

THE EFFECT OF CONSUMER PERCEPTIONS TOWARDS INTENTION TO BUY AIR TICKETS ONLINE IN MALAYSIA

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Abstract

As the airline industry struggles to be profitable in the face of high operating costs and intense competition, electronic ticketing has emerged to be an effective way to reduce costs. While market research shows an increasing trend among travellers to book air tickets online, they are mostly from advanced nations such as the United States and United Kingdom. Online booking is somewhat lower in Malaysia. To increase online ticket purchases in Malaysia, it is imperative to understand the factors that influence consumers' buying intention. Academic research remains limited in Malaysia. Therefore, this paper reviews the literature on the main variables influencing online buying intention. It starts with an overview of the airline business environment, and air travellers' behaviour pertaining to tickets booking. Subsequently, the Technology Acceptance Model and its relevant variables are discussed. Next, the research methodology and conceptual model are presented. Finally, the paper concludes with recommendations for airline companies.

Keywords: air tickets, online, intention

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Introduction

Airlines companies operate under a harsh market environment characterized by high operating costs and intense competition. Finding ways to earn sufficient revenue to cover costs, and to earn profits remain as challenging tasks. Under such difficult circumstances, electronic-ticketing (e-ticketing) emerged to be an effective way to reduce costs (Lubbe, 2007). The impetus towards this direction began when the International Air Transport Association (IATA) identified e-ticketing as an effective method to lessen the large operating costs incurred by the overall airline industry. Hence, from June 2008 onwards, the

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implementation of e-ticketing was made compulsory for all IATA members (SITA, 2009). This system enabled travellers to book air tickets directly online, thus eliminating the use of physical travel agencies and airline sales offices, which are costly to airline operators.

Market research shows that on a worldwide basis, online reservation of air tickets has been increasing over time since it was first introduced. Most of the tickets bought through the internet are from advanced nations including the United States, United Kingdom and Japan (WNS, 2014). However, in some other countries, such as Malaysia, many people continue to buy air tickets through traditional offline channels like travel agencies and airline companies' sales offices. In order to encourage more consumers to buy air tickets online in Malaysia, it is imperative to understand the factors that influence their purchase intention. Based on the Technology Acceptance Model, this paper reviews the literature on the effects of Perceived Ease-of-Use and Perceived Usefulness on ticket purchasing intention of air travellers in Malaysia.

Literature Review

Electronic Ticketing

In the United States patent document, e-ticketing is defined as “a method and system of issuing an electronic authorization and validation for pre-scheduled activities such as airline reservations to eliminate paper tickets. The passenger makes a reservation and allows a reservation operation center to charge the passengers' credit card company”, (Goheen, 2000, p.1).

Years later, in a whitepaper, SITA (2009) described e-ticketing as a paperless system supported by computer technology which documents and tracks movements of air travel passengers. In a research on Malaysia, e-ticketing has been defined as the merging of issuance and delivery of tickets into one operation, thus improving work efficiency (Sulaiman, Ng, & Mohezar, 2008).

By doing away with paper tickets, the main benefit that e-ticketing brings to airline companies is the substantial lowering of their operational costs (Pearson, O'Connell, Pitfield, & Ryley, 2015). Costs savings can be derived from several areas such as printing, labour, and avoidance of commission pay-out to agents and global distribution systems (Chia-Yu Chen, 2007). E-ticketing also works very well on the internet communication technology (ICT) platform, which allows travellers to browse websites for information about various flight products and service offerings. Some airline companies have even installed self-service kiosks at airports which simplifies and quickens the process of checking-in so that travellers can avoid the usual long queues for paper tickets check-in (Chia-Yu Chen, 2007).

Travellers' Behaviour

From a consumer viewpoint, buying air tickets through the internet has its pros and cons compared to buying from physical outlets such as travel agencies and airline ticketing offices.

Air travellers stand to benefit in a few ways by booking tickets online. Since there is no more need to bring along any paper ticket, passenger worries and stress of lost or misplaced tickets is eliminated. Travellers can look up the internet, find out which seats are available, and conveniently reserve their choice seats through the relevant website from any place at any time of the day (Chang & Hung, 2013). In general, consumers can also buy cheaper tickets on the internet than physical channels (Crespo-Almendros & Del Barrio-García, 2016). It is the consumers' positive versus negative perceptions of the internet that influences their likelihood to buy air tickets online (Izquierdo-Yusta, Martínez-Ruiz, & Álvarez-Herranz, 2014).

