Constructing a Methodological Approach to Examine the Determinants Affecting Purchase Intention Through Perceived Risk in the Hotel Context

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ABSTRACT
Purchase intention is one of the most widely studied areas in relation to the analysis of consumer markets due to the constantly changing micro and macro environments surrounding businesses. This study aims to provide hotel stakeholders with an understanding on the factors which affect purchase intention. A methodological approach is constructed to examine the effect of leniency of hospitality service policies, e-servicescape and price sensitivity, and the moderating role of perceived risk on purchase intention in the online hotel booking context. The analysis of data will be carried out using Statistical Package for Social Sciences, particularly focusing on factor analysis, regression analysis and descriptive statistics. This study is expected to contribute to the field of marketing in the hotel context, where managers of accommodation establishments would be able to improve brand strategies to appeal to a new wave of customers.

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1. Introduction

The service industry, particularly the hospitality sector has undergone a significant change since early 2020 when COVID-19 has caused a global outbreak. The pandemic has brought about a ban on international travel, causing the closure of many hotels. In Malaysia alone, hotels faced a RM3.3 billion loss in the first half of the year (Ganesan, 2020). Governments across the globe including the Malaysian government have set out action plans to “revive” the tourism industry (Malay Mail, 2020). Moving forward into a period of transition and recovery from this economic downturn, there are several travel patterns which hospitality and tourism experts could anticipate. These include an increase in domestic travel and a strong emphasis on public health and hygiene (Ho, 2020).

However, there are mixed views on the recovery of tourism. Firstly, taking China as an illustration, the post-pandemic period witnessed “revenge travel”, where hotel bookings in local popular destinations have increased two-fold (Kuo, 2020). The term “revenge travel” is believed to have come from “revenge spending” in the 1980s, when there was a surge in consumer demands immediately after the Cultural Revolution in China has ended (Shadel, 2020). Revenge travel is similar but instead, is related to the travel and tourism industry. The revenge travel patterns could be attributed to the Chinese government’s influence in urging its citizens to travel in order to enhance its economy (Kuo, 2020). On the contrary, the travel and tourism industry has been experiencing negative encounters such as closures, layoffs, and a significant drop in revenue (Lee, 2020). The International Monetary Fund (IMF) also added that the pandemic will lead to the “worst economic crisis” (British Broadcasting Corporation, 2020). Given these two contradictory claims on travel and economics, there is a need to examine future travel behaviours.

This study will present a theoretical and methodological framework to examine the various determinants which will affect purchase intention in the hotel context (online hotel booking). Additionally, it will also provide insights to managers of hospitality establishments on how to develop effective strategies and action plans in this period of economic transition and recovery.

2. Problem Statement

Fair and flexible policies concerning online businesses are crucial because it builds a customer’s confidence (Oghazi, Karlsson, Hellström, & Hjort, 2018; Pei, Paswan, & Yan, 2014). Purchase intention has been a widely researched area, especially for marketers because
it ultimately leads to purchase decision (Kotler & Keller, 2016). With the growth in technology enabling the development of online retailing, online businesses are continuously re-shaping and innovating its revenue model and value proposition to sustain their profits (Laudon & Traver, 2016). Likewise, in the hotel industry, the advancements in technology have stimulated the increase of online accommodation booking in geographical locations around the world (Weissenber & Langford, 2018). As these components continually evolve due to environmental, economic and social challenges, purchase intention is an area where new and continuous studies are required.

Accordingly, along with purchase intention, perceived risks ought to be investigated. Risks are elements that cause disruption to the consumer buying process, by causing uncertainty and reducing trust. Online purchases entail a certain degree of risk, which are financial and product-related (Janakiraman, Syrdal, & Freling, 2016). Hence, marketers strive to understand ways to reduce possible risks, in order to encourage consumer purchase. Businesses are often compelled to share information to customers to assuage the levels of risks (Kotler & Keller, 2016). Online business owners, nonetheless, typically possess more information about a product or service offering compared to the buyer – this causes information asymmetry (Oghazi et al., 2018).

