

The Determinants of Business Performance of Homestay Operators in Rural Tourism in Sarawak with Moderating Impact of Digital Technologies

Jason Lim Wei

Doctor of Philosophy 2023

The Determinants of Business Performance of Homestay Operators in Rural Tourism in Sarawak with Moderating Impact of Digital Technologies

Jason Lim Wei

A thesis submitted

In fulfillment of the requirements for the degree of Doctor of Philosophy

(Management)

Faculty of Economics and Business UNIVERSITI MALAYSIA SARAWAK 2023

DECLARATION

I declare that the work in this thesis was carried out in accordance with the regulations of Universiti Malaysia Sarawak. Except where due acknowledgements have been made, the work is that of the author alone. The thesis has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature

Name: Jason Lim Wei

Matric No.: 15010262

Faculty of Economics and Business

Universiti Malaysia Sarawak

Date: 27 September 2023

ACKNOWLEDGEMENT

I, wish to acknowledge many people in my life who have supported me throughout my journey. However, it will be too lengthy to address every single one of them. This masterpiece of thesis will not possible be crafted without any of them.

First and foremost, here marked a remarkable person to go through this tough path with me, she is none the less my beloved supervisor Prof. Dr. Lo May-Chiun for her role as main supervisor to guide, encourage, motivate, and pull me through many times during my low, down and 'hit-the-wall' moments. My heartfelt gratitude to you for everything you have offered to me, I could not put everything in just few lines. It is simply more than words can express.

Not to forget, my co-supervisor Dr. Abang Azlan, you never turn me down whenever I need to seek for his advice, may it be only few minutes and you are generously sparing time for me. Besides academic support, you have given me chance to interact with your undergraduate students, groom me along with your lecturing experience. These have been a value adding to a researcher.

Universiti Malaysia Sarawak, thank you for the opportunity to let me treasure and fulfil my dream to complete my PhD journey in my life without even the need to study abroad and staying apart with family looking at my current commitment to my family. Big thank you to the Dean, Deputy Dean and staff for all your support, friendly hospitality rendered. I really felt the warmth of Sarawak unity under this big harmonious family of Faculty of Economics and Business. It is my first ever experience to study locally under public university upon graduated with my first degree and my master's degree in overseas.

My parents, my lovely wife and my two little precious sons – Joel and Jared. Thank you for your trust in me, thank you for all your encouragements and thank you for the all-rounder supports. My achievement today is certainly credited to all of you, without you it is not possible. This academic achievement, I wish to crown it on all of you. You have helped me fulfil my dream.

Finally, in sealing off the research journey, I appreciate the help rendered by the local communities, especially those homestay operators I communicated with in Sarawak's rural tourism destinations who had spent your time interacting with me and piling tonnes of information to me pertaining on my research topic.

God bless us all.

ABSTRACT

Tourism has been known as the green industry in the microeconomic point of view though in mass tourism or rural tourism. However, though Sarawak has carried many powerful resources yet the tourism industry in this state is somehow still very much underdeveloped. Therefore, the moderator should be considered and introduced to the industry to boost the tourism industry in the state of Sarawak. Rural tourism is somehow not a new form of tourism experience, it has indeed existed in western countries decades ago. It is a booming industry or baby boomer for Sarawak in which Sarawak tourism board and related agencies aim to promote and make it a unique and intend to sell it globally. First and foremost, homestay operators tend to be the first entrepreneurs to treasure and explore such business as there have been no luxurious hotels established in the remote and rural areas. Hence, besides road show promotion and marketing planning from the tourism board; digital technologies will be the next effective tool to promote and sell rural tourism to achieve its competitiveness. As such, digital is powerful and virtual, it will efficiently and effectively be crafted as the most and powerful instrument to market and sell rural tourism of Sarawak. This study has focused on homestay operation in rural tourism and the study investigates the relationship between economic, environmental, and socio-cultural factors of homestay operation towards its performance in Sarawak. A quantitative study has been carried out to obtain the data from the accommodation aspect – homestay operators. There are 241 valid responses collected for the study. Measurement model assessment and structural model assessment have been applied to analyse the constructs and path relationship of the study. The relationships between independent and dependent variables have been investigated and are anticipated to be a useful source of reference to the academic researchers, tourism authorities and other tourism stakeholders to further carry out investigation to bring out the positive impacts of the rural tourism industry in Sarawak, Malaysia. The findings have shown that the main pillars of tourism attributes (economics, environmental and sociocultural factors) were only partially but significantly affecting the performance of tourism in Sarawak, either financially or non-financially; based on the literature studied from past researchers, the moderator introduced to this framework should be able to enhance the relationships of independent variables and dependant variable. However, the results obtained were not as expected, the reasons could not deter by education level, technology infrastructure, promotion, funds projection and other factors.

