

An Investigation into the Factors Influencing Consumers to Use E-Services of Indonesian Airlines: The Role of Motivation

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ABSTRACT

E-Services have been a popular area of research. This research explores what pushes consumers to use Indonesian airline e-Services. Specifically, this study investigates into how the 'motivation' factor can be combined in some traditional theoretical models, within which it studies the influence on intention of the customers to use e-Services as well as its usage. A positivist paradigm is referred to conduct the research using a two-stage sequential mixed method research approach comprising both field study and quantitative methods. The field study has been employed to refine the research model and quantitative data collected from questionnaire-based survey is analyzed by using Partial Least Square (PLS) based Structural Equation Model (SEM). The research model is validated by surveying 819 Indonesian consumers who have used Indonesian Airline e-Services. The results confirm behavioral intention to use is influenced by the effort expectancy, social influence, outcome expectancy, and motivation. The motivation itself is influenced by the effort expectancy, social influence, trustworthiness, and outcome expectancy. Findings indicate that the effort and outcome expectancy are both influenced by trustworthiness and facilitation conditions. The results also demonstrate that motivation drives e-Services usage directly or indirectly through the intention to use. Furthermore, the implications of the findings are highlighted.

Keywords: E-Services, Indonesian airlines, adoption, partial least square (PLS)

1. INTRODUCTION

E-Services have been widely used in business transactions. It is defined as ‘services delivered via the Internet and comprising transactions initiated and largely controlled by customers’ (Colby and Parasuraman, 2003). E-Services are important for consumers in business environment because they represent the ways to provide demand solutions to the customers, which in turn strengthen customer-service provider relations, create transactional efficiencies, and improve customers’ satisfaction (Ruyter et al. 2001). In developed countries, consumers are willing to use e-Services. However, in some developing countries, consumers are still reluctant to use airlines’ website as a purchase channel. For example, in Indonesia, consumers tend to buy their airline tickets through travel agents despite the fact that many airline companies (public and private) in Indonesia offer extensive e-Services (Agustina, 2008). This study, thus, explores consumer’s behavior in using e-Services of Indonesian airlines and identifies potential influencing factors.

Scholars have the behavioral aspects of the e-Services users in different country settings (for example, see Featherman and Pavlou (2003) in the USA; Scupola (2008) in Denmark). For this, the application models of the behavioral literature were usually used. These models have addressed all possible explanatory factors to the use of e-Services. However, another important and potential explanatory factor such as motivation was not included in these models. We argue that motivation potentially affects the use of e-Services especially in a situation where people are still reluctant to use Internet. Thus, this study specifically addresses the following research questions:

- (1) *What are the main factors that influence the intention to use e-Services of Indonesian Airlines?*
- (2) *Does motivation influence customers to adopt e-Services?*
- (3) *What are the antecedent factors to motivation in using e-Services of the airline companies?*

The remainder of the paper is organized as follows. The first section presents the background of the study followed by a theoretical foundation and the research model. This research model was then enhanced through a qualitative field study. The hypotheses are then presented. The samples, measures, and the data analysis method, based on partial least square, are presented in research method section. Next, the findings are presented. Finally, the paper concludes with discussion and conclusion of the results.

2. BACKGROUND

E-Services represent services which are available on the Internet to facilitate, execute and process any stages of services, including informing, transacting, interacting, and distributing (Berthon et al. 1999). These services are offered to consumers not only to improve customer services but also to reduce labor-intensive activities. Adopting e-Services is typically more complex as they initiate a long-term relationship between consumers and service providers (see Scupola, 2008). The use of e-Services has continuously been expanded in general commercial uses such as travel agency, banking, health services, education, and airline industries.

The rise of Internet in the late 1990s offered airline companies opportunities to sell tickets directly to the public (Buhalis and O'Connor, 2006). Most airlines companies concentrated on driving consumers towards self-service on Internet-based channels (Werthner and Klein, 1999). Due to this Internet-based business development, it is arguably necessary for airline companies to have a long-term competitive advantage, global competitiveness, and customers’ satisfaction as well as to enhance marketing and managerial efficiencies (Tsai et al. 2005). In developed countries, most airlines companies have highly succeeded in e-Services. For example, in The United States, JetBlue and Southwest Airlines sell up to 90% of their tickets directly to customers through websites (Orlov 2006). Similar trends are reported for some European carriers, such as Ryanair and easyJet.

