The impact of e-commerce usage on business performance of Hotels in Sri Lanka

by

Dunulwila Gorakagahamanda Gedara Athula Samarasinghe

The impact of e-commerce usage on business performance of Hotels in Sri Lanka

by

Dunulwila Gorakagahamanda Gedara Athula Samarasinghe

A Research submitted to the University of Sri Jayawardanapura in partial fulfillment of the requirement for the degree of master of Business administration in Management (General) on 20th August 2014.

Declaration of Supervisor

I certify that the above statement made by the candidate is true and that this research is suitable for submission to the university for the purpose of evaluation.

Mr. Mahesh Fernando

Signature:

Date: 25/04/2016

TABLE OF CONTENTS

-		Page No.
CHAPTER (ONE: INTRODUCTION	01
1.1	Background	01
1.2	Problem Statement	05
1.3	Problem justification	06
1.4	Objective of the Study	09
1.5	Significance of the study	10
1.6	Scope of the study	11
1.7	Chapter Organization	12
CHAPTER 7	ΓWO: LITERATURE REVIEW	13
2.1	Introduction	13
2.2	Tourism and e-commerce	14
2.2.1	Sri Lankan hotel industry	16
2.3	Technological, Organizational and Environmental (TOE)	17
	Model	
2.4	Technological Context	18
2.4.1	Technology Competence	18
2.5	Organizational context	20
2.5.1.	Firm's Scope	21
2.5.2.	Web technology investment	21

	<u></u>		Page No
	2.5.3.	Managerial Beliefs	23
	2.5.4.	Organizational Culture	25
	2.6.	Environmental context	29
	2.6.1.	Regulatory support	30
	2.6.2.	Pressure intensity	34
	2.6.3.	E-commerce usage	36
	2.7.	Resource Based View (RBV) Theory	37
	2.7.1.	E-value Model	40
	2.7.2.	Front end functionalities	41
	2.7.3.	Back end integration	43
	2.8.	Business performance	44
	2.9	Research gap	46
	2.10.	Summary	47
CHA	APTER T	HREE: METHODOLOGY	49
	3.1	Introduction	49
	3.2.	Conceptual framework	49
	3.3.	List of Hypotheses	53
	3.3.1.	Technology competence and e-commerce usage	53
	3.3.2.	Firm scope and e-commerce usage	53
	3.3.3.	Web technology investment and e-commerce usage	54
	3.3.4.	Managerial beliefs and e-commerce usage.	55

		Page No
3.3.5.	Organizational culture and e-commerce usage	55
3.3.6.	Regulatory support and e-commerce usage	56
3.3.7.	Pressure intensity and e-commerce usage	57
3.3.8.	E-commerce usage, front-end functionalities, and business	58
	Performance	
3.3.9.	E-commerce usage, back-end integration, and business	59
	Performance	
3.3.10	. Front end functionalities and backend integration	59
3.3.11	. E-commerce usage and business performance	60
3.4.	Population	60
3.5.	Sample	61
3.6.	Operationalization of Variables	61
3.7.	Data analysis	74
3.7.1.	Descriptive statistics	74
3.7.2.	Data analysis method	75
3.8.	Summary	79
PTER F	OUR: ANALYSIS AND DISCUSSION	81
4.1.	Introduction	81
4.2.	Results and Discussion	81
4.2.1.	Measurement Model	84
4.2.1.	1. Reliability and Validity of Data	84
	3.3.6. 3.3.7. 3.3.8. 3.3.9. 3.3.10 3.3.11 3.4. 3.5. 3.6. 3.7. 3.7.1. 3.7.2. 3.8. PTER F 4.1. 4.2. 4.2.1.	3.3.9. E-commerce usage, back-end integration, and business Performance 3.3.10. Front end functionalities and backend integration 3.3.11. E-commerce usage and business performance 3.4. Population 3.5. Sample 3.6. Operationalization of Variables 3.7. Data analysis 3.7.1. Descriptive statistics 3.7.2. Data analysis method 3.8. Summary PTER FOUR: ANALYSIS AND DISCUSSION 4.1. Introduction