E-commerce platforms function as communication channels for both the seller and buyer, with the purpose of reducing information asymmetry to gain buyers’ confidence – a term familiarised as “signalling theory” (Connelly, Certo, Ireland, & Reutzel, 2011). One of the ways businesses “signal” its need-to-know information is through the company policies established. However, these signals, which come in various forms, are costly to business owners (Oghazi et al., 2018). As a result, businesses have the tendency to set stricter policies to reduce these costs. In recent years, Airbnb has become a key competitor in the hotel sector when its revenue has grown six times from 2013 to 2018. Part of this success was attributed to the highly lenient policies set by Airbnb (Molla, 2019). Although much has been said about policies and how it affects purchase intention for products and services (specifically Airbnb), hotel policies have not been explored. There is a need for hotel owners to understand how lenient policies are vital for the continual growth and sustenance of the hotel sector. Hence, this study will explore the extent of leniency of hotel policies and how it relates to online purchase intention, particularly consumer behaviour in the context of Malaysia residents.
On online platforms, the way services create appeal to customers may differ from a traditional brick-and-mortar store. The concept of e-servicescape is where a particular website functions as an environment, influencing an individual’s purchase intention (Jeon & Jeong, 2009). Additionally, engaging with a customer’s senses, a technique known as sensory marketing, is indeed a powerful marketing tool (Krishna, 2012). Krishna (2012) also mentioned that these senses consciously or subconsciously engage with customers, thereby building their desires towards a certain brand. This technique is believed to be more effective in comparison to advertising efforts. Nonetheless, around the globe, a tremendous digital transformation has taken place as a consequence of the COVID-19 pandemic. Therefore, the e-servicescape concept needs to be revisited in terms of its level of engagement and consumer demands.

Past studies have affirmed that price factors are related to purchase intention (Chiang & Jang, 2007; Kim, Ma, & Kim, 2006; Lien, Wen, Huang, & Wu, 2015). These studies have called for action from hotel managers to reconsider pricing strategies as it improves perceived value which then leads to purchase intention. However, the challenging global economic circumstances, have changed the way individuals travel (Kiesnoski, 2020). In order to enable hotel managers to understand the possible demands of the new wave of travellers, price sensitivity of travellers needs to be re-examined in relation to purchase intention.

The discussion above highlights issues in relation to purchase intention in the hotel context. Anticipating a transformed social and economic landscape in the near future, this study will address the gaps in the aforementioned.

2-1 Research questions

This study will focus on four research questions:

1. What is the type of relationship between hotel policies and purchase intention?
2. What is the type of relationship between e-servicescape and purchase intention?
3. What is the type of relationship between price sensitivity and purchase intention?
4. What is the moderating role of perceived risk between hotel policies and purchase intention?
2-2 Research objectives

In this paper, the main objective is to explore the determinants of purchase intention in the hotel context. By including perceived risk as the moderating role, this study will develop an understanding on whether this variable would affect the relationship between the determinants and purchase intention. This study will thus address the question, “How will purchase intention in the hotel context be affected post-COVID-19?” The findings of the study will also enable marketers and senior-level executives to develop new and reinforced marketing strategies to appeal to a new wave of consumers.

2-3 Establishing a conceptual framework

Theoretical support

Kotler and Keller (2016) puts together the process of purchase decision, where it begins with the evaluation of alternatives, leading to purchase intention. This concept also incorporates external factors affecting purchase decision, which include attitudes of “infomediaries” and “unanticipated situation factors” (which is also known as perceived risk), all of which finally lead to purchase decision. These steps are depicted in Figure 1.

