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The role of corporate image and privacy concerns in adopting online travel services*

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〈Content〉

Ⅰ. Introduction

Tourism has developed significantly in Vietnam during recent years and is an important part of the economy since the “Open Door” policy was introduced in the 1980’s. The growth in tourist arrivals during the past 20 years has been over 10% per year, higher than

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the average annual GDP growth rate (which was 6%). However, compared to other neighboring Asian countries such as Thailand, Indonesia, and Malaysia, its contribution to GDP is still far behind Thailand, one of the most important reference countries to Vietnam in the tourism sector (e.g. 9% for Thailand versus 6.5% for Vietnam) (World Travel & Tourism Council, 2016). Therefore, the government is eager to promote the development of the tourism sector.

One factor that has potential to improve the competitiveness of tourism is information technology (IT). IT has significantly changed the tourism industry and created new possibilities for tourism services provision (Cao and Yang, 2016, Kim et al., 2008, Kim et al., 2011, Qu and Lee, 2011, Xiang et al., 2008, 2010). Travel agents are disappearing and are being replaced with online aggregators which offer a selection of travel services (such as flight tickets, hotel reservations, and tour packages) for consumers to compare and combine into tailor-made products (Xiang et al., 2015). Therefore, IT can be part of the solution for Vietnam's further development of the tourism industry. In fact, online travel services have enjoyed rapid growth that even outpaces the growth rate of e-commerce in Vietnam (Vietnam e-Commerce Association, 2018).

Online travel services or e-Traveling services have been the subject of many studies (Amaro and Duarte, 2015; Cao and Yang, 2016; Kim et al., 2017; Kim et al, 2011; Maswera et al, 2009; Tenzin and Lee, 2018) and most of the studies on online travel services were based on the Technology Acceptance Model (TAM). Broadly speaking, the model is among the most used ones in adoption research (Shaikh and Karjaluoto, 2015). So far, the use of TAM to examine e-Travelling adoption has focused on countries such as China and Korea (Cao and Yang, 2016, Kim et al, 2011), which are in regional proximity to Vietnam. Hence, the use of TAM is considered relevant in investigating online travelling services in Vietnam.

However, limitations have been identified in TAM that continue to require improvements in the model (Benbasat and Barki, 2007). For example, Legris et al. (2003) conducted an analysis of empirical research using TAM and concluded that significant factors were not included in the models. They proposed that external variables should be specified and included in a more detailed model of adoption. In this research, we focus on items of importance to online travelling services: corporate image, privacy concerns, and trust. Firstly, corporate image is a factor influencing customers' purchasing intentions (Choi et al., 2016). Corporate image transmits the service signal to customers and relieves information asymmetry when customers and their providers have different information about services (Zmud et al, 2010; Connelly et al, 2011;

Mavlanova et al, 2012). Firms attempt to gain a positive reputation over time as a signal of underlying quality. Corporate image has previously been investigated in traditional, offline travel services (Richard and Zhang, 2012), but not to our knowledge in online travel services. Despite this, it seems to be an important consideration for customers to decide to purchase not only offline services, but also online services.

Secondly, previous studies have investigated privacy concerns and trust. Prior research has investigated these variables mainly in relation to online buying in general (Fortes & Rita, 2016; Pavlou & Fygenson, 2006; Venkatesh, 2000) but there are also some examples of its application in online travel (Agag and El-Masry, 2016). However, we believe it is particularly important to examine the three variables of corporate image, privacy concerns, and trust, together. Online shoppers may use corporate image as a heuristic to judge the privacy protection mechanisms of a webshop because they do not have high awareness of privacy techniques and privacy legislation. Indeed, it is hard for shoppers to keep up with the rapid development of these areas. This has been suggested by Ponte et al. (2015) but research in this area is meager in tourism and information management.

Based on the research gap identified above, a framework was built which explains how corporate image and privacy concerns can exert their influence on online travel service use. The research question that guides this study is: how does corporate image influence privacy concerns and online travel service use intention? This research has three objectives: 1) to investigate the antecedents of Vietnamese users' intention to use an online travel service; 2) to verify the influence of corporate image and privacy concerns on intention to use an online travel service; and 3) to develop a model that can provide insight into why consumers adopt an online travel service. The new model was created by integrating two well recognized theories in management and technology acceptance: the signaling theory and the adoption theory.

