UNIVERSITI PUTRA MALAYSIA

RE-INTERMEDIATION OF MALAYSIAN TRADITIONAL TRAVEL AGENCIES USING ICT AND NON-ICT STRATEGIES

UMA THEVI A/P MUNIKRISHNAN

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By

UMA THEVI A/P MUNIKRISHNAN

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Chair : Serene Ng Siew Imm, PhD
Faculty : Economics and Management

The rapid technological innovation, large advertisement investments opportunities and the ability to consolidate the fragmented tourism products and services have enabled online travel agencies (OTAs) to be the leading global intermediaries replacing the role of SME traditional travel agencies. However, adopting ICT is one of the many strategies used by SME traditional travel agencies to circumvent disintermediation and to remain competitive and relevant in the industry. Malaysia still lags when it comes to ICT adoption, although it is perceived to increase the degree of survivability and competitiveness. As such, this paper identifies the ICT and non-ICT strategies embraced by Malaysian SME traditional travel agencies to to circumvent disintermediation and hence re-intermediate successfully in this digital era.

Past literature have shown there is no one theory can explain the innovation adoption stages of an organisation. As such, this study integrates the Technology-Organisation-Environment framework (TOE) with DTI e-business adoption ladder's classification of stages and Environment-management strategies (EMS) to investigate the ICT adoption pattern, drivers, inhibitors and non-ICT strategies embraced by traditional travel agencies as a re-intermediation strategies.

The ICT adoption drivers and inhibitors are found to conform to TOE framework. Factors such as (i.e. perceived relative advantages, perceived trialability, compatability, IT infrastructure, IT skills/knowledge, owners' attitude, organisational readiness, strategic orientation, high IT investments cost, perceived barriers, firm size, competitive pressure, trading partner pressure, external IS support and industry trend) are found to influence ICT adoption across the levels. Also, the non-ICT strategies embraced by the traditional the agencies do conform to EMS framework. Non-ICT strategies (i.e. competitive aggression, public relation, voluntary action, dependence development, smoothing, collaboration, partnership, alliances, domain selection and diversification) are found to influence ICT adoption. However, this study revealed the ICT adoption pattern did not conform to the DTI framework's classification of stages but revealed a non-staged ICT adoption pattern.

This study employs multiple case studies to ensure the issues are explored through multiple lenses. Semi-structured interviews, website content analysis, document analysis and direct observation are used to collect data from fourteen case firms located in Malaysia. A total of fourteen interviews were carried out with industry experts, hence, fourteen cases were constructed based on in-depth interviews with the CEO-owner who are the key decision makers in the organisation.

Extant literature showed that a consistent and integrated framework for studying ICT adoption at various level was lacking. This study contributes to theory as it responds to the said claim by developing an integrated framework by incorporating elements from EMS and stage models along with TOE framework to provide a comprehensive understanding through new insights and go beyond one fixed theory. Its implication for managers and policy makers are twofold. Recognising the ICT and non-ICT factors at various level could assist the CEOs and policy makers to device specific strategies for business growth and sustainability.

Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia
sebagai memenuhi keperluan Ijazah Doktor Falsafah

INTERMEDIASI SEMULA AGENSI PELANCONGAN TRADISIONAL MALAYSIA MELALUI PENGGUNAPAKAIAN STRATEGI ICT DAN BUKAN ICT

Oleh

UMA THEVI A/P MUNIKRISHNAN

Julai 2018

Pengerusi : Serene Ng Siew Imm, PhD
Fakulti : Ekonomi Dan Pengurusan

Kepesatan inovasi teknologi, peluang pengiklanan pelaburan serta kemampuan untuk menyatukan pelbagai serpihan produk dan perkhidmatan pelancongan telah membolehkan agensi pelancongan atas talian (OTA) menjadi pemimpin perantara global menggantikan peranan agensi pelancongan tradisional Perusahaan Kecil dan Sederhana (SME). Walaubagaimanapun, penggunapakaian Teknologi Maklumat dan Komunikasi (ICT) merupakan salah satu daripada kebanyakan strategi yang digunakan oleh agensi pelancongan tradisional SME bagi mengelakkan ketakpengantaraan dan mengekalkan daya saingan serta kerelevanan di dalam industri tersebut. Temubual tinjauan dengan pakar industri mendedahkan bahawa agensi pelancongan tradisional SME di Malaysia masih ketinggalan dari segi aspek penggunapakaian ICT, walaupun ianya meningkatkan tahap ikhtiar hidup serta daya saingan. Oleh itu, kertas penyelidikan ini menyiasat penggunapakaian ICT di kalangan agensi pelancongan tradisional di Malaysia. Kertas penyelidikan ini mengenalpasti peringkat penggunapakaian ICT dan meninjau strategi proaktif dan pelan-pelan pemasaran yang digunapakai oleh agensi-agensi pelancongan tradisional SME Malaysia untuk menerangkan setakat mana agensi pelancongan traditional SME telah menggunapakai strategi ICT dan bukan-ICT bagi memintas ketakpengantaraan.

Literatur yang lepas telah menunjukkan bahawa tiada satu teori yang dapat menerangkan inovasi berperingkat penggunapakaian sesebuah organisasi. Oleh itu, kajian agensi pelancongan tradisional SME di Malaysia ini mengintegrasikan rangka kerja "Technology-Organisation-Environment" (TOE) dengan klasifikasi peringkat tangga penggunapakaian e-perniagaan DTI dan "Environmental Management Stategies" (EMS). Integrasi DTI dan EMS dengan rangka kerja TOE telah membolehkan satu pemeriksaan ke atas ciri-ciri tafsiran dalam konteks teknologi, organisasi dan persekitaran dan strategi bukan-ICT yang mencakupi ketiga-tiga peringkat penggunapakaian ICT. Pengenalpastian pemacu serta penghalang penggunapakaian ICT serta strategi bukan-ICT yang digunakan oleh agensi pelancongan tradisional SME di Malaysia didapati mematuhi rangka kerja TOE dan klasifikasi strategi EMS masing-

masing. Walaubagaimanapun, kajian ini mendedahkan bahawa peringkat-peringkat penggunapakaian ICT gagal mematuhi klasifikasi peringkat-peringkat rangka kerja DTI. Kajian ini menggunakan kualitatif pelbagai kajian kes untuk memastikan isu-isu tersebut ditinjau melalui pelbagai lensa. Temubual separa-struktur, analisa kandungan laman sesawang, analisa dokumen dan pemerhatian langsung digunakan untuk mengumpul data daripada empatbelas kes firma yang bertempat di Malaysia. Sejumlah enambelas temubual telah dijalankan dengan pakar-pakar industri, dengan itu empat belas kes telah dikaji berdasarkan temubual-temubual secara mendalam dengan CEO-pemilik yang merupakan pembuat keputusan utama di dalam organisasi tersebut. Bukti yang diperolehi daripada analisa kes bersilang menunjukkan bahawa terdapat variasi yang besar dalam faktor-faktor TOE yang mempengaruhi penggunapakaian ICT dan strategi-strategi bukan-ICT yang digunakan dalam ketiga-tiga peringkat tersebut. Literatur yang sedia ada menunjukkan bahawa satu rangka kerja yang konsisten dan berintegrasi bagi mengkaji penggunapakaian ICT sebagai satu fenomena berasaskan peringkat adalah masih berkurangan. Kajian ini menyumbang kepada teori memandangkan ianya memberi respon terhadap kekurangan tersebut dengan membangunkan satu rangka kerja berintegrasi dengan menggabungkan elemen-elemen daripada EMS dan model-model peringkat bersama-sama dengan rangka kerja TOE untuk memberikan satu persefahaman yang komprehensif melalui pemahaman yang baru dan melampaui suatu teori yang tetap. Implikasi untuk pengurus-pengurus dan pembuat polisi adalah dua lipat. Pengiktirafan faktor-faktor ICT dan bukan-ICT sebagai satu fenomena peringkat boleh membantu pengusaha-pengusaha dan pembuat-pembuat polisi untuk merangka strategi-strategi spesifik untuk pertumbuhan dan kemampanan perniagaan.

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I certify that a Thesis Examination Committee has met on 13 July 2018 to conduct the final examination of Uma Thevi Munikrishnan on her thesis entitled "Re-Intermediation of Malaysian Traditional Travel Agencies Using ICT and Non-ICT Strategies" in accordance with the Universities and University Colleges Act 1971 and the Constitution of the Universiti Putra Malaysia [P.U.(A) 106] 15 March 1998. The Committee recommends that the student be awarded the Doctor of Philosophy.

