EFFECT OF TRUST AND RISK ON PURCHASE INTENTIONS IN ONLINE SECONDARY TICKETING: SPORT CONSUMERS AND TICKET RESELLING

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ABSTRACT

The current research focused on examining how perceived risk and trust are related to consumers’ purchase intentions within the online secondary ticket marketplace. Furthermore, this study attempted to identify the relationship between perceived risk and trust associated with online secondary ticketing. The Structural Equation Modelling (SEM) method with a convenience sample of 302 participants was employed to analyse the conceptual framework and psychometric property of the scale. The results indicate that trust significantly and negatively influenced perceived risk and trust exerts a significant impact on consumers’ purchase intentions of online secondary tickets. Consumers’ perceived risk had a direct negative effect on consumers’ online purchase intentions of secondary ticketing. However, the findings of the current study showed that the impact does not reach a significant level. These results and future implications for practical and theoretical research are also discussed.

Key words: Sport consumer; Online secondary ticketing; Trust; Perceived risk.

INTRODUCTION

Online secondary ticketing is a market where sport and event tickets are resold to the public after being originally purchased by the public from the primary seller (Drayer et al., 2008). The online secondary ticket market is an estimated $5 billion business that continues to grow at an annual rate of 12% (Schroeder, 2013). A couple examples of this international market are ‘Viagogo’ – Europe’s biggest online secondary ticket company and partner with the French Tennis Federation – and ‘Webtickets’, a leading online ticket company in South Africa (iSportConnect, 2012; eCommerceNews, 2014). While the growth and popularity of the online secondary ticket market has created economic benefits for both sport fans and online secondary ticket providers, criticism of reselling tickets on the Internet has been raised related to areas, such as ticket scams and fraud (Giovanetti, 2013). Even though companies strive to provide a safe and secure ticket-purchasing experience, consumers are not free from perceived risk when they purchase a particular product or service on the Internet (Chang & Chen, 2008).

Because of the continued rise in usage and business in the online secondary ticket market and the often uncertainty that accompanies transactions in the cyber marketplace (Cozart, 2010),
the principal question of the current research is whether ‘risk’ and ‘trust’ play a crucial role in consumers’ online secondary ticket purchase intentions. Several studies have suggested that trust is a critical success factor for e-commerce (Crowell, 2001; Kesharwani & Bisht, 2012; Kim et al., 2007), and ‘risk’ negatively influences consumers’ willingness to buy tickets online (Im et al., 2008; Kim et al., 2005). For instance, Kesharwani and Bisht (2012) asserted that ‘trust’ is an antecedent of ‘risk’, reducing behavioural uncertainty and associated risks in e-commerce transactions. According to Yousafzai (2010), consumers’ beliefs can be increased by ‘trust’ in an online environment and ‘trust’ plays a significant role in reducing perceived ‘risk’ involved in online transactions with e-retailers.

However, some researchers challenge the argument that ‘trust’ reduces perceived ‘risk’. For example, Pavlou (2003) noted that perceived ‘risk’ is significantly and positively related to ‘trust’ in the online marketplace because perceived ‘risk’ is a potential determinant of ‘trust’. Yousafzai (2010) also emphasised that online ‘trust’ can be increased by diminishing perceived environmental ‘risks’, such as perceived security and privacy. As a result, there has been no consensus in the literature related to online ‘trust’ and perceived ‘risk’. Furthermore, only limited research within the sport management context has explained the relationships among ‘trust’, ‘risk’ and ‘purchase intentions’ associated with online ticketing. In particular, no study in this area has empirically investigated how perceived ‘risk’ and ‘trust’ are associated with consumers’ purchase ‘intentions’ in online secondary ticket websites. Sport consumers, according to Stewart et al. (2003), can be regarded as customers who purchase sporting game and event tickets regularly or occasionally.

Little effort has been devoted to understand the needs of sport consumers associated with online secondary ticketing. Furthermore, just like other non-sport e-commerce websites, these sport ticket reselling portals can have uncertain and risky factors, such as scalpers, hackers, and unknown new technologies (Cozart, 2010). More importantly, compared to the online primary ticket process, there are more risk factors in online secondary ticketing transactions, such as counterfeit tickets offered by unauthorised sellers (Ahn et al., 2014).