Keywords: Homestay operators' performance, tourism factors, digital technologies, rural tourism, Sarawak.

Prestasi Perniagaan Pengusaha Inap Desa dalam Pelancongan Luar Bandar di Sarawak: Kesan Penyerderhanaan Teknologi Digital.

ABSTRAK

Pelancongan telah dikenali sebagai "industri hijau" dari sudut pandangan ekonomi mikro baik di kalangan pelancongan tradisional mahupun pelancongan desa. Walau bagaimanapun, meskipun Sarawak mempunyai banyak keupayaan sumber, industri pelancongan dalam negeri ini masih kurang berkembang. Oleh demikian, penyederhana harus dipertimbangkan dan diperkenalkan kepada industri ini agar dapat meningkatkan industri pelancongan di Sarawak. Pelancongan desa bukanlah sesuatu cabang pelancongan yang baru, di mana ia telah muncul di negara-negara barat sejak beberapa dekad yang lalu. Ia merupakan industri yang sedang berkembang, ataupun "baby boomer" bagi Sarawak, di mana Lembaga Pelancongan Sarawak, termasuk agensi-agensi yang berkaitan, berminat untuk mempromosikan dan menjadikan sebagai satu pakej yang istimewa untuk dipasarkan ke arena antarabangsa. Pertama, pengendali inap desa merupakan usahawan perintis yang meneroka dan membuka pasaran dalam perniagaan ini, akibat ketiadaan hotel-hotel mewah di kawasan pedalaman dan luar bandar. Oleh itu, selain promosi melalui jerayawara dan pelan pemasaran oleh lembaga pelancongan, teknologi digital bakal menjadi peralatan yang berkesan untuk mempromosikan pelancongan demi meningkatkan daya saingannya. Oleh itu, teknologi digital yang canggih dan berkesan dalam dunia virtual, akan mampu dan berupaya untuk dijadikan peralatan pemasaran pakej pelancongan desa untuk Sarawak. Kajian ini mengkaji hubungan antara faktor-faktor ekonomi, alam persekitaran dan sosialkebudayaan terhadap prestasi pelancongan desa di Sarawak. Kajian kualitatif telah dijalankan untuk mendapatkan maklumat pengendali inap desa dari aspek penginapan. Seramai 241 orang responden telah ditemuduga untuk kajian ini. Penilaian model pengukuran dan penilaian model struktur telah diterapkan untuk menganalisa konstruks dan perhubungan laluan dalam kajian ini. Hubungan antara pemboleh ubah tidak bersandar dan pemboleh ubah bersandar telah dikaji dengan harapan ia dapat menjadi sumber rujukan yang berguna kepada penyelidik-penyelidik akademik, pihak pelancongan dan pihak berkepentingan pelancongan agar dapat melanjutkan penyelidikan ini untuk tujuan menunjukkan kesan positif industri pelancongan desa di Sarawak, Malaysia. Kesimpulan yang diperolehi daripada kajian ini telah menunjukkan ciri-ciri utama pelancongan (faktorfaktor ekonomi, alam persekitaran dan sosial-kebudayaan) amat ketara ke atas prestasi pelancongan di Sarawak, walaupun kesannya hanya sebahagian sahaja dan bukannya secara keseluruhan; sama ada kesan daripada sumber kewangan mahupun bukan kewangan; mengikut dasar dari segi literatur daripada para penyelidik, penyederhana yang di perkenalkan ke dalam rangka kajian ini sepatutnya akan berupaya berfungsi sebagai pengukuh talian hubungan antara pembolehubah tidak bersandar. Akan tetapi, hasil kajian yang dicapai adalah tidak menakjubkan sebagaimana yang telah dijangka. Alasan yang munasabah mungkin disebabkan oleh tahap persekolahan, infrastruktur teknologi, promosi dari kalangan pihak berkuasa, jangkaan dari segi perbelanjaan negeri dan mahupun faktorfaktor yang lain.