In Indonesia, airline websites have been growing steadily to provide virtual services, such as flight schedule information, and ticket booking and purchasing. The 2007 Nielsen Global Online Survey (NGOS) revealed that most users of e-Services in Indonesia use the Internet to buy flight tickets instead of buying other products such as books and electronic equipments (Agustina, 2008). Therefore, it is important to investigate airline e-Services in this developing country.

3. THEORETICAL FOUNDATION AND RESEARCH MODEL DEVELOPMENT

The literature suggests that the use of e-Services is mainly driven by an intention to use (Gefen and Straub, 2003). Arguably, consumers have the intention to use because the Internet is easily accessible and commonly used in many areas, particularly in developed countries. However, the situation might be different in developing countries like Indonesia. The Internet infrastructure in Indonesia is still poor and the level of the Internet use is low¹. This is where motivation comes into play. We argue that e-Services in Indonesia will be used only if people have strong motivation. In the context of this study, motivation is considered as a primary component driving consumers to use airline e-Services in Indonesia.

Motivation, which is a basic concept in human behavior, is a driving force within individual that moves them to take a particular action (Evan et al. 2009). In the case of Indonesia, motivation is contextualized in two main aspects, i.e. the need for practicality in doing business and the subjectivity of having a better image in the societal group when individuals are able to apply high technology for business (Smith et al. 2007). For business practicality, people need to enhance efficiency in the use of resources by spending low costs and taking a shorter time. In buying airline tickets, for example, a customer wishes to get information of prices and flights without wasting too much time for queuing at a travel agency with its limited servers. In the context of social interaction, building an image is important for certain persons in a particular group to have greater confidence to socialise with colleagues. This can be achieved in showing that he or she is able to conduct transactions online. This is to say that there is a peculiar category of individuals who feel to have a better image through the application of technology.

3.1 Intention and motivation

The intention to use technology is a central factor in Technology Acceptance Model (TAM) (Davis, 1989) and Unified Theory of Acceptance and Use of Technology (UTAUT) (Venkatesh et al. 2003). The intention to use the technology can be also used to predict the user's actual technology usage. Intention has also been studied in TRA, described as willingness to try and taking an effort to perform individual's actual behavior (Ajzen and Fishbein, 1975).

In the context of e-Services, although an individual may have strong intention to use e-Services, some factors would control him or her to terminate the actual system usage. Examples of these factors include distrust, privacy concerns, and lack of motivation. Uncertainty regarding consumer's intention to use e-Services is therefore fundamental in predicting the use of e-Services. In order to better understand the role of uncertainty in the proposed e-Services usage model, the constructs of trustworthiness, privacy concerns, outcome expectancy, and motivation are put forward as fundamental factors to predict the e-Services usage. Accordingly, we define *intention to use* as the strength of the consumer's intention to engage in e-Services, while *use of e-Services* is defined as the consumer's engagement in e-Services.

Motivation is fundamental to cognition, behavior, and communication. Obviously, the role of motivation has been systematically researched across disciplines (Hall, 1961), including the Information Technology (IT) domain. Motivation should shape subsequent activities to achieve

¹ The national level of Internet use in Indonesia in 2007 was only 5.54% of total population (CIA 2008)

objectives or needs (Smith et al. 2007). Customers who have stronger motivation to use e-Services will have stronger intention to use and enhance a greater usage. Therefore, this study examines the construct of motivation as a determinant of usage as well as intention to use. In this study, motivation is defined as the degree to which a customer is driven to engage in e-Services.

3.2 UTAUT

The UTAUT model (Venkatesh et al. 2003) was devised based on theoretical and empirical similarities across eight user acceptance models. According to UTAUT, four factors determine the intention of the use and usage of technology: performance expectancy (PE); effort expectancy (EE); social influence (SI); and facilitation condition (FC). UTAUT was able to account for 70% of the technology acceptance behavior, whereas the original eight models explained between 17% and 53% of behavioral intention to use. Thus, UTAUT is a classic model providing a foundation to guide future research in the Information Systems area.

Consistently, this research pursues the guidance of UTAUT as the fundamental literature for developing the initial research model. The model captures several constructs of the UTAUT: *actual behavior* (e-Services usage), *behavioral intention* (intention to use e-Services), *effort expectancy* (learning cost to use e-Services), *social influence* (individual support to use e-Services) and *facilitation condition* (organizational infrastructure for e-Services usage). E-Services literature justifies the use of these to construct our model.