FOCUS OF RESEARCH

This research focuses on how perceived ‘risk’ and ‘trust’ are related to sport consumers’ purchasing ‘intentions’ when they buy tickets through online secondary ticket websites. In addition, this study seeks to identify the relationship between perceived ‘risk’ and ‘trust’ associated with online secondary ticketing. Results from this investigation will enlighten online secondary ticket providers to consumers’ ‘trust’ and ‘risk’ perceptions, as well as help ticket reselling professionals better understand the needs of sport consumers related to online secondary ticketing transactions. The following section describes the theoretical background related to each hypothesis in this study.

LITERATURE REVIEW

Trust
Various scholars who have studied online transactions have indicated that trust is a significant element for the success of e-businesses because the online transaction is challenging since there are no physical interactions between sellers and buyers (Lai et al., 2013). Trust can be defined as consumers’ positive expectations that the online shopping and transaction processes are safe (Wu et al., 2008). According to Wang (2003), consumers are likely to make decisions about online shopping stores based on their degree of trust and this trust (or lack thereof) has an effect on consumers’ behaviours. Thus, a lack of trust produces negative consumer attitudes toward web stores (Keshawani & Bisht, 2012).

**Perceived risk**

According to Mayer et al. (1995), trust is essential when uncertainty in the results of future events exists. In other words, trust and perceived risk are connected features, which influence consumers’ choices because not all actions of consumers can happen with complete certainty (Chen & Dhillon, 2003). Perceived risk in online e-commerce can be defined as consumers’ perceptions about the potential negative outcomes from online transactions (Kim et al., 2007). Kim et al. (2005) indicate that perceived risk is a crucial barrier for online consumers when they purchase products or services on the Internet. In addition, perceived risk originating from uncertainty can convey more negative outcomes involved with consumers’ purchasing behaviours (Kim et al., 2009). Thus, it is expected that perceived risk could influence consumers not to engage in online transactions.

**Relationships among trust, perceived risk and purchase intentions**

In e-commerce transactions, consumers tend to choose websites or companies that they trust in order to minimise potential risks. For that reason, the concept of trust also involves perceived risk and scholars have examined this trust-risk relationship (Gefen, 2002; Yousafzai, 2010). One of the primary arguments for the relationship between trust and perceived risk is that positive expectations from consumers can reduce the perceived uncertainty. In other words, trust provides a solution for particular problems of perceived risk and it is expected that trust is an antecedent of perceived risk (Gefen, 2002; Kim et al., 2007). In addition, trust can improve consumers’ beliefs about online transactions and trusted websites can reduce perceived risks (privacy, security issues) associated with environmental uncertainty in the Internet (Lai et al., 2013). Based on these expectations and relationships, the following is the first hypothesis related to the study’s proposed model:

**H1:** Trust is negatively associated with perceived risk in online secondary ticketing.

As mentioned earlier, the degree of trust and perceived risk will have an effect on consumers’ purchase intentions in the online environment. According to Pavlou (2003), the concept of purchase intention is defined as individuals’ willingness and intentions to make an online purchase. Several scholars have indicated that trust is a crucial factor in influencing purchase intentions (Gefen, 2002; Pavlou, 2003). For instance, consumers with a higher degree of trust in retailers are likely to have a higher degree of purchase intentions (Gefen & Straub, 2003) and there is a direct relationship between trust and purchase intentions (Grabner-Krauter & Kaluscha, 2003). Thus, trust can be a powerful factor that leads to consumers’ purchase intentions. According to Fam et al. (2004), consumers’ overall purchase decisions tend to increase with a renowned website, which influences their trust towards that particular website. Several scholars also indicate that trust plays a crucial role in attracting customers to make a purchase (Reichheld & Schefter, 2000; Kuan & Bock, 2007). For example, Kuan and Bock
(2007) found that a positive relationship exists between trust and purchase intentions in online grocery shopping.