This paper is organized as follows. First, we present the theoretical background, constructs and variables, as well as the hypotheses that link them. Next, we operationalize the constructs and explain our research method and sample. Then, the results of the analysis are presented. Finally, we discuss the results, describe theoretical and practical implications learned from this research, and outline some directions for future research.

Ⅱ. Theoretical Background and Research model

2.1 Influence of image on intention to use, privacy concerns, perceived

usefulness and trust

Multiple dimensions of corporate image, including product brand (Keller and Lehman, 2006), shop image (Ryu et al., 2008), and online image (Liang and Lai, 2002) can influence customers' purchase intentions. They do so by affecting customer evaluations of products and services that customers are considering to buy (Ryu et al., 2008). Since online transactions do not involve a physical space, customers are more dependent on intangible evaluation criteria such as product and service brand and e-image (Aghekyan-Sumonian et al. 2012; Gregg and Walczak, 2008), which strengthens the effect of corporate image in business decisions. Thus, this research proposes that corporate image is positively associated with intention to use an online travel service (H1a).

Privacy concerns relate to the control that individuals have over their personal data (Malhotra et al., 2004). Customers tend to believe that a company which has a good reputation, since it has not committed significant privacy violations in the past, is likely to uphold its privacy commitments (Li, 2014). Moreover, customers are more likely to believe that highly-regarded companies are competent, act honestly in daily operations, and consider interests of others in the relationship when making decisions (Su, 2016). Therefore, we can say that the customers of companies having a good corporate image are less likely to have privacy concerns when purchasing from those companies. Thus, the following hypothesis is proposed: Corporate image is negatively associated with privacy concerns (H1b).

A company's image can act as a signal that summarizes its past behavior and can be used to forecast future actions. Positive image can make customers feel that a company can offer good services, which means that the services are considered useful. The good image usually comes from big investment in high technologies (Mavlanova, 2012), which can also make the company's products or services to be more useful. Thus, a proposed assumption is that a favorable image is positively associated with perceived usefulness of an online travel service (H1c).

2.2 Privacy concerns, perceived ease of use, perceived usefulness and trust

Online privacy concerns are heightened due to lack of direct contact with the seller. If an individual considers making a purchase in an online shop, the expectation that his/her data may be handled improperly reduces their willingness to provide that data (Fortes and Rita, 2016; Kim and Oh, 2017; Malhotra et al, 2004). If, however, data is not provided, the web shop may not allow the purchase to occur.

Such a procedure will inevitably make it more difficult to complete the transaction and make the online service less useful and convenient. Thus, in this study, it is proposed that privacy concerns are negatively associated with perceived ease of use (H2a) and perceived usefulness (H2b).

When a person has great concerns for their privacy in online settings, they are worried that their personal details will be used for purposes other than the intended. A common assumption is that they would start receiving messages and advertisements from unknown sources. While these concerns can be present before purchasing, they do not necessarily disappear after the purchase, as the data is still held by the service providers, especially when customers do not have reliable methods to confirm whether the service providers are able to protect or use their private information properly (Wu et al., 2012). Such concerns cause the person to doubt the sincerity and integrity of the seller, eroding trust in the seller (Eastlick et al., 2006; Pavlou, 2003; Wu et al., 2012; Zhou, 2013). Hence, the following hypothesis is proposed: privacy concerns are negatively associated with trust in an online traveling service (H2c).

2.3 Perceived ease of use, perceived usefulness, trust and intention to use

The Technology Acceptance Model (TAM) argues that people generally are inclined to use services which are perceived as being easy to use and useful (Davis, 1989; Venkatesh, 2000). Moreover, individuals tend to consider services to be more useful the easier they are to use (Davis, 1989; Fortes and Rita, 2016; Pavlou and Fygenson, 2006). Thus, we propose that perceived ease of use is positively associated with perceived usefulness (H3a) and intention to use an online travel service (H3b), and perceived usefulness is positively associated with intention to use an online service (H3c).