3.3 Outcome expectancy, Privacy Concerns, and Trustworthiness

This study excludes performance expectancy (one of UTAUT's constructs) and introduces outcome expectancy. Outcome expectancy is predicted as a determinant of intention to use (Landry, 2003) and motivation (Elding et al. 2006). Outcome expectancy is defined as the customer's perception that expended effort leading to desired outcomes.

This study also includes two essential factors, such as privacy concerns and trustworthiness, based on wider empirical literature on the Internet applications. These two factors are among the most important factors that lead customers to quit the online business (Lohse, et al. 2000). Privacy concern is defined as customer's concerns about possible loss of privacy resulting from a voluntary or surreptitious information disclosure to an airline e-Services site (Dinev and Hurt, 2004). We, therefore, argue that privacy concerns influence intention to use airline e-Services.

Trustworthiness is defined as the perception of customer's trust in the enterprise providing the services and the technology through electronic transactions via the Internet (Carter and Belanger, 2005). In the context of this study, a consumer will be more confident to use e-Services if it can be trusted, as trustworthiness reduces behavioral uncertainty related to the action of e-Services. Moreover, it can be argued that consumers' trustworthiness of e-Services can drive their motivation to use it and encourage them to motivate their relatives or friends to e-Services usage.

3.4 E-Services Adoption Research Model

The current research model primarily draws upon the UTAUT model (Venkatesh et al. 2003), expectancy theory (Vroom, 1964) and other factors that identified in studies on information technology and e-Commerce adoption. The proposed research model was first developed from the review of extensive literature and the research context of Indonesia. This initial research model was further enriched through a qualitative field study that was concerned with exploring more comprehensively and confirming the factors and variables identified during the literature review. The final research model is shown in Figure 1.

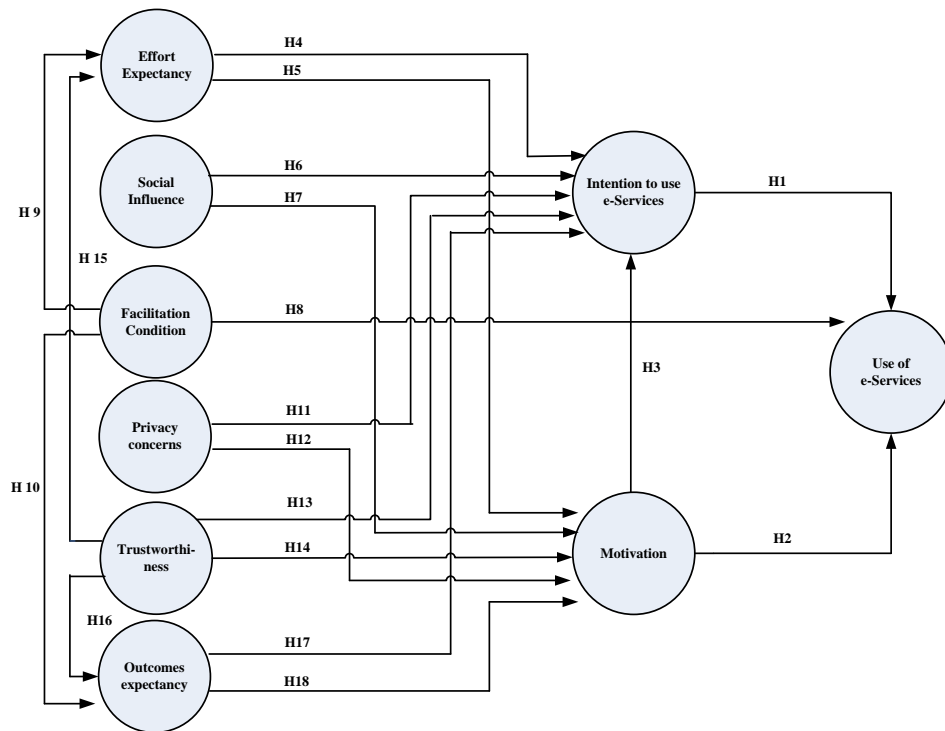


Figure 1. Research model for e-Services adoption

4. HYPOTHESES

Based on the research model, the links among the factors in Figure 1 illustrate the hypotheses. The hypotheses are presented below which have been developed based on extensive literature review. However, due to page limitation discussions on the hypotheses development is not presented here.