The risk that a consumer perceives also has been found to have a significant influence in the consumer purchasing process. Many efforts have been devoted to understand the relationship between perceived risk and purchase intentions (Jarvenpaa et al., 2000; Gefen, 2002; Kim et al., 2007; Chang & Chen, 2008). According to Chang and Chen (2008), perceived risk has an influence on purchase intention and consumers tend to purchase less products when their perceptions of risk increase. Gefen (2002) also suggest that consumers with low perceived risk are more likely to engage in purchasing activities than consumers with high perceived risk. In an online environment, the spatial gap between consumers and e-retailers generates more unpredictability and uncertainty in purchasing transactions. Especially, Internet threats, such as hacking and phishing, lower consumers’ behavioural intentions to engage in online transactions (Kesharwani & Bisht, 2012). Therefore, perceived risk can be negatively related to consumers’ purchase intentions. Based on the preceding review of consumer characteristics in the online purchasing environment, the following are the final two hypotheses presented relating to the proposed model:

**H2**: Trust is positively associated with purchase intentions in online secondary ticketing.

**H3**: Perceived risk is negatively associated with purchase intentions in online secondary ticketing.

**METHOD**

**Sample and procedures**

The sample for this investigation was from undergraduate students at an institution of higher education located in Northeastern region of the United States. The sample is suitable for this study because college students are actively involved in various online ticketing activities (concerts) and arguably better understand how to use secondary ticket websites compared to other segments of the population. Sport marketing professors assessed face and content validity and the questionnaire was slightly changed based on their comments. After receiving permission from the Institutional Review Board (IRB), a self-administered survey was distributed in various business-related courses.

To investigate experiences associated with online secondary ticketing, respondents were asked to answer whether they had ever purchased secondary ticket online for sport events. While 372 students responded and submitted questionnaires, there were 70 of the respondents who were eliminated due to them providing incomplete answers or because they did not use secondary ticket websites for sport events. Thus, 302 questionnaires were used for the data analysis in this investigation. Of the sample, 60.9% of the participants were male and 39.1% female. The vast majority (88.1%) of the respondents were Caucasian and the highest remaining racial and ethnic percentages in the study were Hispanic (6%), African American (3%), Asian (1.3%) and Native American (0.3%).

**Measures**

In addition to several demographic variables, the questionnaire contained 3 major research constructs pertaining to the areas of perceived risk (PR), trust (PT) and purchase intention (PI).
All 3 constructs were measured on a 7-point Likert-type scales ranging from 1 (strongly disagree) to 7 (strongly agree). Three items of the trust scale were adopted and modified from the Jarvenpaa et al. (2000) study. The scales to measure perceived risks with 3 items were modified from the work by Featherman and Pavlou (2003). The purchase intention scale measures sport consumers’ intention to purchase tickets from a secondary ticket website in the future. The scale for measuring purchasing intention was adopted and modified from the study by Im et al. (2008). Internal consistency for reliability was calculated using Cronbach’s alpha. The reliabilities of the variables ranged from 0.78 to 0.88, all of which exceeded the minimum cut-off Cronbach’s alpha level of 0.70 (Nunnally & Bernstein, 1994). However, in Structural Equation Modelling (SEM) studies, it is recommended to assess construct reliability (standardised loadings, measurement error for each item) for the measurement and structural models (Shook et al., 2004). Thus, construct reliability assessment was performed with this study and the results of this testing are revealed in Table 1.

<table>
<thead>
<tr>
<th>Factor and items</th>
<th>Loading</th>
<th>CR</th>
<th>AVE</th>
<th>Means</th>
</tr>
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<tbody>
<tr>
<td>Trust (α = 0.89)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>TR 1:</td>
<td>0.78</td>
<td>0.83</td>
<td>0.62</td>
<td>5.06</td>
</tr>
<tr>
<td>Based on my experience with the website in the past, I know it cares about customers</td>
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<td></td>
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<tr>
<td>TR 2:</td>
<td>0.80</td>
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<td>5.07</td>
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<tr>
<td>Based on my experience with the website in the past, I know it is predictable</td>
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<tr>
<td>TR 3:</td>
<td>0.79</td>
<td></td>
<td></td>
<td>5.19</td>
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<tr>
<td>Based on my experience with the website in the past, I know it is trustworthy</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Perceived risk (α = 0.88)</td>
<td>0.81</td>
<td>0.62</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PR 1:</td>
<td>0.71</td>
<td></td>
<td></td>
<td>2.87</td>
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<tr>
<td>The security systems built into the website are not strong enough to protect my checking account.</td>
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<tr>
<td>PR 2:</td>
<td>0.78</td>
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<td></td>
<td>2.85</td>
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<tr>
<td>What are the chances that using the website will cause you to lose control over the privacy of your payment information?</td>
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<td></td>
<td></td>
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<tr>
<td>PR 3:</td>
<td>0.82</td>
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<td></td>
<td>2.85</td>
</tr>
<tr>
<td>My signing up for and using the website would lead to a loss of privacy for me because my personal information would be used without my knowledge.</td>
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<tr>
<td>Purchase intention (α = 0.89)</td>
<td></td>
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<td></td>
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<tr>
<td>PI 1:</td>
<td>0.76</td>
<td>0.83</td>
<td>0.63</td>
<td>5.38</td>
</tr>
<tr>
<td>I predict I would purchase tickets from the website.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>PI 2:</td>
<td>0.78</td>
<td></td>
<td></td>
<td>5.03</td>
</tr>
<tr>
<td>The website would be one of my favourite technologies for purchasing tickets</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>PI 3:</td>
<td>0.84</td>
<td></td>
<td></td>
<td>5.26</td>
</tr>
<tr>
<td>I intend to purchase tickets from the website.</td>
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Data analysis
The collected data and the psychometrics of the scale were analysed with the SPSS 20.0 and AMOS 20.0. Descriptive statistics and internal consistency reliability were examined by SPSS. Prior to testing, the proposed model, a Confirmatory Factor Analysis (CFA) (reliability, convergent validity, discriminant validity), was analysed to examine the appropriateness of the latent factors. Then SEM was conducted to test the hypothesised relationships among constructs. To assess adequately the goodness-of-fit and the parsimony of the proposed model, a chi-square with related degrees of freedom (df), the Root Mean Square Error of Approximation (RMSEA) and the Comparative Fit Index (CFI) were examined.

