons who

assisted me with the questionnaire surveys and to all who have contributed in one

way or another to this doctoral research.

Yong Fah Foo @ Michael Yong

March, 2015.

vii

## TABLE OF CONTENTS

			Page
ABST	TRACT		ii
APPF	ROVAL 1	PAGE	iii
DECI	LARATI	ON PAGE	iv
ACK	NOWLE	DGEMENT	vi
LIST	OF TAE	BLES	viii
LIST	OF FIG	URES	ix
CHA	PTER		
1.0	INTE	RODUCTION	1
	1.1	Introduction	1
	1.2	Background of the Study	1
	1.3	Statement of Problem	6
	1.4	Research Questions	10
	1.5	Significance of the Study	16
		1.5.1 Significance in theory	16
		1.5.2 Significance in practice	19
	1.6	Limitations of research	23
	1.7	Organization of remaining chapters	24
	1.8	Definition of Terms	27
	1.9	Summary	28
			54
2.0	LITE	ERATURE REVIEW	29
	2.1	Introduction	29
	2.2	Internet and information technology development	29
	2.3	Online shopping	33
	2.4	Internet Security and Trust Issues	35

2.5	E-marketing		
2.6	Broadband penetration and its impact		
2.7	Branding in the Airline Industry		
2.8	Travel and Tourism Industry		
	2.8.1	The Suppliers	56
	2.8.2	Service Providers	58
	2.8.3	The Consumers- Travellers	61
2.9	Malaysian	Studies and Context	67
2.10	Relevant T	heories	69
	2.10.1	Expectation Confirmation Theory.	71
	2.10.2	Innovation Diffusion Theory	71
	2.10.3	Flow Theory	72
	2.10.4	Technology Acceptance Model	73
	2.10.5	Theory of Reasoned Action &	
		Theory of Planned Behaviour	77
	2.10.6	Intuition and Asymmetry of information	90
2.11	Theoretical	Framework	93
	2.11.1	Perceived Behavioral Control	95
	2.11.2	Perceived Usefulness	96
	2.11.3	Perceived Ease of Use	96
	2.11.4	Price	98
	2.11.5	Perceived Trust	101
	2.11.6	Perceived Security	103
	2.11.7	Perceived Convenience	105
	2.11.8	Subjective Norms	106
	2.11.9	Attitude toward online airline ticketing	107
	2.11.10	Value for Money	108
	2.11.11	Behavioral Intention	111
2.12	Questionn	aire Design	112

4

q

	2.13	Definitio	n of Terms	113
	2.14	Summary	y	114
3.0	METH	ODOLOG	Y	115
	3.1	Introduct	tion	115
		3.1.1. Tv	vo Phases of Methodology	115
	3.2	Research	Design	116
		3.2.1	Unit of analysis	118
		3.2.2	Selecting Kuching City as location for surveys-	
			Justifications	118
		3.2.3	Instrument Development & Measurements	120
		3.2.4	Sampling technique	122
	3.3	Data colle	ection strategy	125
		3.3.1	Data collection	125
		3.3.2	Sample size calculation	128
		3.3.3	Instrument development	129
		3.3.4	Advantages of using questionnaire	133
		3.3.5	Disadvantages of using questionnaire	133
	3.4	Ethical Is	sues	134
	3.5	Research	Constructs and Sources of Measures	136
	3.6	Data anal	ysis process	140
		3.6.1	Codebook	141
	3.7	Checking	Reliability of Measures	142
		3.7.1	Checking validity	143
		3.7.2	Tests of Normality	143
	3.8	Factor Ana	alysis	143
	3.9	Summary		145

4.0	RESU	LTS AN	D DATA A	ANALYSIS	146	
	4.1	Introduc	ction		146	
	4.2	Response Rate			146	
		4.2.1	Demogr	aphic profile	148	
		4.2.2	Racial c	omposition	148	
		4.2.3	Education	on level	149	
		4.2.4	Types o	f employment	150	
		4.2.5	Income	Income level		
		4.2.6	Number	of years working	150	
		4.2.7	On areas	not accounted in the model •	151	
	4.3	Goodness of measures tests			155	
		4.3.1	Correlati	on analysis	156	
	4.4	Factor analysis		163		
		4.4.1	Factor ar	nalysis	163	
		4.4.2	Factor ar	nalysis- extraction	164	
			4.4.2.1	Convenience	164	
			4.4.2.2	Control .	164	
			4.4.2.3	Price	165	
			4.4.2.4	Trust	166	
			4.4.2.5	Security	166	
			4.4.2.6	Perceived Usefulness	167	
			4.4.2.7	Perceived Ease of Use	167	
			4.4.2.8	Subjective Norms	168	
			4.4.2.9	Value for Money	168	
			4.4.2.10	Online Airline Ticketing Attitude	169	
			4.4.2.11	Behavioural Intention	170	
	4.5	Results	of Factor as	nalysis	170	
	4.6	Multiple	regression	analysis performed	172	
	4.7	Summar	v of results	of multiple regression analysis	176	