Hypothesis 1 (H1): *Behavioral intention to use will have a significant positive influence on consumers' use behavior.*

Hypothesis 2 (H2): *Motivation will positively influence the use of e-Services.*

Hypothesis 3 (H3): *Motivation will positively influence the intensity of consumers' behavioral intention to use e-Services.*

Hypothesis 4 (H4): *Effort expectancy will positively influence the intensity of consumers' behavioral intention to use e-Services.*

Hypothesis 5 (H5): *Effort expectancy will positively influence consumer's motivation..*

Hypothesis 6(H6): *Social influence will positively affect the intensity of consumers' behavioral intention to use e-Services.*

Hypothesis 7 (H7): *Social influence will positively influence consumers' motivation.*

Hypothesis 8 (H8): *Facilitation condition will positively influence the use of e-Services.*

Hypothesis 9 (H9): *Facilitation condition will positively influence effort expectancy.*

Hypothesis 10 (H10): *Facilitation condition will positively influence outcome expectancy.*

Hypothesis 11 (H11): *Privacy concerns will negatively influence the intensity of consumers' behavioral intention to use e-Services.*

Hypothesis 12(H12): *Privacy concerns will negatively influence consumers' motivation.*

Hypothesis 13 (H13): *Trustworthiness will positively influence the intensity of consumers' behavioral intention of using e-Services.*

Hypothesis 14 (H14): *Trustworthiness will positively influence consumers' motivation*

Hypothesis 15 (H15): *Trustworthiness will positively influence effort expectancy.*

Hypothesis 16 (H16): *Trustworthiness will positively influence outcome expectancy.*

Hypothesis 17 (H17): *Outcome expectancy will positively influence the intensity of consumers' behavioral intention to use e-Services.*

Hypothesis 18 (H18): *Outcome expectancy will positively influence consumers' motivation*

5. RESEARCH METHOD

We used a mixed methods research design to conduct this study. It consisted of three phases as follows: (i) the development of the proposed research model of the use of e-Services by an extensive literature review; (ii) the qualitative field study, which further enhanced the proposed research model of Phase (i); (iii) the quantitative survey using structured questionnaire to test the hypotheses.

According to Kaplan and Duchon (1988), combining qualitative and quantitative methods in the information systems research is an important methodological consideration. Qualitative data collection was carried out in Indonesia and the resulting research model was refined further. Three new causal linkages among factors were found, namely (i) facilitation condition and effort expectancy, (ii) facilitation condition and outcome expectancy, and (iii) effort expectancy and motivation.

5.1 Sample and Procedure

A structured questionnaire was first developed based on the research model of Figure 1. This questionnaire was then pre-tested and focus group discussions were conducted to generate the final questionnaire for the data collection via survey among the Indonesian consumers who have used Indonesia Airline e-Services.

To select the participants, a non-probabilistic sample design is adopted, namely a combination of convenience and snowball sampling (Henry, 1990). The questionnaire is distributed via paper and web-based. A total of 900 paper-based questionnaires were distributed, 780 were returned, and 768 were usable. While web-based distribution is deployed by sending 75 respondents to fill in questionnaire via webpage survey, 51 were completed. Total response rate of paper and web-based is 84%, 819 were usable. The collected data were analyzed by the Partial Least Square (PLS)-based structural equation modeling (Chin, 1998).

5.2 Measures

The nine factors described earlier (Figure 1) were measured with considerable care. The measurement scales in this study were obtained and adapted from previous studies. Minor changes in wording were necessary to suitably relate the airlines' consumer context to e-Services, as defined for this study. They were further enhanced through the field study. Some revisions were also done via preliminary study. Seven-point Likert scale ranging from 1=strongly disagree to 7=strongly agree has been used to measure all the items.

6. RESULTS

6.1 Assessment of measurement properties

The proposed research model consisted of 52 observed variables. The analysis of the research model was conducted using PLS (Chin, 1998). The model was tested through two stages: firstly, the reliability and validity of the measurement model was assessed; secondly, the structural model was assessed for testing the hypotheses. This promises that measures of the variables are reliable and valid before assessing the relationships among the variables (Barclay et al. 1995).