Consumers are unlikely to buy from a website if they do not trust electronic transactions to be safe. Therefore, trust has been identified as one of the critical factors to form a positive intention to use online services (Ha and Stoel, 2009, Liu et al., 2005). For example, Ha and Stoel (2009) argued that trust increases intention to use the services while Liu et al. (2005) stated that a lack of trust is one of the main reasons why many people did not intend to use online services. Liu et al. (2005) suggested a “privacy-trust-behavioral intention” model to study the online user behavior. Thus we believe that trust will influence the intention to use of online services and suggest a hypothesis as: Trust is positively associated with intention to use of an online travel service (H4).

Based on the preceding literature review, the conceptual framework of this study integrates image (IMG), privacy concerns (PRI), trust

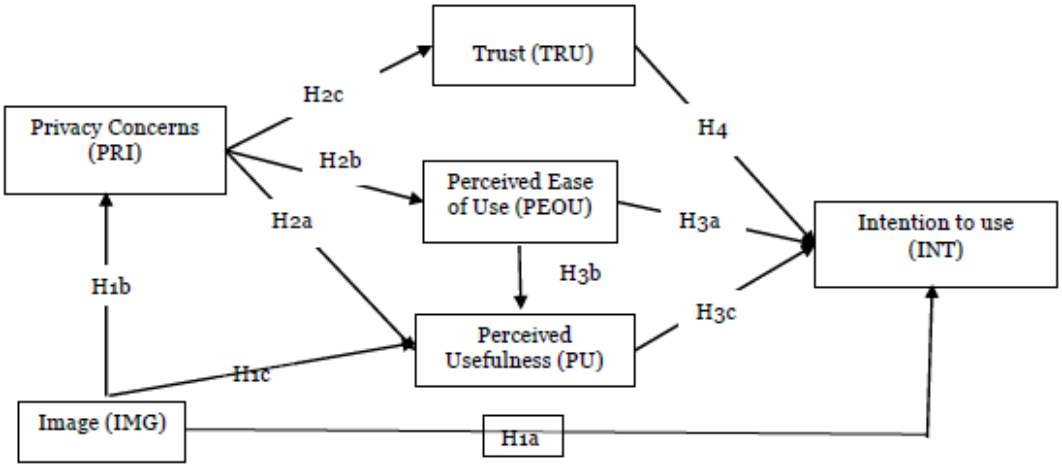

Figure 1. Research model

(TRU), perceived ease of use (PEOU) and perceived usefulness (PU) as antecedents of the intentions of people to use online services (INT) in a comprehensive framework, which is depicted in Figure 1.

The hypothesized relationships are discussed in the following section. This proposed integrated model was validated by the data collected from the online travelling services in Vietnam.

Ⅲ. Research methodology

3.1 Constructs and questionnaire

In this research, an empirical study with the data from online travel services in Vietnam was conducted to test the proposed hypotheses. The questionnaire was developed from the adaptation of the scales presented in previous studies. Although privacy concerns, trust and corporate image were conceptualized as multidimensional constructs in some previous studies, in this study, unidimensional scales were used to capture generalized perceptions and major dimensions of these constructs. Thus, it helps to reasonably reduce the size of the questionnaire in order to encourage people to participate in the survey.

The “privacy concerns" construct was referenced from the studies of Dinev and Hart (2005) and Fortes and Rita (2016). "Trust" was referenced from Fortes and Rita (2016) and Pavlou (2003). Overall corporate image was referred to Kang and James (2004) and Su et al. (2016). “Perceived ease of use” was referenced from Davis (1989) and Koufaris (2002), “perceived usefulness” was referenced from Davis (1989), Fortes and Rita (2016), and Park et al. (2004), and “intention to use service” was referenced from Davis (1989);

Erkan and Evans (2016); Schlosser et al (2006), and Venkatesh (2000).

All items were measured with Likert scales of five points (from 1 = totally disagree to 5 = totally agree). The questionnaire was translated from English into Vietnamese and was evaluated through a group discussion with five experts on the travel industry in Vietnam. Then, it was pre-tested with 136 different customers in order to eliminate unsuitable scales using content analysis and tested by Cronbach's Alpha coefficient. Specific adjustments were made in the formulation of some questions following the results of the pre-test. All scales showed their unidimensional scales based on the results of the exploratory factor analysis, and adequate internal consistency based on the results of the item analysis and Cronbach's alpha.