		Page No
4.2.1.2	2. Indicator Reliability	84
4.2.1.3	3. Internal Consistency Reliability	87
4.2.1.4	l. Discriminant Validity	88
4.2.1.5	5. Convergent Validity	90
4.3.	Structural Model (inner model)	91
4.4.	Results, Interpretation and Discussion	94
4.4.1.	Summary of Hypotheses	95
4.4.2.	Technological competence and e-commerce usage	97
4.4.3.	Firm scope and e-commerce usage	98
4.4.4.	Web technology investment and e-commerce usage	98
4.4.5.	Managerial beliefs and e-commerce usage.	99
4.4.6.	Organizational culture and e-commerce usage	99
4.4.7.	Regulatory support and e-commerce usage	100
4.4.8.	Pressure intensity and e-commerce usage	101
4.4.9.	E-commerce usage, front-end functionalities, and business	102
	Performance	
4.4.10	D. E-commerce usage, back-end integration, and business	102
	Performance	
4.4.11	. Front end functionalities and backend integration	103
4.4.12	2. E-commerce usage and business performance	103
4.5	Summary	104

	Page No
CHAPTER FIVE: SUMMARY AND CONCLUSION	106
REFERENCES	115
APPENDICES	126
Annexure 01 - Questionnaire	127
Annexure 02 - PLS SEM Data Analysis Results	137

LIST OF TABLES

Table No.	Title	Page
No		
Table 2.1	Proposed improvements to Zhu and Kraemer's (2005) model	37
Table 3.1	Definitions of constructs	46
Table 3.2	Operationalization of Variables	57
Table 3.3	Accepted parameters for measurement model analysis	72
Table 4.1	Outer loadings	81
Table 4.2	Internal Consistency Reliability	82
Table 4.3	Latent Variable Correlation	84
Table 4.4	Latent Variable Correlation with AVE	85
Table 4.5	Total effects	88
Table 4.6	Path coefficient Analysis	89
Table 4.7	Summary of Hypothesis testing	90

LIST OF FIGURES

Figure No.	Title	Page
No.		
Figure 2.1-	Sri Lankan Hotel Occupancy rates over time	15
Figure 3.1-	Conceptual Framework	46
Figure 4.1-	PLS-SEM Algorithm	78
Figure 4.2	Bootstrapping Results	87

ACKNOWLEDGEMENTS

At the outset, it is my duty to acknowledge with gratitude the generous support that I have received from Mr. Mahesh Fernando as my research Supervisor during the entire research process. Not only that but also the proper guidance, flexibility and friendliness that I have received during consultation times. Further, I would like to extend my warm thanks to Mr. Terenc Gunawardana for guiding me in the analysis segment and sharing his knowledge on research techniques.

Special thanks are extended to all my lecturers at the University of Sri Jayawardanapura who taught me and guided me in the MBA programme to reach greater heights.

In Addition I would like to express my gratitude to all the managerial level persons in the Sri Lankan tourism organization who have provided me with valuable information to complete this research successfully.

Further, I would like to thank all those who supported me, my friends and my family members who continue to give me this insight with patience, support and love.

The impact of e-commerce usage on business performance of hotels in Sri Lanka

Dunulwila Gorakagahamanda Gedara Athula Samarasinghe

ABSTRACT

The adoption of e-commerce in the tourism sector has become one of the main business improvement areas in the hotel industry that seems unavoidable in competing and even surviving in a highly competitive industry. This study focuses on the impact of e-commerce usage on business performance of hotels in Sri Lanka. It was found that many firms attempted to adopt e-commerce to upgrade their competitive capabilities but it seems e-commerce related businesses performance has not improved significantly over the years. In order to review this problem in the Sri Lankan tourism sector, the modified E-Value model was used as the conceptual framework. A cross sectional survey was carried out on 44 Sri Lankan hotels which are registered with the Sri Lankan Tourists Board and limited to the managerial position above the three star level category and structured questionnaire was sent through e-mail.