Members of the Thesis Examination Committee were as follows:

Amer Hamzah bin Jantan, PhD
Senior Lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Sridar a/l Ramachandran, PhD
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Yee Choy Leong, PhD
Senior Lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Internal Examiner)

Parikshat Singh Manhas, PhD
Professor
University of Jammu
India
(External Examiner)

RUSLI HAJI ABDULLAH, PhD
Professor and Deputy Dean
School of Graduate Studies
Universiti Putra Malaysia

Date: 27 September 2018

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Doctor of Philosophy. The members of the Supervisory Committee were as follows:

Serene Ng Siew Imm, PhD
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Chairman)

Ho Jo Ann, PhD
Associate Professor
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

Raja Nerina Raja Yusof, PhD
Senior Lecturer
Faculty of Economics and Management
Universiti Putra Malaysia
(Member)

____
ROBIAH BINTI YUNUS, PhD
Professor and Dean
School of Graduate Studies
Universiti Putra Malaysia

Date:

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I hereby confirm that:

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Signature: ______________________
Name of Member of Supervisory Committee: Associate Professor Dr. Ng Siew Imm

Signature: ______________________
Name of Member of Supervisory Committee: Associate Professor Dr. Ho Jo Ann

Signature: ______________________
Name of Member of Supervisory Committee: Dr. Raja Nerina Raja Yusof

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ARP	Address Resolution Protocol
AT	Attitude toward use
AU	Actual Use
BI	Behavioural Intention to Use
BUMITRA	Bumiputera Travel and Tour Agents Association of Malaysia
CRM	Customer Relationship Management
CRS	Computer Reservation Systems
CSR	Corporate Social Responsibility
DMC	Destination Management Company
DMO	Destination Management Organisations
DTI	Department of Trade and Industry
EDI	Electronic Data Interchange
EMS	Environmental Management Strategies
ERP	Enterprise Resource Planning
GDS	Global Distribution Systems
GSA	General Sales Agent
IATA	International Air Transport Association
ITC	Islamic Tourism Centre
KAP	Knowledge Attitude Practice
LAN	Local Area Network
LCC	Low Cost Carriers
MAH	Malaysian Association of Hotels
MATC	Malaysia Tourism Centre
MCTA	Malaysian Chinese Tourism Association
MDEC	Malaysia Digital Economy Cooperation
MICE	Meetings, Incentives, Conventions and Exhibitions
MITA	Malaysian Indian Travel Association
MITI	Ministry of International Trade and Industry
MOCAT	Ministry of Culture, Arts and Tourism
MOF	Ministry of Finance
MOTAC	Ministry of Tourism and Culture

MOTOUR	Ministry of Tourism
MPTB	Malaysia Tourism Promotion Board
MTDC	Malaysian Technology Development Corporation
MTTP	Malaysia Tourism Transformation Plan
NEAC	National Economic Action Council
NEM	New Economy Model
NGO	Non-governmental Organisation
NKEA	National Key Economic Areas
NTP	National Tourism Policy
OTA	Online Travel Agency
PATA	Pacific Asia Travel Association
SME	Small Medium Enterprise
SMTE	Small and Medium Tourism Enterprises
SNS	Social Network Sites
TDC	Tourist Development Corporation
TMC	Travel Management Company
TTAs	Traditional Travel Agencies
WWW	World Wide Web

CHAPTER 1

INTRODUCTION

1.1 Introduction

The aim of this study is to explore the key drivers and inhibitors of electronic adoption, wherein the adoption of Information Communication Technology (hereinafter referred to as 'ICT') by traditional travel agencies in Malaysia will be investigated. Technology adoption in tourism has been a central focus since the establishment of the Computer Reservation Systems (CRSs) in the 1970s and Global Distribution Systems (GDSs) in the late 1980s, superseded by the development of the internet-based technologies in the late 1990s (Buhalis & Law, 2008). ICT have been transforming travel and tourism sector globally as both organisations as well as individuals around the world are adopting the internet and internet based technologies for their daily and business activities. Businesses are adopting internet-based technologies in order to improve their marketing activities (Buhalis & Law, 2008; Kozak, 2007); reducing transaction costs (Standing & Vasudavan, 2000); increasing competitiveness and performance (Yoon, Yoon & Yang, 2006); whereas consumers are using e-adoption to empower themselves via their online active participations.

Traditional travel agencies are retail businesses selling travel products and services to consumers (Kayani, McGrath & Lorsen, 2015) while Online Travel Agencies (hereinafter referred to as 'OTAs') are travel intermediaries selling to final consumers via websites rather than via bricks and mortar outlets (Euromonitor International, 2014) and receive a percentage of transaction value (Turban, 2008). Extant literature suggest that e-adoption represents a strategic instrument for traditional travel agencies, especially of the smaller size, that seek to grapple the competitive environment and remain relevant in the industry (Law, Qi & Buhalis, 2010; Manzano & Valpuesta, 2010; Ozturan & Roney, 2004; Xin, Ramayah, Soto-Acosta, Popa & Ping, 2014). However, empirical evidence on decisive factors leading to the e-adoption in traditional travel agencies in emerging economies are somewhat scarce and limited, as Hung, Yang, Yang and Chuang (2011) emphasised. Existing tourism e-business literature (e.g. Standing, Tang-Taye & Boyer, 2014) identified a rich set of factors. Unfortunately, it is not known whether these factors which were identified and assessed for tourism and travel firms operating in developed countries and some matured Asian countries would apply equally to traditional travel agencies in Malaysia.

In this study, in order to recognise the importance of technology adoption by traditional travel agencies to remain competitive and relevant in the industry, an integrative framework was developed and analysed through empirical analysis of multiple case studies. The framework depicted the stages/levels involved in the technology adoption and the various contextual factors that might affect the different stages of adoption. Furthermore, this study explored the proactive strategies and marketing plans embraced by traditional travel agencies to cushion the environmental threats and exploit the opportunities to remain relevant in the industry.

The study focused on traditional travel agencies in a highly innovative and competitive global industry, the tourism industry, which plays a crucial role in both developing and developed countries, some of which have transformed to OTAs for sustainability. Key findings from Euromonitor International (2014), indicated that the global online travel intermediaries' sales recorded 8 percent CAGR over the 2008-2013 period, driven by a rapid rise in OTAs. Furthermore, the worldwide revenue generated through online travel bookings in 2017 hit USD 629.81 billion (The statistics Portal: "Digital travel sales worldwide"). This indicates the quickly evolving, innovative and competitive environment constantly forces its players to change their business model to thrive.

Although the Malaysian travel and tourism sector has been ranked as the world's twenty sixth most competitive tourism destination (Dass, 2017) and has demonstrated its economic importance, there is relatively low technology adoption as far as the travel industry is concerned. However, the industry players are realising that in order to stay relevant they have to embrace technology adoption (Fuza, Ismail & Isa, 2015; Yusoff, 2013). This suggests that the rapid innovation and development in information technology requires travel agencies to reposition their traditional role, change their business model and become less dependent on their travel suppliers. Under the power of ICT almost all the roles played by traditional travel agency can be handled by OTAs. For instance, airline tickets, accommodations, tour guides and ground tours can be booked on-line by tourist themselves within a few clicks. The question that arises is "how do traditional travel agencies stay relevant in the industry despite most of the traditional travel agencies functions can be done via on-line without having to go through traditional travel agencies"? Thus, the choice of travel agencies as the target sector in this study is also grounded on its relevance to both local and global economy and its resulting potential for policy and strategic development.

The objective of this chapter is to demonstrate the relevance of the research problem to the e-tourism literature and how this study aims to address it. This chapter will begin with the background to the research, followed by an outline of the gaps in tourism e-business research. A statement of research question, propositions and an outline of specific objectives are then developed.

1.2 Background to the Research

The tourism industry is an international industry and the biggest provider of jobs globally that provide impetus to economic growth of developing and developed economies (Petrou & Daskalopoulou, 2013). According to Buhalis and Law (2008), the robust growth and development in the industry is mirrored by the growth of ICT. In addition, he acknowledged that the synergistic interaction between technology and tourism has brought the revolutionary changes on the industry structure. The adoption of ICT and internet-based technologies provide the basis to remain competitive in the marketplace.

The development of new systems linking consumers and Consumer Reservation Systems (CRSs)/Global Distribution System (GDSs) has lowered the entry barriers, reduced the operating cost, revolutionised distribution channels, facilitated price transparency and enhanced the competitive position by providing tourism principals, airlines and hoteliers an opportunity to sell directly (Kim, Nam, & Stimpert, 2004; Xiang, Wang, O' Leary & Fesenmaier, 2014). Thus, the accelerating development in ICT and internet-based technologies has created a condition for the emergence of a series of OTAs such as Expedia Inc., Priceline.com Inc., Orbitz Worldwide Inc., tripadvisor.com, Hotel.com, etc. These OTAs provide travel product suppliers to sell directly via internet by allowing travel buyers to directly access their reservation systems, web-based travel agents and internet portals (Egger & Buhalis, 2008). Furthermore, these OTAs have taken advantage of the online booking and 'DIY' holidays to reduce their transaction costs (Law & Leung, 2000), eliminate coordination mechanism from other sales channels and limits spill over effects of price discounts (Xiang et al., 2014).