Kata kunci: Prestasi pengusaha inap desa, faktor pelancongan, teknologi digital, pelancongan luar bandar, Sarawak.

TABLE OF CONTENTS

		Page	
DECI	ARATION	i	
ACKI	NOWLEDGEMENT	ii	
ABSTRACT		iv	
ABSTRAK		vi	
TABLE OF CONTENTS		viii	
LIST OF TABLES x		xiv	
LIST	LIST OF FIGURES xv		
LIST	OF ABBREVIATIONS	xvi	
CHA	PTER 1 INTRODUCTION	1	
1.1	Background of Study	1	
1.1.1	Malaysia Scenario	4	
1.1.2	Rural Tourism in Sarawak	6	
1.1.3	Homestays in Sarawak and Its Digital Approach	8	
1.2	Problem Statement	9	
1.3	Research Questions	11	
1.4	Research Objectives	13	
1.5	Significance of Study	14	
1.6	Scope of Study	15	

1.7	Organisation of Chapters		
1.8	Summary	16	
CHAI	PTER 2 LITERATURE REVIEW	18	
2.1	Introduction	18	
2.2	Rural Tourism and Its Overview	18	
2.2.1	The Rationale and Importance of Rural Tourism to Community and State	24	
2.3	Tourism Performance	31	
2.3.1	Types of Performance Measurements	40	
2.3.2	Financial Performance Measurement	42	
2.3.3	Non-Financial Performance Measurement	45	
2.4	Tourism Factors and Its Impacts to Rural Tourism Performance	51	
2.4.1	Economic Factor	52	
2.4.2	Environmental Factor	63	
2.4.3	Socio-Cultural Factor	71	
2.5	The Moderating Role of Digital Technologies	88	
2.5.1	Digital Technologies (ICTs) Development in Tourism	101	
2.6	Underlying Theories	104	
2.6.1	Resource-based View (RBV) Theory	104	
2.6.2	Social Exchange Theory (SET)	111	
2.6.3	Unified Theory of Acceptance and Use of Technology (UTAUT)	115	

2.7	Gaps in Literature	117
2.8	Theoretical Framework	118
2.9	Hypotheses Development	120
2.9.1	Economic Factor and Homestay Operators' Business Performance	120
2.9.2	Environmental Factor and Homestay Operators' Business Performance	123
2.9.3	Socio-cultural Factor and Homestay Operators' Business Performance	126
2.9.4	Digital Technologies as Moderator to Business Performance of Homestay	129
2.10	Summary	137
CHAI	PTER 3 RESEARCH METHODOLOGY	138
3.1	Introduction	138
3.2	Research Sites	138
3.3	Research Setting and Rationale	140
3.4	Research Design, Sample and Procedures	141
3.4.1	Population Sample and Sampling Technique	144
3.4.2	Data Collection Procedures	152
3.5	Design and Development of Research Questionnaire	154
3.6	Measures	157
3.6.1	Demographic Information	158
3.6.2	Economic Factor	159
3.6.3	Environmental Factor	159