		4.7.1	Results of	Multiple Regression	177
		4.7.2	List of res	sults of hypotheses testing	178
2	1.8	One Wa	y Analysis	of Variances performed	181
		4.8.1	Attitude		181
			4.8.1.1	Impact of Age	181
			4.8.1.2	Impact of Gender	182
			4.8.1.3	By Educational level	183
			4.8.1.4	By Income level	184
		4.8.2	Intention		186
			4.8.2.1	Impact of Age	186
			4.8.2.2	Impact of Gender	187
			4.8.2.3	By Educational level	188
			4.8.2.4	By Income level	189
		4.9	On areas	not accounted in the model	190
		4.10	Summar	y	192
5.0 CONC			IMITATI	ONS & FUTURE RESEARCH &	193
	5.1	Introdu	iction	*	193
	5.2	Finding	gs		193
		5.2.1	Demogra	phic profiles	193
		5.2.2	Research	Question 1	196
		5.2.3	Research	Question 2	215
			5.2.3.1	Attitude	216
			5.2.3.2	Intention	223
		5.2.4	Research	Question 3	230
		5.2.5	Research	Question 4	232
	5.3	Limita	tions of the	e Study and Areas for	
		Future	Research		235
	5.4	Discus	ssions		237
	5.5	Likely	trends		240

5.6	Theoretical Implications	242
5.7	Managerial implications	243
5.8	Conclusions	246
REFERE	NCES	251
APPEND	275	

## LIST OF TABLES

Table		Page
1	Total population by Ethnic group, Local Authority	12:
2	Research Constructs and Sources of Measurements	139
3	Race Composition- Details from survey	149
4	Demographics and Characteristics of respondents	152
5	Goodness of Data	15:
6	List of Hypotheses	. 157
7	Scale Reliability	159
8	Rotated Component Matrix	171
9	Coefficients	174
10	Coefficients	176
11	Multiple Regression results	176
12	Multiple Regression results	177
13	Reasons stated in the returned questionnaire	191

## LIST OF FIGURES

Figure		Page
1	Conceptual Model	94
2	Research Process Flowchart	117
3	Kuching Ciy Plan showing Distribution Centres	124
4	Data analysis process flowchart	141

#### **CHAPTER 1**

## 1.0 INTRODUCTION

## 1.1 Introduction

This chapter provides an overview of the study background, statement of problem, research questions, significance of the study, limitations of the research, brief description on the following four chapters, definition of key terms in this study and a brief summary.

## 1.2 Background to the Study

The development and advancement of the information technology and with the increased adoption of the internet as a communication tool allowing the wider reach of the consumers to go online directly or indirectly for and travel needs have attributed to this phenomenon(Bobbitt and Dabholkar,2001). As technology continues to advance and airlines and travel agencies are able to offer more self-service options to consumers, this current study attempts to examine what are the factors influencing consumers' attitude and intention toward online ticketing.

The current research undertaken and entitled "Factors affecting consumers' attitude and intention toward online airline ticketing" was arrived at after a lengthy literature survey and much discussion with my supervisor and some subject experts particularly on the theoretical framework. The necessity of speed of travel to reach their destinations, the increased frequency and high traffic volume of air travels and with a considerable sum of money involved when performing the journeys as compared to other mode of travel such as rails or coaches have heightened the importance air travels in the tourism and travel industry.

According to the business report in The Atlantic Monthly Group (2013), in 1965, no more than 20 percent of Americans had ever flown in an airplane but by 2000, 50 percent of the country took at least one round-trip flight a year. The average was two round-trip tickets. It also reported that the number of air passengers had tripled between the 1970s and 2011. This also underlines the importance of the travel and tourism industry.

However, the travel and tourism industry is also faced with a shrinking market. This was further compounded by the deregulation of airline market and emergence of the low-cost carriers (LCCs) in the late 1990s which target at price-sensitive customer and involved in offering lower fares online (Muthitacharoen *et.al.*,2006; Alamdari and Mason,2006). The per-mile cost of flying has dropped by almost 50 percent since 1978.