The reliability of individual items was assessed by examining the item loadings. Following the recommendation by Hair et al. (2007), eight items were discarded as their loadings were below 0.5. The discarded items were across two latent variables, namely outcome expectancy and e-Services

usage. The revised model with 44 items was again tested using PLS and all item reliabilities exceeded the 0.5 reliability criteria. Table 1 shows the final item loadings.

Construct	AVE	Items	Loading	Construct	AVE	Items	Loading
Effort expectancy	0.576	EE1	0.785	Trustworthiness	0.646	TW1	0.782
		EE2	0.783			TW2	0.829
		EE3	0.750			TW3	0.864
		EE4	0.775			TW4	0.745
		EE5	0.818			TW5	0.792
		EE6	0.666	Motivation	0.591	MT1	0.811
		EE7	0.727			MT2	0.598
Social Influence	0.582	SI1	0.829	Intention to use	0.672	MT3	0.869
		SI2	0.833			IU1	0.859
		SI3	0.827			IU2	0.872
		SI4	0.621			IU3	0.752
		SI5	0.678			IU4	0.792
Facilitation condition	0.755	FC1	0.870	e-Services usage	0.500	EU1	0.404
		FC2	0.886			EU2	0.439
		FC3	0.851			EU3	0.742
Outcome Expectancy	0.506	OE1	0.561			EU4	0.770
		OE4	0.515			EU5	0.726
		OE5	0.533			EU7	0.829
		OE6	0.627			EU8	0.772
		OE7	0.685			EU9	0.766
Privacy Concerns	0.784	PC1	0.906			EU10	0.624
		PC2	0.901				
		PC3	0.848				

Table 1. Item loadings and average variance extracted (AVE)

Establishing convergent validity requires average variance extracted (AVE) to be greater than 0.50 (Fornell and Larcker, 1981). For the revised model, all AVEs were greater than 0.50 (see Table 1). Internal consistency of the constructs was also tested following the procedure of Fornell and Larcker (1981), by checking composite reliability. The results of the revised model showed that all constructs had greater than the accepted level of 0.7 internal consistency (Nunnally, 1978). The internal consistencies are shown in Table 2.

	ICR	EE	SI	FC	PC	TW	OE	IU	MT	EU
EE	0.905	0.759								
SI	0.873	0.314	0.763							
FC	0.901	0.371	0.339	0.869						
PC	0.916	-0.142	-0.097	-0.199	0.885					
TW	0.901	0.596	0.351	0.393	-0.295	0.804				
OE	0.835	0.553	0.430	0.418	-0.142	0.593	0.711			
IU	0.891	0.413	0.397	0.348	-0.124	0.402	0.481	0.900		
MT	0.809	0.463	0.539	0.492	-0.138	0.506	0.569	0.571	0.769	
EU	0.895	0.360	0.244	0.150	-0.066	0.254	0.352	0.466	0.317	0.706

(ICR = Internal composite reliability. Note: the bold elements in the main diagonal are the square roots of AVE.)

Table 2. Internal consistency, Correlation of Latent Variables & Square Roots of AVE

Discriminant validity of the constructs was measured by using the square root of the average AVE and cross loading matrix (Barclay et al. 1995). The constructs in the model are believed to have acceptance discriminant validity if the square root of the AVE of a construct is larger than its correlation with other constructs. Square roots of the AVEs are shown in the main diagonal of Table 2. The off-

diagonal elements represent the correlations among the constructs. Table 2 indicates that discriminant validity of the constructs was met, which means that all the constructs are different from each other.

6.2 The Structural Model and Tests of Hypotheses

The structural model deals with testing the hypothesized relationships. Bootstrap method was used to test the hypotheses. Table 3 shows the results detailing the path coefficients and t-statistics. It is observed that hypotheses H1, H2, H3, H4, H5, H6, H7, H9, H10, H14, H15, H16, H17, and H18 are supported (significant t-values) while H8, H11, H12, and H13 are not supported (insignificant t-values). The explanatory power of the initial model can be assessed by observing the R^2 values of the endogenous constructs (Santosa et al. 2005). The model explains 23% of the variance of e-Services usage. All R^2 values are greater than the accepted level of 0.10 (Falk and Miller 1992).