Under the power of ICT, the industry players within the industry will have to redesign the strategy due to the emergence of new value chain and value system (Buhalis, 2003). According to Ng, Cassidy and Brown (2006) and Heung (2003), travel and tourism industry is ranked amongst the top three product/service categories purchased via the internet. Similarly, Standing, Tang-Taye and Boyer (2014) asserted that no other sector of the economy has been impacted by ICT as has the travel and tourism industry. Travel agencies were the most impacted and thus disintermediation seemed inevitable.

Disintermediation is associated with a reduced role of traditional intermediaries (travel agencies and tour operators) due to the introduction of electronic means that enable consumers to directly deal with suppliers (Andreu, Aldas, Bigne & Mattila, 2010). Study by Law, Law and Wai (2001) and Tsai, Huang and Lin (2005) on the impact of internet on travel agencies in Hong Kong and e-commerce development model for Taiwanese travel agencies provide empirical evidences of disintermediation of traditional travel agency being facilitated by advanced technology.

The advanced technology provides the means for suppliers and consumers to bypass the travel agency and communicate directly leaving the travel agency in a vulnerable state. This situation is epitomised by the deregulation of airlines, the reduction of commissions paid to travel agency and the advent of electronic ticketing (Cheyne, Downes & Legg, 2006). Internet booking brings new independence for suppliers and travellers (Poon, 2001). This suggests that the traditional travel agency cannot sit back and expect their businesses will be secured. The OTAs have proven to have taken on the role of tour operators and travel agencies globally. Therefore to remain relevant in the industry, the travel agencies have to reposition their traditional role, change their business model and become less dependent on their travel suppliers by recognising the potential benefits of embracing e-adoption. More importantly to withstand the competitive environment traditional travel agencies requires strategies that will sustain them in business.

Also, Almunawar and Anshari (2014) indicated that the traditional travel agencies need to implement strategies such as focusing on niche markets and creating close relationship with their customers and if there is no proper business strategies developed to face the environmental uncertainties and threats from the ICTs development, travel agencies will have a slim chance for survival. Similarly, Dolnicar and Laesser (2007) in their study found that traditional travel agencies can survive if they focus on specific specialised services and specific segment of the market. The OTAs offering similar services is now driving traditional travel agencies to be more receptive and competitive. To remain relevant in the industry, traditional travel agencies must have value-creating strategies that can entice customers to transact with them (Almunawar & Anshari, 2014; Dilts & Prough, 2001; Dolnicar & Laesser, 2007). This reasoning therefore sets forth the potential importance of technology adoption and strategy implementation in traditional travel agencies for survival and successful growth.

1.3 Traditional Travel Agencies versus Online Travel Agencies

Traditional travel agencies are retail business selling travel products and services to consumers (Kayani, McGrath & Lorsen, 2015). These agencies act as intermediaries between consumers and travel suppliers such as airlines, car rentals, cruise lines, hotels, railways, and package tours on a commission basis. According to Rajamma, Paswan and Ganesh (2007) traditional travel agencies are perceived tangible as these firms have a physical location in a specific geographic areas, providing potential customers access to their services. However, unlike other retail businesses, these travel agencies do not keep stock in hand. Traditional travel agencies are engaged in providing a range of services, for example providing consultation, passing information from tourism principals to customers, preparation of travel documents and itineraries, facilitating ticket reservations and processing transactions, arranging transportation and organising and arranging reservation for special interest activities such as religious pilgrimages (Cheung & Lam, 2009; Tsai et al., 2005).

The rapid adoption of ICT and internet-based technologies in the various tourism-related organisations has affected the traditional operation of traditional travel agencies and transformed the distribution function to an electronic market place (Buhalis & Law, 2008). ICT provide traditional travel agencies with comprehensive, timely and accurate information to aid their customers. ICT is widely used in traditional travel agencies for reservation, accounting, and inventory management functions (Standing & Vasudavan, 2001). Global distribution system (GDS) such as Galileo, Sabre and Amadeus are used for reservations, information search, and client management and reporting. Whereas Organisation Information System (OIS) is used for accounting, reporting, record management and billing (Standing, et al., 2014).

In general, ICT and internet-based technologies offer traditional travel agencies the convenience, efficiency and accessibility to reach the global market at a low cost (Ozturan & Roney, 2004). Although the internet-based technologies gave the travel agencies the ability to reach the global market, it also provided the airlines and hotels the opportunity to deal directly with their consumers. The ability to reach the consumers directly resulted in the airline companies and hotels reducing the commissions they were willing to pay to the travel agencies. In the case of the airline companies, for instance, they were able to reduce the commissions initially from 20% to 25% and then to a mere 5% for a paper ticket. Additionally, many of the airline companies also imposed a cap on the amount of commissions that they were willing to pay (Alexander, Pearson & Crosby, 2003).

Undeniably, the technological progress and the changes in the consumer profile and behaviour have changed the market structure of the travel industry. Consequently, for sustainability, it is crucial for traditional travel agencies to proactively incorporate ICTs along with their traditional marketing strategies to reposition their traditional retail role (Buhalis, 2000, Viljoen, Lombard & Jooste, 2015). The adoption of technology, though it is not novel for traditional travel agencies, the lack of awareness, resources and expertise of the potential benefits have limited their growth. Traditional travel agencies are vulnerable to the growth of the ICTs as a tool for e-business and information dissemination (Khuja & Bohari, 2012) due to the structural and functional weaknesses (Buhalis, 2000). Further, the emergence of OTAs has led to the disintermediation hypothesis, which means the travel suppliers come in direct contact with their customers and remove all types of intermediaries that come in their way and add unnecessary cost.

The advancement in ICT and internet has witnessed the growth of OTAs. OTAs are travel intermediaries selling to final consumers via websites rather than via bricks and mortar outlets (Euromonitor International). Priceline.com Inc. and Expedia Inc. emerged as the most successful OTAs with gross booking of USD 56 and 61 million respectively in 2015. In the Asia Pacific, Chinese OTA C-trip recorded 27 million in terms of gross bookings in 2015 (Euromonitor International). The rapid technological innovation, large advertisement investments opportunities and the ability to consolidate the fragmented tourism products and services have enabled these OTAs to be the leading global intermediaries replacing the role of traditional travel agencies. Furthermore, "search engines and meta-search engines (such as Google and Kayak) destination management systems (such as visitbritain.com), social networking and web 2.0 portals (such as tripadvisor), price comparison sites (such as Kelkoo) as well as individual supplier and intermediaries sites" (Buhalis & Law, 2008, p. 611), have weakened the position of the traditional travel agencies. Clearly, traditional travel agencies will have to radically rethink the way they do business.

1.4 Intermediation and Re-Intermediation of Traditional Travel Agency

The advancement in technology and the changes in the customer profile and behaviour has led to profound changes in the structure of travel distribution. In the last few years, a substantial number of tourist started to use electronic mediums for travel bookings bypassing the traditional travel agencies. The reduced role of traditional intermediaries is what became known as "disintermediation" (Cheung & Lam, 2009; Buhalis & Jun, 2011). Nevertheless, it has also created an opportunity for OTAs and other cybermediaries which is much more powerful than traditional travel agencies to emerge and grow. According to Kaewkitipong (2010) tourism industry is among the earliest industries to be impacted by disintermediation.

Traditional travel agencies are inevitably to be effected by OTAs and other cybermediaries due to the nature of the travel products being almost pure information goods at the point of purchase (Novak & Schwabe, 2009). According to Dilts and Prough (2002), the direct online interaction channels and the easy access to information sources on Internet provide customers with variety of choices and bypass traditional travel agencies offering little added value.

Therefore, to circumvent disintermediation, traditional travel intermediaries have to discover new ways to remain relevant and competitive in the market hence this led to the introduction of re-intermediation (Huang, Chen & Wu, 2009). Re-intermediation refers to previously disintermediated travel intermediaries role being reinstated again by offering new value proposition (Viljoen & Lombard, 2016). The brick and mortar traditional travel agencies may build their new value proposition by combining internet activities (Viljoen & Lombard, 2016) with their core-competence such as their close relationship with the clients and their expert-mediated advisory services (Novak & Schwabe, 2009). The co-existence may assist the traditional travel intermediaries to build on their current weakness on internet and able to retain customers in the long run. According to Garkavenko (2007), though internet provides adequate information on travel requirement and destinations it is no match for personalised service that comes with first-hand knowledge and experience.