3.6.4	Socio-cultural Factor	160
3.6.5	Digital Technologies	160
3.6.6	Business Performance of Homestay Operators (Financial and Non-Financial)	161
3.7	Pre-test	162
3.8	Statistical Analysis	166
3.8.1	Preliminary Data Analysis	166
3.8.2	Descriptive Statistics	168
3.8.3	PLS-SEM	169
3.8.4	Measurement Model	172
3.8.5	Structural Model	176
3.9	Summary	179
CHAI	PTER 4 RESULTS	180
4.1	Introduction	180
4.2	Preliminary Data Analysis	180
4.2.1	Demographic Profile of Respondents	184
4.3	Assessment of Measurement Model	186
4.3.1	Indicator Reliability	187
4.3.2	Internal Consistency Reliability	188
4.3.3	Convergent Validity	188
4.3.4	Discriminant Validity	189

4.3.5	Multicollinearity	190
4.4	Assessment of Structural Model	190
4.4.1	Hypotheses Testing	191
4.4.2	Effect Size (f^2)	196
4.4.3	Coefficient of Determination (R^2)	197
4.4.4	Predictive Relevance (Q^2)	197
4.5	Summary	198
CHAI	PTER 5 DISCUSSION AND CONCLUSION	199
5.1	Introduction	199
5.2	Discussion	199
5.2.1	Economic Factor and Homestay Operators' Business Performance (Financial)	200
5.2.2	Economic Factor and Homestay Operators' Business Performance (Non-	
	Financial)	201
5.2.3	Environmental Factor and Homestay Operators' Business Performance	
	(Financial)	202
5.2.4	Environmental Factor and Homestay Operators' Business Performance (Non-	
	Financial)	204
5.2.5	Socio-cultural Factor and Homestay Operators' Business Performance	
	(Financial)	205
5.2.6	Socio-cultural Factor and Homestay Operators' Business Performance (Non-	
	Financial)	207

APPENDICES		351
REFERENCES		239
5.7	Conclusion	236
5.6	Directions for Future Research	234
5.5	Limitations of the Study	232
5.4	Recommendations to Entrepreneurs and other Stakeholders	227
5.3.2	Practical Implications	221
5.3.1	Theoretical Implications	216
5.3	Theoretical and Practical Implications	216
5.2.7	The Moderating Effects of Digital Technologies	209

LIST OF TABLES

		Page
Table 1.1	Visitors Arrivals to Sarawak by Regions in Percentage	28
Table 1.2	Foreign Visitors Arrival to National Park, Sarawak	29
Table 1.3	Breakdown of Foreign & Domestic Visitors Arrival to Sarawak	30
Table 3.1	The 11 Sites in Sarawak Selected for the Study	144
Table 3.2	Computation of Distribution of Homestay Operators by Divisions/ Districts	146
Table 3.3	Sample Size Recommendations (80% Statistical Power)	148
Table 3.4	The Respective Homestays from Each Divisions/ Districts	150
Table 3.5	Summary of Questionnaire	156
Table 3.6	Outcomes of Pre-test	164
Table 4.1	Skewness and Kurtosis of Constructs	182
Table 4.2	Demographic Profile of Respondents	185
Table 4.3	Summary of Construct Reliability and Validity	186
Table 4.4	Discriminant Validity of Constructs (Fornell-Larcker Criterion)	189
Table 4.5	Discriminant Validity of Constructs (HTMT Ratio)	189
Table 4.6	Collinearity Statistics	190
Table 4.7	Summary of Path Coefficients and Hypotheses Testing	193
Table 4.8	Effect size (f^2)	196
Table 4.9	Predictive Relevance (Q^2)	198

LIST OF FIGURES

Figure 2.1 Concpetual framework	120
Figure 3.1 Results of G*Power Analysis	149
Figure 4.1 Results of Path Analysis	192