Hypotheses	Path	Path coefficients (mean of subsample)	t-Value for path
H1	IU → EU	0.4290	10.967**
H2	MT → EU	0.0969	9.018**
H3	MT → IU	0.3678	1.986*
H4	EE → IU	0.1130	3.138**
H5	EE → MT	0.1157	2.212*
H6	SI → IU	0.0847	2.710**
H7	SI → MT	0.3311	9.479**
H8	FC → EU	-0.0411	1.305
H9	FC → EE	0.1643	4.286**
H10	FC → OE	0.2180	6.589**
H11	PC → IU	-0.0265	0.705
H12	PC → MT	-0.0120	0.139
H13	TW → IU	0.0170	0.434
H14	TW → MT	0.5108	3.843**
H15	TW → EE	0.5359	15.260**
H16	TW → OE	0.5108	15.364**
H17	OE → IU	0.1598	3.907**
H18	OE → MT	0.2673	6.180**

(* $p < 0.05$; ** $p < 0.01$; R^2 for e-Services Usage = 0.23; R^2 for Intention to use = 0.38; R^2 for Motivation = 0.51
 R^2 for Outcome Expectancy = 0.43; R^2 for Effort Expectancy = 0.38)

Table 3. Test of hypotheses

7. DISCUSSION

This study is aimed to identify factors influencing Indonesian consumers to use e-Services and to investigate the role of motivation on intention to use e-Services in Indonesian Airline Companies. Various observations can be drawn from our results. It is noted that our sample size was quite large (819). Any bias due to non-probabilistic sampling will therefore be minimized.

Intention to use was found to be statistically significant to positively influence e-Services usage (H1). This is consistent with the TRA and the technology acceptance concept, and validates the practical utility of the initial model. This means that consumers of e-Services usage are driven by consumers' intention to use e-Services.

Our finding suggests that motivation influences the use of e-Services directly (H2) and indirectly via intention to use e-Services (H3). The use of e-Services via intention to use is consistent with prior study by Igarbia et al. (1996) who found that motivation has an impact on actual behaviors through intention to use. This result suggests that consumers are motivated to use e-Services when they have a plan to travel. Consumer would be motivated to use e-Services without via intention to use when he/she would suddenly be encouraged to use Indonesia airline of e-Services. For instance, a consumer gets information about low-priced airline ticket from his/her friend or newspaper or television; then he

or she accesses immediately to the corresponding Indonesia airline e-Services. Motivation thus becomes a significant factor to nurture the use of e-Services of Indonesian airlines. It is therefore important to understand the antecedent factors of motivation, i.e. what nurtures the motivation of using e-Services.

Effort expectancy was found to have a significant effect on the intention to use e-Services (H4), which is consistent with the prior findings by Venkatesh et al. (2003). This study also suggests that effort expectancy influenced consumer's motivation to use e-Services of Indonesia Airlines (H5), which supports Lee et al.'s (2010) study. A possible explanation is that the consumer's intention to use and motivation will increase when the Indonesia airlines of e-Services is user friendly to Indonesian consumers.

Social influence was found to have a significant influence on motivation to adopt e-Services (H7). This is consistent with earlier findings by Wentzel (1998). Thus social influence is an important factor to nurture motivation of consumers to use airlines e-Services. Social influence was also found to have a significant effect on behavioral intention to use (H6), which is consistent with Venkatesh et al.'s (2003) argument. This result suggests that consumers' intention to use e-Services is influenced directly by their peers.

The findings of the study did not statistically support the significance of facilitation conditions on e-Services usage (H8). The literature has also shown mixed results. The lack of significance of facilitation conditions could be attributed to the fact that the respondents are very infrequent to utilize support facilities that have been provided by airline companies. As before, a possible explanation is that respondents have adequate Internet and computer background experiences, thus they do not find it complex to use e-Services. The result showed that facilitation conditions statistically influence effort expectancy (H9) and outcome expectancy (H10), which is consistent with Ngai et al.'s (2007) study. This result suggests that consumers' access and use of the Indonesia airline e-Services are influenced by the good quality of technical infrastructure and supports provided by Indonesian airlines.

Privacy concerns did not have a significant negative effect on consumers' intention to use e-Services (H11). This finding contradicts the earlier studies by Dinev and Hart (2004). The lack of statistical support for Privacy Concerns was surprising, given the support for this factor in the field study interviews. The respondents might not be anxious of misuse of their personal information that has already been submitted to use e-Services. Our results also did not find any negative impact of privacy concerns on motivation (H12). Therefore, as far as lack of motivation to use e-Services is concerned privacy concern is not an issue. One plausible explanation for our dissimilar findings to previous a study can be traced because of Indonesian culture that can be classified as having low individualism (Abdat and Pervan, 1999) may affect for this study. Information privacy for most Indonesians becomes common to share in social networks, such as married status and date of birth.