3.2 Sample and data collection

According to a report by the Vietnamese Ministry of Information and Communications (2016), a high percentage of young (under 35-year-old) people are using the Internet. In addition, previous studies (Muda et al., 2016) found that young people are the biggest group of online service users since they are surrounded by online activities and prone to use social media on daily basis. Therefore, students were considered an appropriate sample and the survey and data collection were implemented at the Foreign Trade University (Ha Noi Campus), which has a high concentration of young people who are interested in online business in Vietnam.

A paper-based questionnaire was administered directly to student respondents in April and May, 2017. The survey was started by explaining the project to the respondents including its purpose and how their identity was protected. The reason to choose this method instead of collecting data online is to have better control in data quality (i.e. respondents are known to be relevant to the sample).

Before analyzing, unfit responses were eliminated according to two criteria: whether there were the same answers for all questions; and whether less than 10% of the questions were answered. After eliminating such unfit responses, the number of responses was 541, which exceeds 500, the minimum number typically required. Most respondents (88.4%) were of age 30 or under, and were using the Internet heavily; as many as 50.1% were using the Internet more than 5 hours in a day. Only 6.8% of respondents used the Internet less than 2 hours a day (see Table 6 in the Appendix).

Ⅳ. Data analysis and results

Confirmatory Factor Analysis (CFA) was used to evaluate the reliability and validity of

constructs in the model. The model is considered to fit the data when Chi-square is less than 3; CFI, TLI, IFI are greater than 0.9; and RMSEA is smaller than 0.08 (Hair et al, 2006; Hooper et al, 2008; Kline, 2011). The loading of each factor should be above 0.5 to have convergent validity (Hair et al, 2006), Composite Reliability (CR) and Cronbach's Alpha should be above 0.7, and the Average Variance Extracted (AVE) should be above 50% in order to show reliability (Hair et al, 2006). In order to assess discriminant validity among constructs, we used the square root of AVE, which should be greater than the correlations involving the constructs. To test the hypotheses, we applied structural equation modeling (SEM) with the level of statistical significance at 5%. We also used direct, indirect and total effect coefficients to evaluate the total impact of factors on the intention to use services.

4.1 Evaluating reliability and validity and model fitness

The results show that the model fits the data (Chi – square = 2.420 < 3, CFI = 0.947; TLI = 0.938, IFI = 0.947; GFI = 0.915, above 0.9, RMSEA = 0.048 < 0.08). However, two items (PU1, TRU4 and IMG3) which had factor loading less than 0.5 were eliminated. The other items were above 0.5, showing that the constructs reached convergent validity. Cronbach's Alpha and composite reliability

Table 1. Reliability and Cronbach's Alpha tests

Constructs (No of Items)	Factor loadings Range	AVE (%)	Composite Reliability	Cronbach's Alpha
PRI (3)	0.788 – 0.887	69.33%	0.871	0.868
PEOU(4)	0.712 – 0.846	63.38%	0.873	0.870
PU (3)	0.727 - 0.785	56.41%	0.795	0.786
TRU (3)	0.760 – 0.842	63.79%	0.840	0.824
IMG (5)	0.681 – 0.761	53.51%	0.851	0.847
INT(4)	0.700 – 0.775	55.58%	0.833	0.832

Table 2. Discriminant validity

	Mean (SD)	PRI	PEOU	PU	TRU	IMG	INT
PRI	2.040 (0.938)	**0.833**					
PEOU	3.525 (0.803)	-0.182	**0.796**				
PU	3.742 (0.765)	-0.341	0.639	**0.751**			
TRU	3.159 (0.780)	-0.103	0.242	0.309	**0.799**		
IMG	3.765 (0.717)	-0.372	0.342	0.389	0.312	**0.732**	
INT	3.540 (0.728)	-0.308	0.489	0.620	0.316	0.457	**0.746**

coefficients were larger than 0.7, and average variance extracted was above 50%, showing that the constructs reached reliability (see Table 1).