A study conducted by Vijoen and Lombard (2016) on six hundred travel agencies in South Africa cites delivering continuous high quality service, high level of product knowledge, differentiated product and co-exist with technology are essential for customer retention and hence re-intermediation. Furthermore, Garkavenko (2007) suggested the following strategies (i.e. embrace technology, seek and foster niche market, consolidate and become more customer oriented). In doing so, the traditional travel agencies are able to meet the complex customer requirements and retain them in the long run. In conclusion, these studies propose a technology-related re-intermediation solution for disintermediated traditional travel agencies

1.5 Background of Tourism and Travel Industry in Malaysia

Tourism activity in Malaysia can be traced way back to 1960s when Department of Tourism was first set up under the Ministry of Trade of Malaysia in 1959. Tourism was regarded as an economic catalyst with the inclusion of the primary objectives of tourism in the Second Malaysia plan (1971-1975). Subsequently, the government initiatives grew with the establishment of Ministry of Culture and Tourism in 1987. However, in 1992, the Ministry of Culture and Tourism was renamed Ministry of Culture, Arts and Tourism (MoCAT). Further, in 2004 MoCAT was split to i.e. Ministry of Tourism (MoTour) to solely handle matters related to tourism. The split reflected the Malaysian government's aspiration to promote tourism as one of the key income earner. Due to the close link between the activities carried out by MoCAT and MoTour, in 2013 MoTour was transformed to Ministry of Tourism and Culture (MOTAC). The initiatives taken by the government of Malaysia to strengthen tourism activities is witnessed by the robust tourism growth in recent years.

The robust growth in recent years can be attributed to the establishment of the Tourist Development Corporation (TDC) in 1972 during the Second Malaysia Plan period. In effort to position tourism sector as the catalyst for employment, foreign exchange earner and economic growth, the Malaysian government had developed and implemented various tourism policies. This is evident through the various and incessant tourism specific initiatives taken in its five years economic plan since the 2nd Malaysian Plan (1971-1975) until the recent 11th Malaysian Plan (2016-2020). The first National Tourism Policy (NTP) which was established in the Sixth Malaysian Plan served as the guiding principle for tourism development and planning. Subsequently, to boost the industry growth, tourism was selected as one of the National Key Economic Areas (NKEA) under the NTP in 2010. Furthermore, National Eco-tourism Plan (1996) and Rural Tourism Master Plan (2001) was established Seventh and Eight Malaysian Plan respectively. Hence, each of these specific policies have assisted to boast a wide range of tourist products/services, attractions and facilities. Table 1.1 below depicts the tourism development strategies in the last five Malaysian Plan.

Table1.1: Tourism strategy development in the last five Malaysian Plan

Malaysian Plan (MP)	Tourism Strategy Development
Seventh Malaysia Plan (1996-2000)	• Diversify products and services to meet needs of tourists • Promote new products namely; sports, shopping, conventions, and water based activities. • Ensure more effective marketing and promotional efforts • Encourage investment and especially private sector participation in innovative tourism projects. • Increase the involvement of local communities and small entrepreneurs. • Improve infrastructures and provide necessary basic facilities. • Provide communication facilities
Eight Malaysia Plan (2001-2005)	• Balance between economic, environmental, cultural and social, when aspects planning and implementing of tourism activities. • Designing methods to conserve physical environment and cultural heritage. • Establishment of a holistic approach in tourism development (hospitality, innovation and strength of the private sector, creating courtesy and public consciousness). • Display Malaysia as an along-the-year carnival destination. • More focus on products that cater special needs such as cruise and yachting tourism. • Ensure safety, comfort, and well-being of tourists
Ninth Malaysia Plan (2006-2010)	• Ensure the development of sustainable tourism. • Support innovative tourism services. • Encourage marketing and promotional activities. • Focus on new developing new product such as agro-tourism, eco-tourism, educational tourism, meetings and exhibitions, sports and recreational tourism, and Malaysia My Second Home.
Tenth Malaysia Plan (2011-2015)	• Stressing the state's tourism development based on the nine core areas of heritage tourism, ecotourism, homestay tourism, sports tourism, coastal and island tourism, meetings and exhibition tourism, food tourism, golf tourism, and shopping and health tourism. • Improve the image of tourism destinations. • Implement major tourist events and large-scale programs intended to improve levels of comfort, safety, cleanliness.

	• More development for tourism facilities and infrastructures. • Continue marketing and promotion of intensive tourism products in key markets in Asia, Indo-China and Europe. • Emphasis quality of training and human resource development in order to deliver quality services.
Eleventh Malaysia Plan (2016-2020)	• Support for rural tourism operators. • Clusters consisting of tourism products that are iconic, driven by catalytic investors and able to attract high yield tourists will be promoted. • The value of tourism products will be enhanced to enrich and provide unique tourists' experience through product differentiation, presentation, interpretation and service quality. • Promote Eco-labels such as Green-Globe or sustainability certification to attract tourists who are willing to pay a premium for an environmentally-friendly stay. • To upgrade service quality. • Re-strategising marketing and promotion wherein focus will be given to ecotourism, shopping and MICE segments to capture high spending tourists • Improving governance through integrated development and implementation of tourism products and facilities between Federal Government, state governments and local authorities to ensure optimal utilisation of resources.

Source: Adapted from Mosbah 2014 and Eleventh Malaysia Plan

Undoubtedly, to accomplish the strategies various government and private travel and tourism organisations are formed for an integrated development and strategic implementation. Thus, to ensure sustainable development integrated tourism planning was enhanced between the Federal Government, State Government and local authorities. Primarily, two government bodies are responsible for tourism development in Malaysia. The first is MOTAC which is responsible for the development of tourism policies and strategies. The second is Malaysia Tourism Promotion Board (MPTB) also known as Tourism Malaysia which is responsible for promoting Malaysia domestically and internationally. In addition, other federal department and government agencies such as Department of Agriculture (Agro-tourism), Department of Forestry (Ecotourism), Department of Fisheries (Coastal-tourism), Department of Wildlife and National Parks (ecotourism), Department of Aborigines' Affair (ethnic tourism) and Department of Museum and Antiquities (Heritage and Cultural tourism) (Mosbah & Khuja, 2014) are also responsible for tourism development in Malaysia.

The other government and non-governmental bodies that are actively involved in developing Malaysia as a leading tourism destination are Malaysia Tourism Centre (MATIC), Islamic Tourism Centre (ITC) and Malaysian Association of Tour and Travel

Agents (MATTA), Malaysian Association of Hotels (MAH). MATIC which one-stop tourist centre offers various services and facilities i.e. as Tourist information Counter, Tourist Police Counter, Internet access to tourism e-portal etc. in its effort to place Malaysia as one of the best tourist destination in the world. Whereas, ITC was launched in 2009 to assist MOTAC in capacity building services in relation to Islamic tourism (http://www.itc.gov.my). The success of ITC can been seen through the various initiatives that eventually led Malaysia to rank the world's best muslim travel destination (The Star Online, 6 May, 2017).

Malaysian Association of Tour and Travel Agents (MATTA) which the national umbrella representative body for the entire travel industry in Malaysia started with 30 members but now its membership is about 3000 and increasing. The MATTA members comprise of local tour and travel agencies and numerous overseas affiliation (http://www.matta.org.my). MATTA collaborates closely with MOTAC and MTPB to organise various tourism activities to create public awareness and to assist its members. The active involvement of MATTA had assisted its members (travel agencies) to secure business, upgrade their skills and knowledge and in fact, the tech-talk conducted by MATTA for its members have created the awareness on the importance of technology adoption to remain competitive. MATTA as an umbrella body takes an adequate initiative to ensure its members are aware of the industry changes, knowledgeable and skilled to meet the domestic and international tourist needs and demands. Finally, MAH which was established in 1974 has enhanced the tourism industry by integrating member hotels throughout Malaysia. MAH collaborates with MOTAC and private sectors to ensure high standard of service quality.

The positive approach and the various strategies taken by the Malaysian government had resulted in the sustained branding of Malaysia as a leading tourism destination. According to Anuar, Ahmah, Jusoh and Hussain (2013) the aggressive initiatives taken by MOTAC along with MTPB and other private agencies to promote tourism had resulted in the advancement in physical developments i.e. infrastructure, facilities, and marketing and promotional activities. These development had assisted Malaysia to garner 89 billion worth of tourist receipt, 29.4 million of tourist arrival and 2 million jobs in 2015 and estimated to touch 136 billion in tourism receipt, 36 million of tourist arrival and 2.3 million in jobs in 2020 (Eleventh Malaysia Plan).