Some previous research revealed that air travellers resist buying tickets online (Kolsaker, Lee-Kelley, & Choy, 2004; Ruiz-Mafé, Sanz-Blas, & Aldás-Manzano, 2009) even though they are aware of the advantages of internet booking (Kolsaker et al., 2004). It was also found that most air travellers (80%) surfed the web to obtain information about flight schedules and prices, but few (30%) proceeded to online booking (Ruiz-Mafé et al., 2009). In a similar vein, a market research conducted by PhoCusWright (Kapoor & Rauch, 2013) also found that many travellers from the Asia-Pacific region searched the internet for travel information but few bought online instead opting to buy from physical stores. Other market surveys showed that Malaysian travellers behaved likewise too (Tourism Australia, 2013; Singapore Tourism Board, 2014).

In online shopping, the consumer has no choice but to use the self-service technology which effectively shoves the purchase responsibility to the shopper including any buying mistakes (Park, Tussyadiah, & Zhang, 2016). For online flight ticket reservations, the traveller is personally responsible for surfing the internet to look for information on ticket prices, routes, make comparisons, and then to key in the correct details for booking purposes (Cunningham, Gerlach, & Harper, 2004). Typically the consumer will face the hassle of correcting any mistakes made after purchasing online (Cunningham, Gerlach, & Harper, 2005) particularly when it involves changing travel itineraries.

These issues arise due to the use of the internet as a new technological channel to buy airline tickets. However, as mentioned previously, there are certain benefits to buying tickets online as well such as convenience, access to useful information, easy to compare price, promotions and deals, and quicker shopping (Heung, 2003; Vijayasathy, 2004). Consequently, people's perceptions of the easiness and usefulness of using the internet for online reservations are likely to influence their intention to buy air tickets through the web (Izquierdo-Yusta et al., 2014). In the following sections, the relationships between these factors are discussed in greater detail.

Technology Acceptance Model

The Technology Acceptance Model (TAM) originated from Fred Davis (1986) in the pioneering work done for his doctoral thesis. Basically, he wanted to find out about employees' reasons for accepting or rejecting information technology at work. Initially, Davis did not investigate about people's behavioural intention in the TAM. Intention was only added to the model several years later in another article by the same author (Davis, 1989).

According to Davis (1986, 1989), people's intention of whether or not to use information technology at work is jointly determined by two key influencers i.e. perceived usefulness (PU) and perceived ease of use (PEU). PU is described as the degree of one's beliefs that using a particular system would improve one's job performance in an organization. The other factor, PEOU, is about the extent of beliefs held by potential IT users that using a certain system would be free of physical and mental strain.

The TAM addressed the concerns of many business organizations in the 1980s. Many firms were pondering about the acquisition and installation of expensive information technology systems, and whether or not employees were going to use them for work purposes. The model was quickly received and applied at that time. Since then, TAM has been popularly used by information systems (IS) researchers to help explain people's adoption of information technology (IT) (Marangunić & Granić, 2015).

TAM's power of explanation has led many researchers in other non-IS areas to borrow its idea to study people's acceptance of technology. One such particular area of research focussed on consumer acceptance of the internet to be used for a variety of purposes including shopping online (Akhlq & Ahmed, 2014; Ha & Stoel, 2009). For example, Ha and Stoel's (2009) study showed the significance of the TAM variables on consumers' intentions to engage in e-shopping. Another supporting study by Akhlq and Ahmed (2014) demonstrated the relevance of TAM when applied on a global basis. They conducted a survey with respondents from 14 countries across North America, Europe and Asia. Their findings revealed that the two major TAM variables (i.e. PEU and PU) have positive relationships with intentions to shop online. Generally, research frameworks based on TAM have been found to be useful to explain consumer behaviour.

Although many years have passed since TAM was first introduced, PU and PEU have been found to remain consistently reliable and valid as shown by meta-analyses of studies conducted across time (Chuttur, 2009; Marangunić & Granić, 2015).

Buying Intention

According to Fishbein and Ajzen (1975), behavioural intention is a person's subjective likelihood of acting in accordance with an expressed behaviour (p.12). This description of intention can be divided into two elements. The first element, degree, refers to the subjective likelihood of behavioral occurrence while the second element, direction, refers to people's behavior which is directed towards doing or not doing something. Seen from this perspective, intention can fall anywhere from low to high probability that a behavior will actually be performed by a person. When applied to individual consumers, he/she may display varying degrees of buying intention – from no intention to buy to high buying intention.