The result showed that there were significant statistical evidence to support a positive relationship between trustworthiness and effort and outcome expectancy (H15 and H16). These findings are consistent with previous studies (Chircu et al. 2000; Pavlou, 2003). Trustworthiness also influences consumers' motivation (H14). Interestingly, trustworthiness did not influence to use e-Services (H13). These findings contradict earlier studies (Pavlou, 2003; Slyke et al. 2004). Although trustworthiness has no direct relationship on intention to use, it indirectly influences through outcome expectancy and motivation.

Outcome expectancy has a significant effect on consumers' intention to use e-Services (H17). This finding is consistent with previous findings (Landry, 2003; Benbunan-Fich and Arbaugh, 2006). Outcome expectancy has also significant impact on motivation (H18). These results suggest that consumer's intention and motivation to use Indonesia airline e-Services is driven by outcomes expected by using it.

8. CONCLUSION

8.1 Contributions and Implications

This study unearthed a number of interesting findings that have both theoretical contributions and practical implications. From a theoretical standpoint, the results presented contributed to the existing literature in number ways. First, the study contributes to e-Services literature by providing insights on the factors that seem to affect the airline e-Services usage. This study suggests that motivation is a significant predictor of the use of e-Services, either directly or indirectly through intention to use. The study also found that social influence and outcome expectancy are two most important antecedent factors of motivation, followed trustworthiness and effort expectancy. Intention to use is influenced by outcome and effort expectancy, social influence and motivation. Secondly, the findings of this study did not support the factor of privacy concerns and facilitation condition as predictor of e-Services usage. Moreover, trustworthiness did not influence intention to use. These findings are not in line with most previous studies. Furthermore, the study revealed that trustworthiness strongly influences effort and outcome expectancy. Finally, this study found that intention to use was more influential than motivation in the airline e-Services acceptance.

Our findings have several implications for organizations that are interested in offering e-Services to customers, such as Airline companies in this context. The first implication is derived from the fact that social influence and outcome expectancy have an important influence on the customers' motivation and behaviors. The airline companies should consider developing supportive relationships among the peers to increase the intensity of customers' motivation to use e-Services. The airline companies should also identify most benefits that are expected by consumers. Thus, the airline companies need to be known to the prospective consumers via various marketing and promotional events to form positive motivation to use e-Services via intention.

The second implication is drawn upon the results that trustworthiness has a significant effect on motivation, effort and outcome expectancy. On the contrary, trustworthiness is insignificant on intention to use. However, trustworthiness has indirect impact on intention to use through outcome expectancy and motivation. Trustworthiness plays a very significant role because consumers must submit personal and financial data via e-Services transactions. Most consumers would be confident to do that if the airline companies have a good reputation. Airline companies, therefore, need to make planned activities in order to increase consumers' expectation in every marketing activity.

8.2 Limitation and Future Research

Although the results can be considered statistically significant in most parts, the study has several limitations that have an effect on the reliability and validity of the findings. The first limitation concerns the sample. Although the sample size quite large compared to sample size of other technology acceptance studies, it involved Indonesian consumers only. This study represents a simplification of e-Services in the Indonesia's airline industry. Furthermore, generalizability of the findings would be limited due to some features of our study. Secondly, one of our findings stated that privacy concerns did not have a significant negative effect on behavioral intention to use e-Services. This finding is inconsistent with earlier findings in the IT adoption literature in the Western context (Dinev and Hart 2006; Malhotra et al. 2004), but it is consistent with the work of Xu and Gupta (2009) in the Eastern environment (Singapore). Therefore, for the improvement of the model validity, future research could examine in different contexts in Eastern countries. Moreover, our model might also suffer from the fact that other possible factors influencing the Indonesia airline e-Services usage were not included in the model.

Finally, the core of this research model has applicability to the consumer adoption of various kinds of e-Services. Beyond the scope of e-Services, the model could also be applied to the adoption of inter-organizational systems. However, the model may require some extension and re-operationalization of constructs for the different IT applications and contexts.

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