Discriminant validity was greater than correlation coefficients between the factors. This shows that the constructs reached discriminant validity (see Table 2).

To assess the measurement model's goodness of fit, multiple fit indices including the Chi-square/df value, Comparative Fit Index (CFI), Tucker and Lewis Index (TLI), Incremental Fit Index (IFI) and Root Mean Square Error Approximation (RMSEA) were used. Table 3 shows that Chi-square/df was 2.769 (< 3); CFI, TLI and IFI were all over 0.9 (i.e. CFI = 0.941, TLI = 0.930; IFI = 0.942) and RMSEA was 0.057 (< 0.08), which satisfies the criteria recommended by Hair et al. (2006). Thus, the measurement model has a sufficiently good model fit.

4.2 Structural equation modeling

4.2.1 Path coefficient

Table 4 shows the results after applying SEM analysis to test the hypotheses. We found the evidence to support all hypotheses.

Among the factors influencing intention to use, perceived usefulness (β= 0.434, $p < 0.001$) showed the greatest effects, followed by image (β= 0.239, $p < 0.001$), perceived ease of use (β= 0.138, $p < 0.05$) and trust (β= 0.239, $p < 0.01$). The influence of image on privacy concerns (β = 0.389, p-value < 0.001)

Table 3. The values of fit indices

Goodness of fit measures	Chi-square/ df	Comparative Fit Index(CFI)	Tucker and Lewis Index (TLI)	Incremental Fit Index (IFI)	Root Mean Square Error Approximation (RMSEA)
Recommended value	<3	>0.9	>0.9	>0.9	<0.08
CFA model	2.420	0.947	0.938	0.947	0.048
Structural model	2.769	0.941	0.930	0.942	0.057

Table 4. The path coefficients and significances

H1a	Image --> Intention to Use	0.239 (<0.001)	Yes
H1b	Image --> Privacy Concerns	-0.389 (<0.001)	Yes
H1c	Image --> Perceived usefulness	0.159 (<0.001)	Yes
H2a	Privacy Concerns --> Perceived Ease of Use	-0.198 (<0.001)	Yes
H2b	Privacy Concerns --> Perceived Usefulness	-0.192 (<0.001)	Yes
H2c	Privacy Concerns --> Trust	-0.126 (0.012)	Yes
H3a	Perceived Ease of Use --> Perceived usefulness	0.567 (<0.001)	Yes
H3b	Perceived Ease of Use --> Intention to Use	0.138 (0.028)	Yes
H3c	Perceived Usefulness --> Intention to Use	0.434 (<0.001)	Yes
H4	Trust --> Intention to Use	0.121 (0.007)	Yes

and perceived usefulness (β = 0.159, p-value < 0.001) are both also positive, thus supporting H1b and H1c. Perceived ease of use (β= 0.567, p < 0.001) is found to have a significant influence on perceived usefulness, thus supporting H3a. Finally, privacy concerns are found to have a significant and direct relationship with all of perceived ease of use (β= 0.198, p < 0.001), perceived usefulness (β = 0.192, p < 0.001) and trust (β= 0.126, p < 0.05), thus supporting H2a, H2b and H2c.

4.2.2 Path analysis

The analyses based on direct correlation, indirect correlation and generalized correlation showed that all variables affected the intention to use service (see Table 5). Perceived usefulness accounted for the highest impact level (β = 0.434) on intention to use, followed by perceived ease of use (β = 0.384), corporate image (β = 0.376), privacy concerns (β = 0.174) and trust (β = 0.121). Regarding the direct impact, after perceived usefulness (β = 0.434), image was the second most important to intention to use (β = 0.239). In other words, image was more important than perceived ease of use (β = 0.138) and trust on intention to use (β = 0.121).