It has also been argued that the intention to perform a behavior is the major predictor of real live behavior (Ajzen, 1991). Furthermore, Ajzen (1991) also noted that people's intentions are reflective of those motivating elements which influence their behavior. As such, the stronger an individual's intention to perform an act, the higher the probability of the act being carried out (Ajzen, 1991).

When behavioural intentions are measured appropriately, it is possible to obtain a high degree of accuracy in predicting actual behaviour (Ajzen & Fishbein, 1973). Although there is no perfect correlation between intention and behavior in real-life, the former has been widely applied to represent actual buying behaviour under academic and commercial settings (Chandon, Morwitz, & Reinartz, 2005). Furthermore, research on purchase intentions continues to remain relevant in recent years as observed from studies relating to online shopping (e.g. Mohseni, Jayashree, Rezaei, Kasim, & Okumus, 2016; Pappas, Kourouthanassis, Giannakos, & Lekakos, 2016) and travel products (e.g. Bonsón Ponte, Carvajal-Trujillo, & Escobar-Rodríguez, 2015; Filieri, Mcleay, & Tsui, 2017; Mohseni et al., 2016).

PU and Buying Intention

The relationship between PU and buying intention has been rather well studied especially in TAM research on information systems (IS)(Yayla & Hu, 2007). Most of these IS studies found significant relationships exist between PU and intention. For example, Yayla and Hu (2007) compiled 32 studies from 22 journal articles and 4 dissertations which investigated IS users' intentions. Using these studies, the researchers then conducted a meta-analysis to investigate how well the results fit the TAM and TPB (Theory of Planned Behaviour) frameworks. Among other findings, they demonstrated that PU is an important factor influencing intentions.

Extended to online settings, numerous studies demonstrate that perceptions of internet usefulness significantly influenced people's intention to use the web for many different types of transactions. For example, Featherman and Wells (2010) studied intention to adopt online bill payment services, and found that when people perceive the online service as being useful, they will have more intention to make payments online in the future. Similarly, such relationships have been observed among online shoppers for other purposes like general shopping (Akhlaq & Ahmed, 2014; Ha & Stoel, 2009; Li & Huang, 2009), buying travel products (Kamarulzaman, 2007; Kucukusta, Law, Besbes, & Legohere, 2015), banking (Alalwan, Dwivedi, Rana, & Williams, 2016; Gu, Lee, & Suh, 2009), and air tickets purchases (Bukhari, Ghoneim, & Dennis, 2012; Mohd Suki & Mohd Suki, 2017).

Overall, commercial websites offer various products and services to consumers enabling them to make better purchase decisions. As a result, not surprisingly, many consumers perceive the internet to be useful for shopping activities, which then increases their online buying intention.

PEU and Buying Intention

Quite a number of research in the IS field did not investigate the relationship between PEU and intention (Legris, Ingham, & Collette, 2003) perhaps because Davis (1986) himself did not study users' intention in his original model.

Subsequently, when this variable was added to the TAM, Davis (1989) found a significant relationship between PEU and usage intention among computer users. However, IS research over time has demonstrated mixed findings for this relationship (King & He, 2006). In particular, King and He's (2006) meta-analysis involving 88 studies from reputable journals showed that PEU's effects on users' behavioural intentions are not consistent across the studies probably due to the different context of usage. Nonetheless, King and He (2006) noted the substantial direct effect of PEU on intention when applied for internet usage.

The mixed support for the relationship between PEU and intention is mirrored in the online environment. Some studies found significant relationships while others did not (Ukpabi & Karjaluoto, 2016). For online shopping, significant relationship between PEU and buying intention have been shown for general shopping (Akhlaq & Ahmed, 2014; Li & Huang, 2009) and air tickets purchase (Bukhari et al., 2012). In contrast, other studies that demonstrated insignificant relationships between the two variables included shopping for travel products and services (Kamarulzaman, 2007; Mohd Suki & Mohd Suki, 2017) and buying from website retailers (Pavlou, 2003).

PEU and PU

As originally found by Davis (1986), majority of IS research supports the significant association between PEU and PU (Davis, 1989; Legris et al., 2003; Yayla & Hu, 2007). From analyzing TAM studies on the usage of various software tools, Legris et al. (2003) found that 21 out of 28 studies showed significant relationships between PEU and PU, 5 studies found insignificant associations, and 2 studies did not test for it.