1.6 The Importance of Tourism and the Travel Sector in Malaysia

The tourism industry is widely acknowledged to provide impetus to economic growth of developing and developed economies. Its importance is gaining widespread recognition due to its direct and indirect effects on socio-economic activities (Dritsakis, 2004), linking a series of interwoven activities involving the provision of goods and services. It can be argued that tourism industry is the largest, and one of the fastest growing service industries in the world and probably the most important growth engine (Petrou & Daskalopoulou, 2013).

Undoubtedly, the tourism industry also plays an important role in the development of the Malaysian economy, demonstrating its potential as one of the major source of foreign currency earner and catalyst to economic growth (Mosbah & Al-Khuja, 2014). In 2016, there were approximately 26.76 million tourist arrival, with the sector revenue of RM82.1 billion contributing 13.7% to national gross domestic product (GDP) and this is expected to rise to 15.1% by 2026. In addition, tourism sector is the single largest employer with almost two million jobs created directly and indirectly related tourism industries. In 2016 the total contribution of Travel and Tourism industry to employment was 12% of the total employment and this is expected to rise by 3.7% per annum by 2026 (World Travel and Tourism Council, 2017). Furthermore, statistics in 2005 show that the share of tourism revenue in the service accounts of the Malaysian Balance of Payment contributed more than 40% (Ninth Malaysia Plan, 2006-2010). Tourism also earned USD18.1 billion in export revenue which is approximately 10% of the total exports of Malaysia in 2006 (Bhuiyan, Siwar & Ismail, 2013).

The growth is in line with the broad objective of National Key Economic Areas (NKEA) and Malaysia Tourism Transformation Plan (MTTP). Besides, the sector's importance has been reflected in the development allocation, which showed a remarkable increase over the years. During the 7th Malaysia Plan, the allocation for development was RM 605.5 million (Seventh Malaysia Plan, 1996-2000), and which was subsequently increased to RM 1009 million during the 8th Malaysia Plan (Eight Malaysia Plan, 2001-2005). It eventually reached RM 1367 million during the 9th Malaysia Plan (Ninth Malaysia Plan, 2006-2010).

Since tourism contributes significantly to the national GDP and is ranked 16th in terms of global inbound tourism receipts, capturing approximately 2% of the global market share in 2008 (Tenth Malaysia Plan, 2011-2015), travel-related ICT and internet-based technology adoption seem to be growing in certain areas of the travel industry. According to Kamaruzaman, Handrich and Sullivan (2010), the potential driver for Malaysia‘s e-commerce is e-tourism. These authors also asserted that Malaysian firms lag behind by approximately 3 to 5 years in e-commerce adoption as compared to firms in the United States. However, the gap is getting smaller wherein the e-commerce market value grew from USD1.9 billion in 2014 to USD2.8 billion in 2017 and it is expected to grow to USD20 billion in 2020 (The Statistic Portal: "E-commerce market value in Malaysia").

One of the Malaysian technology adoption success story is that of Air Asia, which leveraged on internet-based technologies as their main marketing and distribution channel and raked in a revenue of approximately RM6846 million in 2016 (Wall Street Journal). The deregulation of the airline market and the emergence of low cost carriers (LCCs) have caused the increase in the number of online websites (Buhalis, 2004; Harison & Boonstra, 2008). Likewise, the hotel sector also have established their own websites where it has become possible to book hotel rooms via online (Gilbert, Leekelley & Beveridge, 2004; O' Connor and Frew, 2000). Furthermore, the current developments in e-tourism application are extended to the destination level. According to Ma, Buhalis and Song (2003) some destination management organisations (DMOs) have successfully integrated internet, intranet and extranet to promote their destinations by providing tourist with pre-trip and in-trip information and helping small and medium sized tourism enterprises (SMTEs) to promote their products.

Previously, only the traditional travel agencies carried out the airline ticket bookings and hotel reservations. Kamaruzaman et al. (2010) asserted that in 2008, 41% of Malaysians made use of internet-based technologies for airline ticket reservations, whilst 24% used it for Event ticket reservations and 22% for tours or hotel reservations. Though it is clear that the adoption of ICT and internet-based technologies is reducing the importance of traditional travel agencies, nevertheless only 20.5% of the traditional travel agencies are involved in e-business in tourism and hospitality sector in Malaysia (Mohamed, Marthandan, Daud & Omar, 2008).

Despite the incessant growth in ICT and internet-based technologies, traditional travel agencies are still in business. There are more than 3,000 travel agencies and 2,013 have registered with MATTA. However an interview with Mr Zamrul, the Chief Executive Officer of Olive Travel Sdn Bhd based in Taman Tun Dr. Ismail, revealed that there are approximately 5000 travel agencies in operation, of which some of them are unregistered whilst some are registered with other associations such as Bumiputera Travel and Tour Agents Association of Malaysia (BUMITRA), Malaysian Indian Travel Association (MITA) and Malaysian Chinese Tourism Association (MCTA) (Mr. Zamrul, January, 21, 2015). The majority of these travel agencies are SMEs and the adoption of information technology is still rather low (Hamid, 2011). He also pointed out that the position of traditional travel agencies can be considered weak as they are threatened by the dynamic operating environment, decreasing market share and profit level.

Interestingly, a research carried out by the global travel distribution system, Amadeus in 2008 found that travel agencies in Malaysia can see their profit margins increase by expanding the use of technology (Skyscanner, 2008). David Brett, President of Amadeus Asia Pacific, said: "The travel agencies in Malaysia can thrive if they harness new industry developments, particularly where technology is concerned. Years ago, many feared that the internet would mean the death of travel agencies. Clearly that isn't the case, as it is the agencies using technology to their advantage that are emerging as the most successful businesses." (Skyscanner, Sunday, January, 20, 2008).

In furtherance to the above discussion on the importance of information technology in the tourism sector, the study will also focus on Malaysian traditional travel agencies for the following reasons. Firstly, the tourism growth figures above provide an indication of a spectacular growth in the tourism industry. Tourism has become one of the fastest growing sectors in the Malaysian economy contributing to economic growth, development, investment and employment. According to Set (2014), tourism industry in Malaysia contributed about 13.2% to gross domestic product (GDP), employed 11.2% of the total labour force, and generated earnings of 10.7% of total exports. Despite the strong market growth, the ICT penetration amongst the tourism and hospitality sector in Malaysia only represent 20.5% (Mohamed et al., 2008) and 14% from the total of SMEs establishments in the country (Set, 2014). Secondly, the tourism development allocation which has increased 125% during the Seventh Malaysian Plan and Ninth Malaysian Plan period is a strong indication of the government's initiative to position the country as a leading tourism destination. Therefore, the role of traditional travel agencies to sell the travel packages will continue to grow in the future. Thirdly, the plummeting airline commission and emergence of OTAs pose a challenge for Malaysian traditional travel agencies. Their response to electronic adoption for sustainability is an interesting subject for study. Will these travel agencies ignore the challenges and go dormant or will they seek to reinvent a new business model optimizing technology to circumvent disintermediation and remaining competitive in the industry?

1.7 ICT in Developing Economies

The importance of ICT innovation in 'raising the economy-wide productivity and output' (Kaplinsky et al., 2009) has been acknowledged as a critical tool for a country's development and to enhance productivity levels. In fact, Fagerberg (2003) affirmed that countries with higher ICT innovations enjoy a higher productivity level and income than countries with lesser ICT development. According to Xiao, Califf, Sarker and Sarker (2013), globalisation, economic liberalisation, integration into the world economy and the realisation of developing countries to continuously innovate their product and process to 'catch up' are among the forces of ICT adoption in developing countries. Evidence from other studies support ICT as a tool for sustainable growth, good governance, reducing transaction cost, improved operational efficiencies, greater competitive advantage and poverty reduction (Ahmad, Abu Bakar, Faziharuden & Zaki, 2014; Datta, 2011; Dutta & Mia, 2011; Molla & Licker, 2005a).

Nevertheless, for ICT to be effectively deployed as an engine of growth, the existing ICT skill gap in developing countries need to be carefully addressed (Mutula & Brakel, 2007). They asserted that the fundamental obstacles faced by SMEs in countries like Singapore, Thailand, Philippines, Hong Kong, Indonesia and Malaysia, are lack of knowledge, insufficient management expertise and training. The insufficient resources may lead to issues concerning diffusion of innovation and digital divide. According to Mutula (2008), the extent of digital divide is inextricably intertwined with the level of development. The issues pertaining to digital divide continue to attract the attention in developing countries (Fuch & Horak, 2008; Hinson & Sorensen, 2006) due to unequal distribution of ICTs across and within the society (Quibria, Ahmed, Tschang & Macasaquit, 2003). Besides that, Al-Hudhaif and Alkubeyyer (2011) acknowledged that the adoption of ICT and internet-based technologies have fallen below expectation in developing counties. This indicates that there is a need to address and empirically test the importance of the phenomenon of the ICT and internet-based technology adoption of firms from developing countries.