Partial Least Square Structural Equation Method (PLS-SEM) analysis results indicated that technology competence, web technology investment, innovative culture, front end functionalities and back end integrations statistically significantly influenced e-commerce usage. Further, Front end functionalities better described the level of backend integration. Also e-commerce usage significantly influenced business performance of the firms. This research is limited to the tourism sector in Sri Lanka and views it only from the management perspectives of e-commerce adoption.

Mangers and decision makers in tourism organizations will be benefitted by this study in enhancing their knowledge in the diffusion of e-commerce in the tourism industry. Academics and researchers too will be benefited by further investigation of technological innovations and diffusion streams.

The Origin of this research could be traced to Malaysia to investigate the impact of ecommerce usage on business performance and this model was further developed by adding innovative culture. Through the modified E-Value model the research was carried out to investigate the influences on e-commerce usage and business performance.

Key Words - Electronic Commerce, Business performance, Tourism industry, Sri Lanka.

CHAPTER 1

INTRODUCTION

1.1 Background

Tourism remains the fastest growing service industry in the economies of most of developing countries and plays an important role in the economic and technological development of nations. Further, the tourism industry is considered as one of the biggest industries, which generates approximately 11% of world Gross Domestic Production, employing 200 Million people and serves 700 Million tourists worldwide. International tourist arrivals are forecast to be a total 1,581,250,000, generating an expenditure of USD1, 934.8billion, an increase of 4.2% pa (World Travel and Tourism Council, 2013). The development of the tourism sector is a very important part of the economy of Sri Lanka. With reference to the economic contribution, it is vital to understand the economic significance of the tourism sector and therefore it is necessary to focus on the areas of development. Many countries prepare their strategic plans by establishing certain targets to accelerate the growth of tourism. The important indicator of the role of international tourism is its generation of foreign exchange earnings. Tourism is one of the top five export categories for as many as 83% of countries and is a main source of foreign exchange earnings for at least 38% of countries (Machel and Prudence (2001) cited by Buhalis and Deimezi (2011)).

Tourism in Sri Lanka is a major branch of the country's economy, accounting for approximately 14% of the GDP and generating annual revenue amounting to 6,600 million rupees (Ministry of Tourism, 2012).

The Sri Lankan tourism industry has been growing steadily as a promising sector for economic development, subject to periodical setbacks especially the civil war prevailed that in Sri Lanka, world terrorist attacks and natural disasters. According to the World Travel and Tourism Council rankings, (WTTC Country report (2013)) Sri Lanka is 43 in long term (ten years) growth and 27 in real growth.

The official government institutions for the development of the Sri Lankan tourism industry are the Sri Lanka Tourism Development Authority and Sri Lanka Tourism Promotion Bureau under the Ministry of Tourism. In order to achieve their targets, they have expanded their online brands and marketing activities across the world and offer the whole scope of the internet services such as information, communication, relationship, transaction and entertainment services, to catch the market in India, United Kingdom and other countries and have specialized in the high end niche market, cultivated now and popularized by the internet savvy travelers (Ranasinghe and Deshapriya (2011))

The Sri Lankan tourism sector is a tour operator dominated sector, private and public both operating the tourism industry. The private sector is rather insecure in its attempts to move away from being almost totally dependent on foreign tour operators and to engage more actively in a multi-channel communication and distribution policy. The larger companies especially are in the process of enhancing their online branding, marketing and the look-to-book ratio. Hotels wish to become less dependent on local travel agents or national guides to bring business in return for very high commissions.

There is the growing awareness that Information and Communication Technology has drastically changed tourism worldwide; it is of vital importance to acquire the skills and tools to engage in a multi-channel strategy to reach the final customers reducing the