Ⅴ. Discussion

5.1 Image and privacy concerns

This study found that corporate image has a negative impact on privacy concerns. In other words, customers' privacy concerns are somewhat mitigated when shopping at reputable travel companies such as booking.com, as they are already familiar with the company even in the absence of clear understanding regarding how these companies

Table 5. Effects of variables on intention to use

	Effects	IMG	PRI	PEOU	PU	TRU
PRI	Direct	-0.389	0.000	0.000	0.000	0.000
	Indirect	0.000	0.000	0.000	0.000	0.000
	Total	-0.389	0.000	0.000	0.000	0.000
PEOU	Direct	0.000	-0.198	0.000	0.000	0.000
	Indirect	0.077	0.000	0.000	0.000	0.000
	Total	0.077	-0.198	0.000	0.000	0.000
PU	Direct	0.159	-0.192	0.567	0.000	0.000
	Indirect	0.118	-0.112	0.000	0.000	0.000
	Total	0.277	-0.304	0.567	0.000	0.000
TRU	Direct	0.000	-0.126	0.000	0.000	0.000
	Indirect	0.049	0.000	0.000	0.000	0.000
	Total	0.049	-0.126	0.000	0.000	0.000
INT	Direct	0.239	0.000	0.138	0.434	0.121
	Indirect	0.137	-0.174	0.246	0.000	0.000
	Total	0.376	-0.174	0.384	0.434	0.121

handle their personal information. On the other hand, if corporate image is weak, for example, it is a small and a relatively unknown company, it is likely that would-be customers will pay particular attention to their information security. For example, they will check whether the company has a physical address, whether the website uses secure protocols to process personal information, and take other similar precautions.

Our finding is similar to the study of Ponte et al. (2015), which found that the reputation of online sellers positively influences buyers' perceived privacy and perceived website security in the realm of online travel. However, that study postulates privacy concerns as a component of perceived privacy, whereas in our research there was a direct link between corporate image and privacy concerns. Our findings are also similar to those of Mavlanova et al. (2012). They conducted an e-business research from a sample of online pharmacies and concluded that low-quality sellers, which are not recommended by the National Association of Boards of Pharmacy, tended to deliver less information on their websites than high-quality ones which are recommended by the Association. Obviously, organizations which have their reputation deteriorated by being blacklisted, may further increase online users' privacy concerns since their poor image is also associated with providing less information, and when less information is delivered, for example, the physical address of the company or its privacy policy is missing, potential online users might become suspicious and their privacy concerns might increase.

Presently, as a trend, many travel organizations use social media, particularly Facebook, to advertise their products and services. Indeed, Xiang and Gretzel (2010) and Xiang et al. (2015) argue that social media is increasingly prevalent as a tool in travel planning, particularly so among young people such as those of Generation Y (millenials). Recently, Facebook has been in the center of a scandal regarding how the data of social media users is being shared with third parties. Such scandals are likely to make travelers more wary of shopping through advertisements displayed on social media; at the very least, they are likely to exercise more caution in selecting the websites for purchasing travel services.

5.2 Image and intention to use

Through this study, we also found that corporate image can impact intention to use of e-Traveling services positively in both direct and indirect ways via perceived usefulness. The direct impact of corporate image on intention to use was also found in prior studies in other online service contexts. For example, in the study of Dehghani and Tumer (2015), advertisement campaigns on Facebook could

facilitate firms to build their image and this contributed to a significant change in purchasing intention of their potential customers. The study of Gregg and Walczak (2008) also found that increasing the quality of e-Image does increase consumers' willingness to transact in auction business. The study of Jarvenpaa et al., (2000) found that Internet users knew that online firms had differences in size and reputation, and these differences influenced their perception and behavior. Our findings confirm this mechanism in the area of online travel.

Furthermore, our study shows that image was actually the second-most important factor to directly impact intention to use ($\beta = 0.239$) after perceived usefulness ($\beta = 0.434$). Image is even more important than perceived ease of use ($\beta = 0.138$) and trust on intention to use ($\beta = 0.121$), despite perceived ease of use (PEOU) being one of the most commonly used antecedents of the intention to adopt (INT) (Shaikh and Karjaluoto, 2015; Ovcjak et al., 2015). While we know that trust (TRU) is a key success factor in the online context (Corritore et al, 2003; Elbeltagi & Agag, 2016), the result of this study suggests that corporate image and signal theory, especially together with privacy concerns, should be more highly valued in online travel services research.