![Figure 1: Purchase decision process (Kotler and Keller, 2016)](image)

As indicated, businesses and marketers are constantly attempting to understand the factors leading to purchase intention because it eventually leads to purchase decision (Kotler & Keller, 2016). Based on Kotler and Keller’s model, “evaluation of alternatives” is defined as consumer judgment based on certain attributes, believing that these attributes will satisfy their needs. Evaluation of alternatives is commonly used for brand comparisons (Biehal &
Chakravarti, 1986). Although this study does not specifically focus on particular hotel brands or Online Travel Agencies, it will nonetheless affect managerial implications on how hotel managers could promote their attributes and create appeal to potential purchasers. These attributes or independent variables are hotel policies, e-servicescape and price sensitivity. Additionally, globalised businesses today possess e-commerce platforms to communicate with their stakeholders, be it customers, suppliers or partners. Two main reasons e-commerce platforms gained popularity is due to its accessibility, and ease of use for customers and businesses (Chaffey, 2007). E-commerce platforms target a mass audience and aim to engage its audience with relevant information, leading to revenue generation. There are several attributes that affect businesses’ desired sales outcome, including perceived risks and product appeal (Morris & Martin, 2000). Hence, reiterating part of Morris and Martin’s work, this paper will also include these two components for further study. Nonetheless, product (or service offering) appeal will be incorporated into the concept of e-servicescape.

The commercialisation of holiday tourism is attributed to the growth of the middle-class income. The concept of leisure was introduced when work hours were separated from time off work. There is a tendency for the working class to “fill-in” their away-from-work hours with leisure or synonymously, tourism (Britton, 1991). In addition, the inclination of travel towards the 3S (sun, sea and sand) began to popularise in the 1960s for the Northern European and Northern American folks, encouraging the “production” of mass travel packages (Sezgin & Yolal, 2012). Hence, to be able to meet the increase in demands of the new middle-class income group, holiday tourism packages are priced affordably. Therefore, it is anticipated that price sensitivity would be the most significant determinant of purchase intention.

A new development of purchase intention in the hotel context would be exploring the leniency of hotel policies. In-depth studies revolving around Airbnb policies have previously involved security policies in relation to municipality governance (Oskam & Boswijk, 2016; Yang & Ahn, 2016). Understanding hotel policies and its degree of leniency could shed some light on how this element affects purchase proclivity.
Proposed conceptual framework

Therefore, with reference to the theoretical support, Figure 2 illustrates the proposed model and relevant hypotheses of this study. This model consists of three primary independent variables which are hotel policies, e-servicescape and price sensitivity. Hotel policies’ influence on purchase intention will be moderated by perceived risk. The dependent variable of this study is purchase intention.

H1: Hotel policy has a positive influence on purchase intention of hotel accommodation booking in the online context.

H2: e-Servicescape has a positive influence on purchase intention of hotel accommodation booking in the online context.

H3: Price sensitivity has a positive influence on purchase intention of hotel accommodation booking in the online context.

H4: Perceived risk plays a moderating role between hotel policies and purchase intention.
3. Literature Review

3-1 Independent variables

Hotel Policies

One of the factors in relation to customer purchase intention in the consumer goods market which is widely studied is post-purchase policies. Determinants of policies in the online goods market have included leniency (Rao, Lee, Connelly, & Iyengar, 2018), ease of use and usefulness (Chiu, Chang, Cheng, & Fang, 2009), and post-purchase experience (Kumar & Anjaly, 2017). Clear and customer-friendly policies have become a necessity as it improves the competitive advantage and the overall satisfaction of customers. Moreover, clearly defined policies also reduce the perceived risks which are related to financial (e.g. cost of customer) and nonfinancial (e.g. level of convenience, and shipping duration) attributes (Balabanis, Reynolds, & Simintiras, 2006).

However, in the service industry, policies vary significantly by sectors. Unlike the consumer goods market, the term “post-purchase” would be inapt in the service industry because services “perish” after it is being rendered. Focusing on the hotel industry, service delivery begins prior to customers entering into premises, where requests for refund or cancellation are being processed (Chen, 2016). In addition, there is also a set of clearly defined service delivery steps throughout a customer’s patronisation at these establishments, from check-in to accommodation-stay, and finally to check-out (De Ruyter, Lemmink, Wetzels, & Mattsson, 1997). Hospitality service policies are formed at each of these touch points to ensure the safety of guests and employees (Daly, Campbell, Wiggers, & Considine, 2002), and to shape the marketing strategies of the hotel (Aksoz & Bac, 2012).