Though ICT is often touted as a global phenomenon, most studies on ICT have focused on developed Western countries (Kaynak, Tataglu & Kula, 2005). According to Xiao et al. (2013) while it is important to understand the ICT innovation in the context of developed nations, it is also imperative to understand how developing economies innovate, what factors affect the ICT innovation and the impacts thereof on these nations. "In the Asia Pacific, although India and China are some of the world's largest economies with world-class team of programmers, booming outsourcing industries and the world's fastest growing internet populations, nevertheless they performed poorly in the global e-readiness ranking" (Mutula & Brakel, 2007, p. 235). Likewise, according to the latest digital economy ranking of the world's largest economies published by Economist Intelligence Unit, Malaysia is ranked 36th among 70 countries. Among Asian countries, Malaysia is behind Hong Kong (7th in the World), Singapore (8th), South Korea (13th), Japan (16th) and Taiwan (12th) (Economist Intelligence Unit, 2010) in spite of the various government initiative of becoming a high income and innovation-driven nation.

Evidences from other studies support the fact that despite the Malaysian government's initiative to boost the development of ICT, the ICT adoption amongst SMEs remain low and is still at an infancy stage (Ahmad, et al., 2014; Alam, 2009; Mohamed et al., 2008). According to Hussin, Nor and Suhaimi (2008) even with a high internet penetration, e-commerce adoption amongst Malaysian businesses is still low. Furthermore, there is a report that (Tarofder, Marthandan & Haque, 2010) claimed that ICT in Malaysia is facing immense challenges due to the slow adoption of technology by Malaysian businesses. In fact, Ahmad et al. (2014) asserted that the numbers of SMEs that have their own company websites are still not fully functional. Furthermore, Alam (2009) stressed that despite the government's e-readiness towards the implementation of ICT, empirical researches on ICT adoption has been very limited. Besides, Husin, Nor and Suhaimi (2008) acknowledged that issues concerning electronic endeavour among SMEs in Malaysia have not quite reached an in-depth analysis. The competitive and dynamic business environment of the businesses suggests that there is indeed a need to conduct a study on ICT adoption amongst businesses in Malaysia. Thus, this study attempts to fill the gaps on ICT adoption and strategies adopted amongst travel related business specifically in travel agencies to remain competitive in the industry.

1.8 The Theoretical Foundation

Extant literature related to technology adoption revealed that research on ICT adoption can be categorised as pre-internet or post-internet phases of studies. Studies during the pre-internet phase predominantly had their foundation in the work of Rogers (1962) and Davis (1989). While the development of internet and the World Wide Web (WWW) in the 1990s had witnessed considerable interest from industry players and policy makers and academia in the adoption and diffusion of innovation. The review of literature reveals various theories used in the ICT adoption research. The analysis of these literatures suggests that information technology is more pervasive and widespread in rendering the traditional business practices obsolete.

According to Oliveira and Martin (2011), Information Technology (hereinafter will be referred to as 'IT') adoption theories are broadly categorised into IT adoption at an individual level and IT adoption at the organisational level. An analysis of the IT adoption literature reveals that the Technology Acceptance Model (TAM) by Davis (1989), the Theory of Reasoned Action (TRA) by Fishbein and Ajzen in (1975), the Theory of Planned Behaviour (TPB) by Ajzen (1985), which is an extension of TRA, and the Theory of Acceptance and Use of Technology (UTAUT) by Venkatesh, Moris, Davis and Davis (2003) are individual-level adoption models. At the organisational level, the most vital and extensively used theories are Innovations of Diffusion Theory (IDT) by Rogers (1962) and Technology Organisation Environment (TOE) framework by Tornatzky and Fleischer (1990). Among other theories that have been frequently used at organisational level are Institutional Theory (IT), Structuration theory (ST) and Resource Based Theory (RBT). A scrutiny of these theories reveals that the distinctions in these schools of thought lie in their approaches in understanding the drivers and inhibitors that would require consideration by businesses when making decisions about adopting new technology.

Furthermore, the advent of research interest in ICT adoption has seen a parallel advancement that focuses on stages of growth models. According to Prananto, Mc Kay and Marshall (2003,) stage model is a useful framework to analyse the organisation's current state of ICT adoption initiatives as well as to help them formulate appropriate strategies in the future in terms of their ICT maturity. Stage models by Cooper and Zmud (1990), Rogers, (1995) and Molla and Licker, (2005a) revealed ICT adoption in an organisation is a sequential process involving multiple stages. For example Molla and Licker (2005) and Rogers (1995) proposed a two-stage model of e-commerce adoption which includes: "initial adoption and institutionalisation" and "initiation and implementation" respectively. Cooper and Zmud (1990) on the other hand proposed a six stage model which includes: no online capabilities, internet and e-mail access, static web presence, interactive web presence, transactive web presence and integrated web. The sequential development will help business owners gain experience at each stage and hence dissipate uncertainty and risk when they proceed to the following stages (Daniel, Wilson & Myers, 2002). The stage model indicates the technology adoption in an organisation as a sequential process involving multiple sequential stages. Despite the critiques on stage hypotheses, this model has been used extensively by researchers (e.g. Al-Somali, Gholami and Clegg, 2015; Cooper & Zmud, 1990; Fichman, 2001; Hameed et al., 2012b; McKay, Marshall & Prananto, 2000; Zhu, Kraemer & Xu, 2006).

Nonetheless, some studies have shown that the adoption and innovation of new technology in developing countries possess a challenge due to the contextual differences. As such, using the existing drivers and inhibitors from developed nations to assess the ICT adoption in Malaysian context may not be reliable. What is lacking is a satisfactory integrative model that can assist academics, entrepreneurs and policy makers identify a broad range of factors, which when combined may explain the ICT adoption in traditional travel agencies in Malaysia. Furthermore, much of the ICT adoption literature focuses on understanding adoption decision making or implementation which represents a particular stage of a broader ICT adoption process. In contrast, relatively less research has been carried out about understanding ICT adoption as a stage based phenomenon. As such, these gaps call for further research to examine drivers and inhibitors at different ICT adoption stages and the non-ICT strategies embraced by these traditional travel agencies to remain competitive and relevant in the industry.

To uncover the possible ICT adoption factors and non-ICT strategies embraced by the Malaysian traditional travel agencies to circumvent disintermediation, open-ended questions were asked. Themes emerged was compared with literatures of TOE and EMS to see if all themes are fallen within TOE and EMS broad classification. Even if broader TOE and EMS framework found supported, new themes was discovered within each broad classification of TOE (i.e. technology, organisation and environment) and EMS (i.e. independent, cooperative and maneuvering) strategies.

The current study bridges the gap by developing an integrative model for traditional travel agencies by integrating TOE framework with DTI e-business adoption ladder

(DTI, 2001) and Environment Management Strategies (EMS) (Galbraith, 1977) as a theoretical basis as these models provide more comprehensive factors in examining the issue. EMS framework has been popularly used in studying firm strategy in the context of travel sector. For example, studies carried out by Dilts and Prough (2001) and Hamid (2011) clearly outlined the various EMS that can be embraced by traditional travel agencies as re-intermediation strategy. It is likely that EMS framework might shed some light in understanding the traditional travel agencies behaviour to circumvent disintermediation.

1.9 Problem Statement

Malaysia, as one of the newly emerging economies, is very keen in promoting ICT as a strategy to move towards becoming a high income and innovation-driven nation. It has been acknowledged by the National Economic Action Council (NEAC, 2010) that with ICT and Knowledge Economy Thrust, the New Economy Model (NEM) is estimated to achieve a GNI of RM58, 413 billion by 2020 from RM17, 747 billion in 2007. Consequently, Malaysia's Third Outline Perspective Plan (2001-2010) has clearly highlighted ICT as the strategic enabler of society, economy and politics. Furthermore, under the Tenth Malaysian Plan, ICT has been identified as one of the twelve New Key Economic Areas (NKEAs) to propel the country towards a high income economy. For that reason, the Malaysian government is pushing ICT adoption among businesses (B2B), consumers (B2C) and government (B2G). This posits the role of ICT development and ICT adoption among business units, consumer and government as critical if the country were to achieve the high-income nation status. Despite the several government initiatives to promote ICT adoption, among which includes the launching of a five-year IT Master plan known as MyICMS, and the introduction of Cyber Laws which include the Electronic Commerce Bill (Hussin et al., 2008), Malaysian travel agencies have been rather slow to deploy ICT technologies (Yusoff, 2013).