LIST OF ABBREVIATIONS

AR	Augmented Reality
ASEAN	The Association of Southeast Asian Nations
AVE	Average Variance Extracted
CB-SEM	Covariance-based Structural Equation Modelling
CD	Compact Disc
CFA	Confirmatory Factor Analysis
CMV	Common Method Variance
CR	Composite Reliability
DV	Dependent Variable
EE	Effort Expectancy
EFA	Exploratory Factor Analysis
EIU	Economist Intelligence Unit
ERP	Enterprise Resource Planning
FC	Facilitating Condition
FDI	Foreign Direct Investment
FP	Financial Performance
GDP	Gross Domestic Product
GoF	Good-of-fit
GSV	Generic Strategy View
HTMT	Heterotrait-Monotrait ratio of the correlations
ICT	Information and Communications Technology
IT	Information Technology

IV	Independent Variable
LO	Learning Orientation
LV	Lantent Variable
MAR	Missing At Random
MCAR	Missing Completely at Random
MoTAC	Ministry of Tourism and Culture
MTAC	Ministry of Tourism, Arts and Culture
МТСР	Ministry of Tourism, Creative Industry and Performing Arts
NFP	Non-Financial Performance
NRM	Non-Random Missing
OECD	Organisation for Economic Co-operation and Development
OI	Organisational Intelligence
PE	Performance Expectancy
PLS-SEM	Partial Least Squares Structural Equation Modelling
РОТ	Performance of Tourism
RBV	Resource-based View
RT	Rural Tourism
SET	Social Exchange Theory
SI	Social Influence
SMA	Sarawak Multimedia Authority
SME	Small Medium Enterprise
SPSS	Statistical Package for Social Sciences
STB	Sarawak Tourism Board
STP	Sustainable Tourism Practices

TelCo	Telecommunications Company
TCP/IP	Transmission Control Protocol/ Internet Protocol
UNESCO	The United Nations Educational, Scientific and Cultural
	Organization
UNWTO	World Tourism Organization
UTAUT	Unified Theory of Acceptance and Use of Technology
VIF	Variance Inflation Factor
VR	Virtual Reality
WTO	World Tourism Organization
WTTC	World Travel and Tourism Council

CHAPTER 1

INTRODUCTION

1.1 Background of Study

In this post-millennium era, tourism is one of the main economic driving forces for many developed countries (Villanueva-Álvaro et al., 2017). In the case of Cyprus by Charalambos Saitis and Yiannis Panayiotou (2021), it analyses the relationship between tourism and economic growth in Cyprus. The authors found that tourism has a positive and significant impact on the country's economic growth, with every 1% increase in tourist arrivals leading to a 0.2% increase in GDP. As backed by researchers, tourism has been a recognized effective catalyst of socio-economic regeneration for over hundred years (Yusof et al., 2013; Ibrahim et al., 2021). Tourism has never been neglected as revenues generator for a country regardless of its national development. Hence, tourism industry is regarded as important or even pivotal economic sector in every country (Suntikul & Butler, 2017; Díaz-Bautista & Murguía-Cánovas, 2021).

As reported by WTO, international arrivals have an increase of 6% growth in 2018 as compared to statistics to a year before to 1.4 billion based on figures collected around the world (World Tourism Organization, 2019). In the same year, travel and tourism sector has grown globally at 3.9% to contribute a record \$8.8 trillion and 319 million jobs to the world economy. This has made tourism industry to be one of the fastest growing sectors across the world. This has reflected how important and influential tourism has impact to national's economy in the context of tourism industry.

Rural tourism is another form or dimension of travel experience, and it will be the upcoming trend of travel and tour to the industry, in which it could be pairing up with mass tourism which involves urban visit together with countryside visit. It does not carry any impact or even effect to outperform traditional mass tourism. This form of tourism industry could efficiently and effectively be carried out simultaneously with mass tourism at the same time.

Since, the experience and intension for the tourists to travel to rural areas uphold a totally different motives and objectives when they opt for such vacation experiences. As defined by Lane (1994), Sharpley and Telfer (2015), and Kastenholz and Lane (2021), rural tourism is a discrete activity conducted with distinct characteristics and varies in intensity and it differs by area. As cited by Sonca, Csosz, Sabin Jr. and Mateoc-Sîrb (2020), rural tourism is one that has prospect of greater growth in coming decades even with variety of tourist typologies.