Conveying policies is a way of sharing information from businesses to customers (Moule & Giavara, 1995). In relation to purchase intention in the hotel context, researchers have emphasised the importance of information-sharing (Kim et al., 2006; Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015). However, there is still a lack of understanding on how hospitality service policies affect customers’ purchase intention. Thus, this study will investigate the significance of this component with a focus on hotel accommodation and financial-related policies.
e-Servicescape

The term “servicescape” is defined as a “built environment” which influences a customer’s or an employee’s actions – it ultimately suggests how ambience, decorative elements or symbols could affect one’s behaviour (Bitner, 1992). This term was later further developed to also include “engagement of senses” with enhanced physical environments using fragrance, comfortable lighting and temperature, and decorative elements (Namasivayam & Lin, 2008). It is also important to note that servicescape may differ according to industries as these respective industries possess varied desired outcomes, be it employee or customer oriented.

Bitner’s conceptual framework discussed servicescape in a traditional brick-and-mortar context, whereas e-servicescape is used to describe online features which may influence consumer decision-making instead (Harris & Goode, 2010). The concept of e-Servicescape, however, was mainly studied in the retail context (Mari & Poggesi, 2013). Thus, there is a need for more e-servicescape studies to cover the service industry context as well. This study focuses on hotel accommodation booking, thereby enabling managers and hotel owners to understand e-servicescape in the hospitality context. It will develop an understanding on how virtual elements could uplift an organisation’s performance. Several components of e-servicescape in the hospitality context include virtual environment, aesthetic appeal and website layout, functionality, and web search engine. E-servicescape is essential for hospitality establishments to enable eased experiences for customers as they browse through the website to seek information or make purchases (Jeon & Jeong, 2009). Therefore, this study will seek to understand the significance of e-servicescape in relation to purchase intention in the hotel context.

Price sensitivity

Studies on purchase intention in the hospitality context often include price factor as an independent variable (Chiang & Jang, 2007; Kim et al., 2006; Lien et al., 2015). However, it is important to note that change in prices may cause different customer reactions. Price sensitivity is defined as the reaction to changes in price levels to the estimated demand, where advertising plays a role in affecting these changes (Kaul & Wittink, 1995). For instance, if a customer is price-sensitive, the particular individual would opt for the lower price alternative. Generally, businesses favour consumers who are less price-sensitive. However, the existence of e-commerce platforms could cause consumers to be more price-sensitive (Kotler & Keller,
This is because consumers have the privilege of access to information on e-platforms, making alternative evaluation convenient.

There are mixed opinions regarding price sensitivity in relation to purchase intention. Nonetheless, most studies do support positive association between price sensitivity and purchase intention (Chen, Monroe, & Lou, 1998; Hsu, Chang, & Yansritakul, 2017; Wang, Pham, & Dang, 2020) - all of which are product-related. In the hospitality context, studies on price sensitivity need more attention to enable hotel managers to plan out their pricing strategies. Hence, with a focus on willingness to spend, importance of lower price, and the role of third parties to reduce costs, this study takes price sensitivity as a factor which affects purchase intention.

3-2 Moderating variable

Perceived Risk

Perceived risk is a topic of interest for researchers and industry practitioners. Unlike retail purchases, travel and tourism experiences can be highly subjective as they vary by different individuals although similar services are being consumed. The element of risk largely affects consumer behaviour, hence this enables marketers to understand the motivating factors of consumer purchases (Mitchell, 1999). Online travel purchases are highly influenced by perceived risk in comparison to physical products - further suggesting the need for “risk-relievers” present on websites (Lin, Jones, & Westwood, 2009). Kotler and Keller (2016) suggests that perceived risk factors include financial risk, functional risk, physical risk, psychological risk and time risk. These very factors were also used in studies concerning purchase decisions in the hospitality context (Casidy & Wymer, 2016; Jun, 2020; Lin et al., 2009).