5.3 Privacy concerns and others to intention to use

Privacy concerns were found to have a negative direct impact on perceived usefulness, perceived ease of use, and trust; and negative indirect impact on intention to use. These findings confirm the results achieved in many studies such as Eastlick et al., (2006), Fortes and Rita, (2016), Mamonov and Benbunan-Fich (2015), Pavlou and Fygenson (2006), Wu et al., (2012) and Zhou (2013), and in particular, tourism studies such as Agag and El-Masry (2015) and Ponte et al. (2015). The strongest direct effect of privacy concerns is on perceived ease of use while the strongest total effect is on perceived usefulness.

Finally, being consistent with many previous studies on online travel services (Amaro and Duarte, 2015; Chen, 2010; Fortes and Rita, 2016; Ha and Stoel, 2009; Liang and Lai, 2002; Kim et al., 2009; Pavlou and Fygenson, 2006), the results of this study allow us to conclude that intention to use online services is affected directly by perceived usefulness, perceived ease of use and trust (Agag and El-Masry, 2015; Ponte et al. 2015). As is found in most studies, the strongest direct and total effect on the intention to use is from perceived usefulness.

Ⅵ. Implications and conclusions

6.1 Theoretical contribution

According to Walker (2010), corporate image has been mostly studied in marketing and management research. With this study, we used image as one variable to explain e-Travelling services use intention. Although many previous studies concentrated on relieving privacy concerns in order to maximize the potential of online services by investigating the relationships of privacy issues with perceived risk (Crespo et al. 2009), trust (Fortes and Rita, 2016), and shopping and product factors (Chen et al., 2010), this study created and validated an empirical model that explains how image and privacy concerns exert their impact on intention to use e-Traveling services. The direct effect of image on privacy concerns in e-Traveling services environments provides an explanation on how image can help to relieve privacy concerns and promote intention to use. Carter and McBride (2010) suggest in their paper – without empirical research – that reputation should be an antecedent to privacy concerns (in the area of government services), underlining the importance of our research. Thus, the results imply that the role of image should be elevated in the information system research.

The second important theoretical contribution of this study is reflected on the combination of different theories and models of consumer behavior widely used in the literature. Signaling theory holds a prominent position in management research (Connelly et al. 2011), within which corporate image has been found to be the most important signal, while Technology Acceptance Model (TAM) with perceived ease of use and perceived usefulness is among the most used adoption models (Ovcjak et al., 2015; Shaikh and Karjaluoto, 2015). The research model of this study integrated these models to better understand the determinants of intention to use e-Traveling services. The findings of this study also reinforce that signal theories can contribute to explain people's intention to use online services through its connection to privacy theories and the technology adoption model.

Furthermore, researchers have been concerned with inadequate models that can be used to explain the adoption trend of online travel services. While prior research on IT adoption in the tourism industry has been carried out in China (Cao and Yang, 2016), Korea (Kim et al. 2008; Kim et al., 2009; Kim et al. 2011) and Egypt (Agag & El-Masry, 2016 a, b), this paper extends the e-Travelling adoption research to Vietnam, a country with no prior studies on the topic and where a rapid transformation can be seen from traditional travel business to e-travel.

6.2 Practical contribution

This study, which investigated the impact of corporate image on privacy concerns, suggests another way for tourist organizations to address their privacy concerns and increase their intention to use online travel services. The findings of this study helps tourist service providers to evolve strategies regarding managing firm image and customer information which can enhance the intention of consumers to use their online services. As many other developing countries have yet to implement online tourist services, they can be expected to face similar issues as Vietnam, and lessons learned in this study can be practically useful and informative for these countries.

In addition to considering the variables of ease of use, perceived usefulness, and trust in services as suggested by prior studies (Agag and El-Masry, 2016; Kim et al., 2009; Kim et al., 2011), online travel service providers should focus on: (1) building their corporate image in both offline and online settings and (2) reducing privacy concerns by keeping a reliable image, and setting up a customer data protection policy and transaction systems that guarantee customer data safety.