Similarly, substantial evidence collected from the online environment demonstrates the significant relationship of PEU to PU (Mohd Suki & Mohd Suki, 2017; Bukhari et al., 2012; Legris et al., 2003; Pavlou, 2003; Yayla & Hu, 2007). Yayla and Hu (2007) compared numerous studies which used the TAM construct through the meta-analytic technique. Their findings provided substantial support for the relationship between PEU and PU across 32 studies taken from 22 journal articles listed in the Web of Science database and 4 dissertations. In a study which investigated people's acceptance of internet service usage for bill payment purposes, Featherman and Wells (2010) found that PEU significantly influences PU. In a similar vein, Pavlou (2003) also demonstrated that PEU have a significant influence on PU in their investigation on consumer acceptance of e-commerce. Another study by Bukhari and colleagues (2012) provided additional supporting evidence for the relationship between PEU and PU of buying tickets online among air travellers in Saudi Arabia. Likewise, Mohd Suki and Mohd Suki (2017)'s study found PEU's significant effect on PU of an air ticket booking app.

Overall, the studies discussed above suggest that those consumers who perceive the internet as being easy to use will generally find it useful for buying purposes as well.

PEU, PU and Buying Intention

Like Davis' (1989) early research, numerous studies over time provide evidence that PEU operates through PU to influence behavioural intention (Featherman & Wells, 2010; Szajna,

1996). Szajna's (1996) findings from a longitudinal IS study of email users demonstrated that there is no direct relationship between PEOU and intention. Instead, PEOU have an indirect relationship with intention through PU after the email system was implemented.

With regards to the online environment, a number of studies have also been conducted. In his investigation on internet buying intention, Pavlou (2003) found significant relationships between PEU and PU, as well as PU and buying intention. However, PEU and intention were only weakly associated with each other for the consumer sample and no relationship was found in the student sample. The results of another study by Ayeh, Au, and Law (2013) indicates that PU has a partial mediating effect between PEU and intention.

For intention to pay bills online, Featherman and Wells (2010) showed that PU acts as a full mediator between PEU and usage intention. Research on travel shopping provides further support for the full mediating effect of PU on PEU, and buying intention (Kamarulzaman, 2007). Moreover, the findings of Mohd Suki and Mohd Suki's (2017) recent research on Malaysians also suggest that PU is a full mediator between PEU and intention to use a mobile app to book flight tickets.

Research Methodology and Conceptual Model

The quantitative approach will be applied for this research. Specifically, self-administered questionnaire is to be developed based on past studies. Data will be collected online since it may not be relevant to survey those respondents who do not have internet access. Moreover, there has been an increasing trend of using the internet to conduct surveys over the past few years (Sekaran & Bougie, 2013). Pre-test will be done before actual implementation. The respondents will be drawn from the Malaysian population of internet users who are at least 18 years old. Convenience sampling will be employed as it is commonly used in social sciences (Gravetter & Forzano, 2016). Finally, the compiled data will be analysed descriptively using SPSS, and PLS-SEM will be used for testing the research hypotheses. To be in line with PLS-SEM technique, the target sample size is at least 200 respondents (Hair, Sarstedt, Pieper, & Ringle, 2012).

Based on the previous discussions, the conceptual model is presented below:

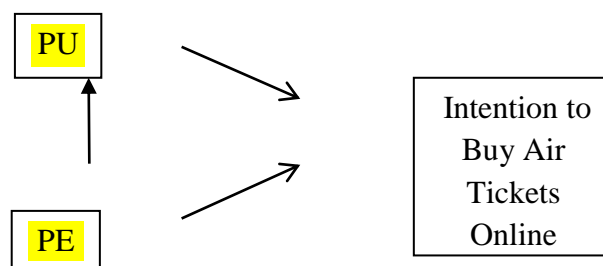


Figure 1. The Conceptual Model

Adapted from Davis (1989)

Conclusion

The research findings are expected to provide support for the effect of consumer perceptions of internet usefulness and ease-of-use on air tickets buying intention online. In addition, the differential impact of PU and PEU on intention, as well as the mediating effect of PU on PEU and intention will be revealed.

Recommendations for Airline Companies

It is recommended that airline companies utilize the research findings to help improve their website ticketing system so as to address travellers' concerns about online reservations. The findings can also be used as a guide to prioritize improvement work between the two factors (i.e. PEU and PU) being investigated in order to stimulate higher intention among consumers to buy air tickets online.

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