One of the reasons higher perceived risk takes place is because of perceived information asymmetry (Yang, Liu, Li, & Yu, 2015). Given the nature of the online environment, information plays an important role in reducing information asymmetry, and encouraging purchase proclivity. In the aforementioned section on hotel policies, it was mentioned that sharing hotel policies is a way businesses share information (Moule & Giavara, 1995). Taking prior studies into consideration, this study will investigate perceived risk broadly as a moderating role towards purchase intention.
3-3 Dependent variable

**Purchase Intention**

Purchase intention can be defined as customer’s eagerness and purpose to be involved in an online purchase (Ali, 2016). To further note, purchase intention could be externally induced – either by the influence of others or by unforeseen circumstances (Kotler & Keller, 2016). This is evident given the fact that purchase intention studies in the hospitality context have revolved around external factors such as: price (Lien et al., 2015), web (Raad, Rashid, ALlamy, Khalid, Al-Shami, & Alaraji, 2018), influence of e-word-of mouth (Yoong & Lian, 2019), and hotel branding (Chiang & Jang, 2007; Yoong & Lian, 2019). Purchase intention is also affected by the perceptions formed: perceived quality (Chiang & Jang, 2007), sensitivity to room rate pricing (Liang, Choi, & Joppe, 2018), perceived flow (Ali, 2016), and perceived value (Chiang & Jang, 2007; Lien et al., 2015). The way that the online environment has changed the way consumers purchase products and services must be recognised (Cho & Sagynov, 2015). Therefore, this is an important outcome of this study.

4. Methodology

Research methodologies are procedures that guide researchers in data collection and analysis (O'Sullivan, Rassell, Maureen, & Taliaferro, 2016). This research is designed as an explanatory quantitative study, which will reveal the relationship between the independent variables (IV) (hotel policies, e-servicescape and price sensitivity) and the dependent variable (DV) (purchase intention). Similar studies focusing on hotel and Airbnb purchase intention have also used quantitative analysis to measure the outcomes on its independent variables (Kim et al., 2006; Liang et al., 2018; Ponte et al., 2015). The moderating variable of perceived risk, which acts as a role of influencing the independent and dependent variables will be quantified in terms of its significance in the IV-DV relationship (Cooper, 2018).

4-1 Research design

Research design, on the other hand, is a planned procedure to answer the research question in relation to the study’s variables. It is a method to determine the allocation of such resources concerning effort, time and money (Cooper, 2018). The type of data collection exercise which will be adopted is the cross-sectional method. This type of study will be able to provide findings at a point in time (Cooper, 2018). This design and method will be relevant to
the purpose of this study as it provides the opportunity to investigate the significance of relationship between the variables.

4-2 Sampling

The amount of Malaysians who travel abroad is believed to be 11.9 million (Ismail, 2019). However, it is believed that approximately only 55% of travellers book accommodations through online avenues (Mantovani, Piga, & Reggiani, 2017). This would mean that the population needed to be studied is 6.5 million. To determine an appropriate sample size, the author of this paper will refer to the Krejcie and Morgan Table (1970) – if the population is 1 million and above, an appropriate sample size is 384 respondents. Nonetheless, this study will also need to incorporate the average response rates of similar studies, which range from 67.6% to 92.2% (Kim et al., 2006; Liang et al., 2018; Ponte et al., 2015) – whereby an average response rate of 80% is computed. To enable an 80% response rate (equivalent to 384 respondents), a minimum of 480 respondents is ideal for this study.

However, for the purpose of this study, the sampling plan is developed based on three components. Firstly, the sampling technique – sampling is defined as a process of selection of items or objects of interest for study within a population (Cooper, 2018). The sampling technique used for this study is the nonprobability convenience sampling. With time limitation for this study, this sampling method is considered an efficient technique (Sekaran & Bougie, 2016).

The target respondents primarily should be from 20 to 59 years of age. A recent Internet Users Survey as reported by the Malaysian Communications and Multimedia Commission (2019) shows that the highest percentages of the Internet users are from these age groups. This statistical information is relevant to this study because of the nature of the study – to determine online purchase intention in a hotel context.

Next, because the number of samples studied is an infinite large population, consisting millions, there is a need to consider time and budget constraints. Hence, the number of samples needed for a 95% confidence interval, estimated value of unknown participation level of 50%, and using a 7% precision level; the number of respondents will be 137.
4-3 Data analysis

Questionnaire

Prior to data collection, a pretest of the questionnaires will be conducted on a group of 5 working adults between the ages 20 to 59, similar to the age group of the targeted respondents. This will increase the questionnaires validity and reliability, where adjustments (such as terms used and questionnaire sequencing) may take place.