Along with the phenomena is paradigm shift in the changing consumers' purchasing habits when it comes to buying their airline tickets. Consumers can bypass the service providers; travel agencies who used to provide the services of; bookings, issuance of tickets and collection of payments. Understanding the related factors affecting consumers' attitude and intention also forms part of the main thrusts of the study. This is because predicting attitudes is the most important concern for most people who are concerned with consumer behaviour (Petty et. al., 1991). Attitude concept can be used to explain customers' action since attitude is a behavioural disposition (Wen, I, 2009).

According to Allport's (1935) statement that attitude is the single most indispensable construct in social psychology remains relevant today. Consumers' attitudes are rapidly changing in particular, in using self-service such as e-ticketing (Bobbitt &

Dabholkar, 2001). The question, why consumers engage in the behaviours they do, forms one of the thrusts of this study.

Internet users are not homogeneous and thus questions in the questionnaire would include aspects of the respondents that will shed light on the internet usage history and explain why the respondents adopt or do not adopt online ticketing but not accounted in the conceptual model. The respondent needs only to circle the number that best describes his/her answer and will be accounted in the descriptive statistics. Similarly, the respondents were asked to tick the relevant box which best indicates his/her answer to the questions on type of air traveller and opinion of his/her experience on online airline ticketing.

The internet originated from the military network ARPANet, which was introduced by the US Department of Defence in 1969 (Law, 2000). With the removal of the requirement of the need for official support be obtained to join the internet, the computer services and users form private firms as well as individuals using the internet have been growing at an exponential rate. The rapid global growth of the internet users provides a promising future for e-commerce. According to a study from the International Data Corp (IDC), more than 600 million people accessed the internet globally by the end of 2002 and spent more than US \$1 trillion buying goods and services online (Straits Times, 2002).

As a result of the development, the face of the travel industry has undergone significant changes over the past decade. Much of these changes are attributed to developments in the information technology, services and applications coupled with the increasing competitive environment. The various sections in the travel industry are affected; the airlines as suppliers, travel agencies as service providers, and the

consumers of such services i.e. the travellers, with the changes to the global distribution channels brought about by the generalised use of the internet and related information and communication technologies.

There are positive impacts on the travel industry such as improvement in the distribution channels (Carroll and Siguaw, 2003) and disintermediation (Buick, 2003). But there are also negative impacts on the industry such as price transparency (O'Connor and Frew, 2004) and reduced customer loyalty (O'Connor and Frew, 2004).

The deregulation of the airline market and the emergence of the low-cost carriers (LCCs) have boosted the increase in the number of airline websites (Harrison and Boonstra,2008; Buhalis,2004). The LCCs introduced aggressive low-fare policies based, among other factors, on online booking systems that avoided intermediary travel agencies and their commissions (Francis *et.al.*,2004; Barret,2004; Dobruszkes,2006; Papatheodorou and Lei,2006). Prior deregulation, airline costs were not a focus for competitive advantage since increases were transferred to passengers (Barrett, 2004). This strategy could however, could not be sustained and coupled with the deregulation and 'price war' brought about by the presence of LCCs (Chi and Koo,2000; Mantin and Koo,2009), the Internet has favoured competition as it allowed consumers to identify fare differences quickly and efficiently (Chen,2006).

Along with this paradigm shift, is the changing consumer purchasing habits when it comes to buying airline tickets. Now they have the ready option of buying online rather than through the traditional travel agencies which invariably perform the services for the consumers such bookings, issuance of tickets and collecting

payments on behalf of the airlines. This trend has been of interest to researchers including Lewis *et.al.*, (1998), Manzano, Jose, I. Castillo *et.al.*, (2010). According to Yoon *et.al.*, (2006), the future of travel agencies might be uncertain.

This area of interest has drawn the researcher to find out and to understand the underlying factors that affect consumers' attitude and intention toward online airline ticketing.

Many of the influences or pull factors on consumers to go online airline ticketing embedded in the conceptual model were derived from the first phase of the research involving qualitative phase. Semi-structured interviews were conducted by the researcher with fifteen respondents as suggested by Ajzen and Fishbein (1980).