MATTA was established as a representative body for all travel agencies in Malaysia under the leadership of YM Dato'Seri Tunku Iskandar Tunku Abdullah. The association has recently been very concerned over the slow uptake of ICT and internet-based technology among the travel agencies (Suraya, 2003). Furthermore, an interview with Datuk Hamzah Rahmat who was the MATTA president from 2015-2017 (Datuk Hamzah, MATTA President., personal communication, September 22, 2016) and Datuk M. Ali who is the present Honorary Secretary of Pacific Asia Travel Association (PATA) (Datuk M. Ali, PATA Honorary Secretary., personal communication, September 26, 2016) revealed that the travel agencies in Malaysia, which are mostly SMEs still lag behind in exploiting the innovation of technology to remain competitive in the industry due to the high cost involvement. In fact, Mr. Aruldass from Tourland Travel Sdn. Bhd., (i.e. the former MATTA vice president and the current deputy president of the Malaysian Indian Travel Agent Association as well as the treasurer for PATA Malaysia chapter) disclosed that the rapid growth of OTAs and internet-based technologies have resulted in travel agencies losing customers. In addition, he stressed that *"for ticketing we have already lost 50% due to online ticketing usage… Malaysian Airlines (MAS) which once used 70% agent-based is now reduced to almost 50%"*. In fact he also mentioned the need to adopt new business models in order to remain relevant and competitive in the industry (Mr. Aruldass, personal communication, 12 January 2017). The above statement confirms that the current business model where these traditional travel agencies only act as agents to travel service providers seems to be failing.

Recognising that the advent of ICT and internet has considerably changed the way how organisations conduct the business activities and communicate with customers, substantial and diverse empirical studies in the field of Information System (hereinafter referred to 'IS') have been carried out. For instance in the context of Malaysia, factor influencing SMEs website continuance intention (Ramayah, Ling, Taghizadeh & Rahman, 2016), factors affecting e-commerce adoption among SMEs in a developing country (Ahmad et. al., 2014), the internet adoption on Tourism Small Medium Enterprises (TSMES) (Set, 2014), Use of Web 2.0 for brand awareness and competitive advantage in Malaysian Hospitality Industry (Xin et al., 2014), Internet based ticketing impacts on travel agencies (Khuja & Bohari, 2012), Travel agency strategies for managing the current dynamic environment (Hamid, 2011), Framework for e-commerce adoption model (Ali, Mat & Ali, 2015), Internet diffusion and e-business opportunities amongst Malaysian travel agencies (Suraya, 2003) and e-commerce and value creation empirical evidences in Malaysian tourism sector (Mohamed et al., 2008). Despite the diverse coverage on ICT research in Malaysia, there are still some research gaps that need research attention.

Firstly, despite the emergence of several innovation stages of growth model and non-staged model such as Thompson (1965), Hage and Aiken (1970), Zaltman et al. (1973), Zmud (1982), Cooper and Zmud (1990), Roger (1995), Fichman (2001), Levy and Powel (2002), Zhu et al. (2006), Hameed et al. (2012b) and more recently with the development of internet and e-commerce stages of growth models such as E-commerce maturity model (KPMG, 1997), British library staircase of internet engagement model (Allcock, Webber & Yeates, 1999), E-commerce adoption model (Daniel, Wilson & Myers, 2002), DTI e-business adoption ladder (DTI, 2001), Stages of growth for e-business model (SOGe) (McKay, Prananto & Marshall, 2000) and Stage oriented model (SOM) (Al-Somali, 2015) little is known which model best describes the ICT adoption for traditional travel agencies. Furthermore, travel sector being one of the most impacted by the development of ICTs and disintermediation seemed inevitable (Law et al., 2015; Lawton & Weaver, 2009, Poon, 2001), its adoption pattern may be different from other industry. Therefore it is important for policy makers and travel associations to understand the adoption pattern in extending help to traditional travel agencies to remain relevant in the industry.

Secondly, although Innovation of Diffusion Theory (IDT) is widely used in examining technology adoption at the organisation level, it limits investigation to only technology attributes (relative advantage, compatibility, complexity, trialability and observability). Furthermore, other technology adoption models such as TAM, TRA, TPB, and UTAUT are widely used to investigate technology adoption at individual level (Oliveira & Martin, 2011) and its attributes mainly focused on technology and organisational factors ignoring environmental factors which are crucial in ICT adoption decision. While institutional theory focuses on environmental factors, it does not incorporate technology and organisational factors such as relative advantage, complexity, compatibility, top management support, firm size and etc. After carefully reviewing the extant literature (e.g. Abdollahzadehgan et al., 2015; Al-Somali et al., 2011, 2015; Oliveira & Martin, 2010; Pang & Jang, 2008; Pudjianto et al., 2011; Ramdani et al., 2009; Xin et al., 2014; Yang et al., 2015; and etc.), it is apparent that there are several similarities between the variables used to explain technology adoption and they can be grouped into technology, organisational and environmental factors. Therefore, the TOE framework which is generic within which a host of various factors can be placed (Zhu & Kraemer, 2006) and highly adaptable to include or vary the factors for every new research (Baker, 2012) is seen as a most suitable to be used as a basis in identifying the drivers and inhibitors of ICT adoption in an organisation. With that, a more holistic framework investigating ICT adoption drivers and inhibitors from three main aspects (technology, organisation and environment) can be developed.

Thirdly, to survive 'disintermediation', the elimination of middle person between producer and consumers, traditional travel agencies need to develop proactive strategies and marketing plans to cushion the environmental threats and exploit the emerging opportunities (Cheyne, Downes & Legg, 2006; Hamid, 2011; Viljoen, 2015). However, the non-ICT factors embraced by the traditional travel agencies to remain competitive and relevant in the industry have not been sufficiently researched. Past researchers (e.g. Clark, Varadarajan & Pride, 1994; Davis, Morris & Allen., 1991; Dilts & Prough, 2001; and Zeithaml & Zeithaml, 1984) have acknowledged competitive advantage of firms can be gained from non-ICT factors, which makes some firms not seeing the need for ICT adoption. Although, there are many strategy frameworks, it is unclear which one most appropriately explains traditional travel agencies' behaviour to survive disintermediation.

Fourthly, much of the research on ICT adoption in travel sector and generally in SMEs were investigated using quantitative methods, leaving a gap in terms of capturing the inherent problems and issues in each stage that a firm needs to resolve before advancing to the next stage. Out of the twenty two literatures reviewed using TOE framework only four had employed qualitative methodology. Therefore it is evident studies on ICT mostly adopt quantitative methodology. The limitations of quantitative methodology are that only relationships are confirmed or disconfirmed but reasons for the relationship are not known. Moreover, though case study had been acknowledged as one of the commonly used research design in IS study (Lawrence, 2010), not many ICT adoption research had taken this approach. To close this gap and to produce an in-depth understanding of the research phenomenon this study adopts case study as a research design. At the end of the study, a typology is developed for traditional travel agency's ICT adoption level, along with TOE and EMS factors driving or inhibiting their adoption. ICT typologies available so far focused on technology, organisation and environmental factors (Abdollahzadehgan et al., 2015; Al-Somali et al, 2015; Pudjianto et al., 2011; Teo Lin and Lai, 2009; Yang, Sun, Zhang and Wang, 2015 and etc.). So far only limited studies was found to include both the ICT and non-ICT factors in investigating ICT adoption hence there is a gap for a typology for traditional travel agencies.

In conclusion, to examine the issues in a truly integrative manner that would assist academics, entrepreneurs and policy makers this study used DTI (2001) staged-based adoption model, TOE and EMS as theoretical foundation in explaining ICT adoption. It proposes technology adoption as a sequential stages passing through five stages 'e-mail' stage, 'website' stage, 'e-commerce' stage,' e-business' stage and finally a 'complete transformed organisation'. Subsequently, TOE framework is used to shed light on traditional travel agencies drivers and inhibitors to ICT adoption. Finally, EMS framework is used to complete our understanding on the various non-ICT strategies adopted by travel agencies to remain competitive and cope with the changes and uncertainties.

1.10 Research Questions and Propositions

This section presents the research questions and propositions for the current study. The propositions are developed to assist in testing and conforming the relevance of TOE, EMS and DTI frameworks for ICT adoption among the traditional travel agencies.

General Research Question:

Do Traditional Travel Agencies in Malaysia differ in terms of ICT adoption stage and Non-ICT strategy engagement?

To address this broad exploratory question, three specific research questions and twelve propositions have been identified.