The data collection exercise of this study includes an online survey questionnaire comprising six subsections. These six subsections are respondents’ demographics, hotel policies, e-servicescape, price sensitivity, perceived risk, and purchase intention. With the exception of the demographics subsection, the remaining subsections will include 6 questionnaires, where respondents are to rate their level of agreeability to the given statement, totalling up to 30 questions. The level of agreeability will be rated using a 5-point Likert scale. The survey of the research will be administered online, where invitation links will be sent to the respondents. All respondents are required to have an online hotel booking experience in the past two years. This will allow the respondents to be somewhat familiar with online hotel booking sites and are able to address the questionnaires effectively, particularly in relation to e-servicescape.

To substantiate the interpretation of this study’s results, the survey will include demographic components such as age, income level, gender, educational level, and years of employment. This data will provide a rationale to the limitations of this study (Cooper, 2018).

Ethical consideration

All respondents, in both the pretest and data collection exercise will also be required to read and acknowledge a disclaimer of one’s own voluntariness to participate in this survey as a form of consent. During the pretest, the participants will also assist to ensure that the questionnaires and possible answers solicited will not pose any risk to the respondent, researcher, organisations and individuals in the community. The data attained will not be shared to any third parties without prior consent of the respondents, and will be solely used for the purpose of this study. A secure data storage method will also be adopted via a password protected folder to ensure that the data is stored securely.
Analysis of data

The analysis of data will be carried out using Statistical Package for Social Sciences (SPSS) version 11.0. Mirroring previous studies, this quantitative study will also utilise statistical techniques such as factor analysis and multiple regression analysis (Ali, 2016; Kim et al., 2006; Liang et al., 2018). Factor analysis will be able to identify and omit highly correlated and redundant factors. In situations where factors are highly correlated, with value of above 0.9, either one of the factors will be removed to avoid factors from “combining” (Samuels, 2017). Additionally, a multiple linear regression model will be adopted to test correlation between variables. This will enable the researcher to understand the strength of the association between variables. Nonetheless, to further support this analysis, this study will need to look into explained variation ($R^2$), whereby the higher the $R^2$ value, the higher the influence of the selected variables on online hotel purchase intention. This model will be represented using scatterplots, and a linear model. To ensure the validity and to avoid violation of this model, the residuals will also be tested for normality and independence (Chinna, & Choo, 2012; Heumann, Schomaker, & Shalabh, 2016).

To further add, convergent validity evaluation will also be included, specifically the average variance extracted (AVE), which ideally should be 0.505 and above (Falk & Miller, 1992). Generally, a higher AVE means that the questionnaires are able to reflect each factor with better accuracy. Additionally, the Cronbach’s Alpha of each factor would also be recorded to test its reliability. As a general rule, the Cronbach’s Alpha value should be no less than 0.7. Hence, this study will adhere to a minimum Cronbach’s Alpha value of 0.7. This is to ensure the credibility of this study, enabling readers to be convinced of the accuracy of its findings.

5. Discussion

Studies for online purchase intention are common in retail marketing. However, studies for online purchase intention within the hotel context does require more in-depth understanding. The volatility of the hospitality and tourism industry can be attributed to an unpredictable post-COVID-19 economic environment. Hence, to frame a more accurate understanding towards purchase intention, there is a need to look at elements surrounding hotel-booking trends in the future because of the way individuals travel is expected to change. The variables intended for this study considers the attributes of a contemporary tourist, whereby there is heavy reliance on online channels for purchase decision-making. With the selection of the respective variables as proposed in this paper, hotel marketers and managers will be able to
discover its significance in relation to purchase intention. This paper has developed advanced and justified methodological data collection approach. It is believed that this approach will attain representation and relevant data to support the hypotheses proposed. This study may also shed light on how these variables could create a concept of flow, and provide substantial contribution to knowledge with regards to purchase intention in the hospitality context.

6. References