The selected variables from the interviews and presented in the conceptual model included; independent variables such as convenience, price, security, trust and behavioural control. However, the speed of transaction was one of the attractions of e-ticketing listed as a pull factor but later found to be a push factor for the consumers from the responses given in the questionnaire survey conducted on a larger population. Contrary to aspect of convenience, price, control, there were push factors stated in the returned questionnaire which included aspects of log-in problems, problems with lines and internet connection, hidden costs, speed of internet slow and need to repurchase ticket if session expired or cut off.

With consumers facing these issues, travel agents could still have a role to play in the travel industry. But they need to be able to address these pressing problems and issues faced by consumers. Through repositioning and adopting technology in their operations like creating interactive websites and advertisements on the net to reach

more consumers instead of the traditional routines of waiting for walk-in customers would mediate the problems.

Knowing factors affecting consumers' attitude and intention toward online airline ticketing will aid the survival of travel agencies as attitude and intention will lead to behaviour and action of actual purchase. It is recognized that attitudes and intentions of consumers cannot be underestimated as these influence decision-making. Armstrong & Kotler (2000) state that attitudes put people into a frame of mind for liking or disliking things, for moving toward or away from them.

#### 1.3 Statement of Problem

From the literature reviews carried out, and following discussions with my supervisor and consultation with some subject experts, the following issues have been identified:

a) A gap in knowledge has been identified through review of literature undertaken. Thus far, little literature is available or written on this area of interest particularly on factors affecting consumers' attitude and intention toward online airline ticketing. Because attitude is found to the best predictor of behaviour, through knowing the attitude of consumers, one is able to predict their behaviour. In this way, it is hoped that one is also able to understand better the influencing factors on consumers. It is hoped the findings could be helpful to marketers in the travel industry to come out with more viable, timely and appropriate marketing strategies. Attitude as a behavioral disposition could be used to explain consumers' actions (Wen, I. 2009). In the theory of planned behavior proposes three conceptual and independent determinants of intention. Of these three determinants, attitude has been tested and

consumers' intention and behavior in various studies. (Wen, I. 2009). Petty *et.al.*, (1991) cited predicting how attitudes affect consumer behaviour is the most important concern for most people interested in consumer behavior. According to Allport's (1935) statement, attitude is the single most indispensable construct in social psychology remains relevant today. In combination, attitude toward the behaviour, subjective norm and perception of behavioural control lead to the formation of a behavioural intention. Researchers like Evans, *et.al.*, (1996), Njite & Parsa (2005): Shim & Drake (1990) found attitudes are more predictive of behavior.

b) Examine what are the factors that affect consumers' attitude and intention toward online airline ticketing.

Taylor and Todd (1995) cited that attitudes to be predictors of information technology usage intention. Shim *et.al.*, (2001) also shared the same views. Shim *et.al.*, (2001) found that consumer attitudes towards internet shopping were important in predicting internet purchasing intentions. Empirical studies on e-commerce done by researchers; including Pavlou (2002), Hung *et.al.*, (2003) lent support to the views that consumer's attitude toward using online services is a predictor of his/her behavioural intention.

Relevant questions on demographic profiles of respondents were in the questionnaire and on areas not accounted for in the model such as type of traveller, purchasing habits, and opinion of these respondents. There are many studies done and centred on consumers' behaviour, the current study will attempt to examine some of the variables and these have been incorporated them in the conceptual model as in Figure

1. The semi-structured interviews with fifteen respondents were conducted in accordance with the procedures suggested by Ajzen and Fishbein (1980) at the initial stage of the study by the researcher. Transcript of these interviews could be viewed in Appendix B. Four salient behavioural beliefs and three referents of the respondents were selected for inclusion in the final version of questionnaire and the conceptual model.

Hartwick and Barki (1994) studied the adoption of information technology under institutional circumstances and noted a direct influence of social norms (SN) on behavioural intentions. Taylor and Todd (1995) in their study of information technology usage of 786 potential users of a computer resource centre found SN to be significant factor. Yu and Wu (2007) in their study also asserted in their findings that SN is positively related to the intention to shop online.

c) A need to develop a conceptual model of causality and supported with the relevant theoretical framework. The objective is to understand these relationships and to allow hypothesis testing for each of these relationships. The current study incorporated the attitudinal theories to develop the theoretical framework; Theory of reasoned action and its extended theory, the Theory of planned behavior (Fishbein and Ajzen, 2010) and Technology acceptance model (Davis,1989) to understand consumers' attitude and intention better. In addition, the aspect of Intuition advocated by Loewenstein (2007) and the perspective of information asymmetry justified for the need to incorporate another variable into the conceptual model to reflect these considerations.