RQ1. How is the ICT adoption stages for the Traditional Travel Agencies operating in Malaysia best described?

P1: The ICT adoption in Traditional Travel Agencies in Malaysia typically conform to the DTI framework's classification of stages.

RQ2. What are the drivers and inhibitors of ICT adoption in the Malaysian Traditional Travel Agencies and do the drivers and inhibitors conform to TOE framework?

P2a: The ICT adoption drivers and inhibitors identified conform to the TOE framework.
P2b1: Differences exist in Technology drivers across ICT adoption stages.
P2b2: Differences exist in Organisational drivers across ICT adoption stages.
P2b3: Differences exist in Environmental drivers across ICT adoption stages.
P2c1: Differences exist in Technology inhibitors across ICT adoption stages.
P2c2: Differences exist in Organisational inhibitors across ICT adoption stages.
P2c3: Differences exist in Environmental inhibitors across ICT adoption stages.

RQ3. What are the non-ICT strategies embraced by the Traditional Travel Agencies in Malaysia at each stage of ICT adoption?

P3a: Non-ICT strategies embraced by the Traditional Travel Agencies in Malaysia conform to the EMS strategy classification
P3b1: Differences exist in the Independent EMS across ICT adoption stages.
P3b2: Differences exist in the Cooperative EMS across ICT adoption stages.
P3b3: Differences exist in the Maneuvering EMS across ICT adoption stages.

1.11 Research Objectives

The overall objective of this research is to gain insight into the ICT adoption behaviour and pattern in the travel agencies and to arrive at a better understanding on factors that affect the ICT adoption, stages of ICT adoption manifested in the Malaysian context and non-ICT strategies embraced by traditional travel agencies to remain relevant. The objectives of this study are:-

1. To identify the stages of ICTs adoption of Malaysian traditional travel agencies.
2. To identify the driving forces that foster ICT adoption in the traditional travel agencies.
3. To identify the inhibitors that hinder the ICT adoption in the traditional travel agencies.
4. To determine the non-ICT strategies embraced by traditional travel agencies at each stage of ICT adoption.
5. To develop a typology on drivers and inhibitors of ICT adoption and non-ICT strategies used by traditional travel agencies for the three categories of adoption stages.

1.12 Methodology

The research method used for this study is within the critical-realist philosophical paradigm that adopts a more moderate approach to provide detailed account of ontology and epistemology by using components of both positivist and constructivist approaches. The critical realist acknowledges social phenomenon are intrinsic, that is meaning has to be understood, it cannot be counted or measured (Easton, 2010) therefore, there is always an explanatory element (Sayer, 2010). Based on the critical realist worldview, that the world is theory laden allows for methods such as case studies to be used within this paradigm.

This study uses case study method to investigate the ICT adoption stages, factors influencing ICT adoption and non-ICT strategies embraced by traditional travel agencies in Malaysia. The case study method was preferred, as it allows (1) to produce comprehensive understanding of the research issues (2) to provide qualitative and empirical information (Yin, 2014) which can improve the understanding/explanatory variables of complex, real-world phenomena (Bradley, Curry & Devers, 2007).

Furthermore, the researcher believes that case study method will strive to illuminate a profound knowledge of the research phenomenon as it allows for multiple data sources. Wherein, the research issues are explored through multiple lenses. This study triangulated the qualitative data gathered from interviews, website content analysis, archival documents and direct observation from the fourteen traditional travel agencies.

The fourteen cases were constructed to provide literal replication (predicts similar results) and theoretical replication (predicts contrasting results but for anticipated reasons) (Yin, 2014). For literal replication, within the selection criteria, all fourteen firms are traditional travel agencies which have been in operation for more than 20 years. For theoretical replication, the sample consisted of SME traditional travel agencies at different levels of ICTs adoption, customer orientation (B2C versus B2B) and size of operation (number of employees).

In this study, the number of cases is limited to fourteen traditional travel agencies. The sample size was not fixed as the intention is not to obtain a fixed number of respondents but to gather sufficient evidences to understand the phenomenon being investigated (Bowen, 2008). Therefore, the researcher ceases data collection once data saturation sets in.

In conclusion, this study espoused Yin's methodological principles for case studies which are consistent with critical realist paradigm. Due to the methodological rigor, case study research is now accepted as a valid strategy within the information system research community and, in fact, these principles have become de facto standards in evaluating case study research in information systems (Lawrence, 2010).

1.13 Significance of the Study

Firstly, extant e-business literature has identified a rich set of factors influencing ICT adoption for tourism and travel sectors operating in developed countries and some matured Asian countries (Standing et al., 2014) however it is not known that these factors would apply equally to traditional travel agencies in developing countries like Malaysia. Therefore, the findings of this study are expected to add value to the body of knowledge on ICT adoption factors from traditional travel agency perspective. Secondly, this study is one of the early effort taken to understand the factors influencing ICT adoption and non-ICT strategies embraced as a multi-level approach in the Malaysian travel sector. Thirdly, past studies in this area have expanded the research context across many industries, cultural and socioeconomic background. According to Khasawneh and Ibrahim (2008) the differences in the cultural and socioeconomic background may pose a challenge in the adoption of new technology. This study which explicitly investigates the traditional travel agencies may assist in identifying the industry and country-specific adoption factors and pattern.

Fourthly, in terms of theoretical contribution, this study is one of the early studies to include telecommunication, information and networking technologies to provide a comprehensive understanding of the ICT adoption pattern among the traditional travel agencies. Fifthly, review of past literature on technology adoption did not provide a theoretical perspective that integrate elements from various theories. Though, in recent years some integrative effort is evident, a consistent and integrated framework for studying ICT adoption as a staged based phenomenon is lacking. Hence, this study bridges the gap by developing an integrative model by integrating TOE framework with DTI e-business adoption ladder and EMS as a theoretical basis to address the elements needed to remain relevant and competitive in the industry. Sixthly, this study highlights the significance of ICT adoption level analysis. Unlike past studies, this study pursues to discover the various TOE drivers and inhibitors, and EMS (Non-ICT strategies) at various ICT adoption level in the context of Malaysian traditional travel agencies. Thus, the typology produced will be of value to policy makers in understanding the different needs of traditional travel agencies operating at different levels of ICT adoption.

Seventh, the main methodological contribution is the in-depth inquiry with the respondents. This study adopts qualitative multiple case studies to provide an in-depth understanding of the research phenomenon through multiple lenses. Furthermore, in contrast to past studies such as (Abou-shouk & Lim, 2010; Al-Qirim, 2007; Al-Somali et al, 2015), this study does not reflect on single technology adoption and its sequential process. The novelty of this study arises through identifying stages through different levels of ICT adoption i.e. telecommunication, information and networking technologies and through which a firm progress towards a sophisticated technology. Finally, the integrative framework constitutes a well-grounded framework that can be tested on other SME research setting to explain the ICT and non-ICT strategies at various ICT adoption stages for organisational sustainability.

1.14 Definition of Key Terms

a. ICT Innovation can be understood as an idea, a product, a process, a program or technology, new organisational structure or administrative system that is new to the adopting unit (Xiao et al., 2013).
b. ICT is as an “integrated system of networked equipment and software, which enables effective data processing and communication for organisational benefit toward transforming organisation to e-business” (Buhalis, 2003, p.8).
c. ICT adoption stages presents technology adoption and business development increasing in the level of sophistication driven by ICT uptake (DTI, 2001).
d. TOE is a framework developed to identify the contexts in which technology innovation adoption and implementation takes place, both internally and externally (Tornatzky and Fleischer, 1990).
e. EMS are proactive strategies and marketing plan used by firms remain competitive and cope with the changes and uncertainties in the environment (Zeithaml and Zeithaml, 1984).
f. Disintermediation is the reduced role of traditional intermediaries (Cheung & Lam, 2009
g. Re-intermediation refers to previously disintermediated travel intermediaries role being reinstated again by offering new value proposition (Viljoen & Lombard, 2016).

1.15 Chapter Conclusion

This chapter presents an introductory overview of the current study. The beginning of this chapter discusses the research background and the research setting. The background information revealed traditional travel agencies are vulnerable and disintermediation is inevitable due to technology development. Also the background information established the empirical evidence about ICTs adoption in traditional travel agency is lacking. The importance of travel sector to the Malaysian economy as an emerging nation is also explained. This chapter also discussed the challenges faced by the traditional travel agencies to survive due to the steep competition from OTAs. The remaining sections explain the research problem, questions and objectives and provide justification for this study. Finally, the key terms used in this study were presented. The next chapter reviews the literature on technology adoption theories, stage models, drivers and inhibitors of technology adoption and strategies adopted by organisations to remain competitive and relevant in the industry.

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