Rural tourism holds a very important and significant role to play economically for a national's economy and foreseen to have great potential in the sector of tourism. Mbaiwa (2005) regarded community-based tourism like rural tourism provided benefits to host destination and acts as a development tool. Its potential contribution towards community development is still acknowledged by Moscardo (2008), Stone and Stone (2011), Mtapuri and Giampiccoli (2014), Kunjuraman and Hussin (2017), and Mtapuri and Giampiccoli (2019).

However, rural areas and rural lifestyle have gone through a challenge in recent years, particularly in those developing countries where traditional agriculture and rural culture is threatened and undergone a situation where they are assimilated through urbanisation and modernisation (Mohd Nor & Kayat, 2010; Pusiran & Xiao, 2013). More and more rural people are leaving their hometown and reside in big cities to look for job opportunity, undergo quality education, seek better medical services, abandoning their houses and lands, especially practised by younger generations. (Gao & Wu, 2017).

This scenario is exactly what is happening in mainland China now. Under this circumstance, it is very alarming so in many developing countries; to prevent this situation from worsening, tourism industry has been targeted to offer rural communities the opportunity to convert their country living lifestyle of agro-based crops and livestock farming and turning it as local resources to competitive advantage for a destination. Besides, there are also changes in other aspects, such as demand and supply, political economic changes, technological innovation, and socio-cultural transformation; these changes are either pinpointed as opportunities or challenges to tourism development (Sharpley & Telfer, 2015).

As such, there are scholars appealing and have interest in the field of rural heritage and communities now (Jimura, 2011; Sun et al., 2013; Gullino & Larcher, 2013; Zou et al., 2014; Xu et al., 2021). As a norm in past years, tourism industry is known to improve economic development especially in those remote areas, sub-urban villages via those ancillary services like accommodation, handicrafts production and sales, food supply from local stalls and restaurants, and other tourist related services like land shuttle transportation, boat transportation, or pottering of traveling goods (Phelan & Sharpley, 2011; Schubert et al., 2011; Su, 2011; Kumar et al., 2012; Kontogeorgopoulos et al., 2015; Wang et al., 2021). According to Bramwell and Lane (1994), Garrod and Fyall (2000), and Shuai, Liu, Ahmed, and Wang (2021), have further explanation, it could include elements like heritage, arts, health, education, sports, adventure, farm activities and interests in which located at a remote, rural destinations. In the case of Himalaya, Jhawar and Sharma (2020) analyses the relationship between sustainable tourism and the environment in the context of the Himalayas, they found that sustainable tourism practices can help to protect the environment and promote economic development in the region. Therefore, promotion of tourism in the rural not only help to sustain tourism but also helps to conserve nature and promote economic development.

The results that brought by rural tourism could be very promising and lucrative to the economy of the destination, or even to the state and country. For example, Statistics obtained for Castilla y León; being the largest region in Spain; research shown it has contributed more than 18% of the rural tourism destinations in Spain, offers more than 3000 accommodations and more than 27,000 hotels available for tourists. With such an environment, it has generated more than 4000 job opportunities to cater more than 15,000 overnight stays solely from a single region. (Instituto Nacional de Estadística. Encuesta de ocupación en alojamientos turísticos, 2017) Hence, this is how impactful it is for rural tourism industry to the national with only one typical potential case from the development of tourism in Spain. Hence, with cases showcased above, it clearly proves that economic, environmental, and socio-cultural factors have played a role in improving the tourism performance. These factors have been identified by researchers to be pivotal factors in tourism industry in generating incomes to nation.

1.1.1 Malaysia Scenario

In the context of Malaysia, the government has realized the impacts, and the benefits brought by rural tourism, with laws, regulations and policies been established and enacted