One of the most important ways to create and maintain good image is improving the quality of services, providing sufficient support for service innovation and having employees who understand and provide for actual customer needs (Chiu, 2016). In addition, organizations can use marketing programs and good public relationship management to advertise their products and control their public image. As recommended by Ponte et al. (2015), we also suggest that tourism managers should manage their social networks and presence on aggregator websites. For online services, websites also represent an important avenue for corporate image creation, particularly a unique online image. Several website characteristics such as website design features, product and information content, and security features can be used as signals from service providers to potential users. Hence, it is important for tourism organizations to create appropriate signaling on their websites to maintain and strengthen their corporate image.

When conducting online transactions in travel-related services, one particularly important facet is that users feel that their privacy is secure. This feeling will ultimately influence how the individual perceives a situation including the quality of the products and services, and decides whether he/she will provide personal information requested to accomplish that online transaction. Online travel businesses will also increase their need to build trust in order to facilitate their use intention. Therefore, online travel businesses should strive to address these privacy concerns by showing the users their ability, integrity and benevolence to protect users' personal

information and transaction security. They can improve their image to relieve privacy concerns as found in our study. They can also focus on setting up a customer data protection policy and transaction systems that guarantee customer data safety.

6.3 Limitation and future research

In this study, image, privacy concerns and trust were measured in unidimensional scales to decrease the length of the questionnaire in order to encourage people to participate in the survey. Although the used scales can capture the major dimensions of these variables, they could be alternately conceptualized as multidimensional constructs, which might lead to results which are different from those found in this study. Another limitation of the study is the sample. Although young people are the biggest group of online travel service users, since this study was limited to a single Vietnamese university, the research findings may not be generalizable over and above the context of Vietnamese university students.

Future research should focus on confirming the application of this proposed research model in different countries. We also propose to conduct a longitudinal study as the image can be changed when the time passes which can also change behavior of users regarding online travel services. Additionally, the impact of increase in generalized privacy concerns (for instance as a result of the Facebook scandal) to corporate image could be addressed by future research. Corporate image may become more crucial as a differentiator for online travel organizations after consumers become more sensitized to loss of privacy and afraid that their data will be mishandled.

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Appendix

Table 6. Sample characteristics

		Number	Percent
Gender	Male	169	31
	Female	372	69
Total		541	100
Age	<20	130	24
	21-25	206	38
	26-30	142	26
	31-35	44	8
	>35	19	4
Total		541	100
Education	High school or below	5	1
	Student/graduate	384	71
	Post-graduate	152	28
Total		541	100
Occupation	Student	187	35
	Employee	290	53
	Self-employed	26	5
	Other	38	7
Total		541	100
Income (monthly, millions VND)	<5	196	36
	5-10	207	38
	>10	138	26
Total		541	100
Internet use (hrs per day)	<2	37	7
	2-5	233	43
	>5	271	50
Total		541	100

<Abstract>

The role of corporate image and privacy concerns in adopting online travel services

Tapanainen, Tommi · Nguyen, Thi Thanh Hai · Dao, Kien Trung

Purpose

This study examines the role of corporate image and privacy concerns in intention to use of online travel services using data from Vietnam.

Design/methodology/approach

The data collection was implemented to a student sample at the Foreign Trade University in Hanoi, which has a high concentration of young people who are interested in online travel in Vietnam. The paper based questionnaire was directly delivered to the respondents. After sorting to eliminate unfit samples, the number of responses was 541, which exceeds 500, the minimum number typically required. To test the hypotheses, we applied structural equation modeling (SEM) and Confirmatory Factor Analysis (CFA) was used to evaluate the reliability and validity of constructs in the model. We also used direct, indirect and total effect coefficient to evaluate the total impact of factors on the intention to use online services.

Findings

This study found that corporate image is positively associated to intention to use online services. It found a link between corporate image and privacy concerns, which suggests another way for firms to address their customers' privacy concerns; corporate image, which has received great attention in traditional offline sales channels, but not in online services, should receive higher attention in IS research. Online travel businesses, besides increasing ease of use, perceived usefulness and trust in their services, should focus on build a reliable corporate image, which can not only promote the service use but also help to eliminate users' the privacy concerns.

Keyword: online services, corporate image, privacy concerns, signal theories, adoption.

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