RESULTS

Measurement model

The CFA of the measurement model was analysed to identify the relationships observed and latent variables. The RMSEA, CFI and the Tucker-Lewis Index (TLI) were examined in order to assess adequately the goodness-of-fit and parsimony of the model. The measurement model was found to be at an acceptable level of S–B χ²/df ratio (2.49; p<0.001), which is lower than the recommended threshold of 3.0 (Kline, 2005). Other fit indices also showed that the measurement model fit the data well (RMSEA=0.07, CFI=0.98, NFI=0.97, IFI=0.98, TLI=0.97).

FIGURE 1. MEASUREMENT MODEL

The construct reliability of measures for each of the latent variables ranged from 0.88 to 0.96, all of which exceed the recommended standard of 0.70 (Nunnally & Bernstein, 1994). Convergent validity was measured through an examination of both the significance of factor loadings and the Average Variance Extracted (AVE). All loadings were statistically significant at the 0.001 level and all of the AVEs were greater than 0.50, thus demonstrating convergent validity (Fornell & Larcker, 1981). Discriminant validity was measured through a correlation
analysis among the latent factors (Table 2). The estimated correlations between the latent factors were lower than the 0.85 recommended threshold (Kline, 2005).

**TABLE 2. FACTOR CORRELATIONS BETWEEN CONSTRUCTS**

<table>
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<th></th>
<th>TR</th>
<th>PR</th>
<th>PI</th>
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<tbody>
<tr>
<td>TR</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>PR</td>
<td>-0.55</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>PI</td>
<td>0.77</td>
<td>-0.39</td>
<td>—</td>
</tr>
</tbody>
</table>

TR=Trust PR=Perceived Risk PI=Purchase Intention

**Structural model**

The structural model was tested to understand further the hypothesised relationships of each construct. The overall model fit of the SEM analysis was acceptable ($S-B \chi^2/df$ ratio= 2.73, $p < 0.001$; RMSEA=0.086; CFI=0.95; NFI=0.92; IFI=0.95, TLI=0.94). In addition, Table 3 summarises path coefficients for the hypothesised relationships for $H1$, $H2$, and $H3$. The results of the SEM testing indicate that all of the path coefficients for the 3 hypotheses were well balanced. A significant path coefficient (-0.55; $p<0.05$) was found from trust to perceived risk ($H1$). Consistent with the hypothesis expectations put forward above, there was a negative relationship between trust and perceived risk. The path coefficient of trust to purchase intention was 0.77, which means that trust was found to be a significant predictor of purchase intentions ($H2$). Furthermore, the path coefficient of perceived risk to purchase intentions was 0.02 ($H3$). As expected, the influence of trust was positive while the influence of perceived risk was negative.

![Figure 2: Proposed Model](image)

**FIGURE 2. PROPOSED MODEL**

**TABLE 3. ANALYSIS OF PROPOSED MODEL**
DISCUSSION

The current study focused on examining how trust and perceived risk influence sport consumers’ purchase intentions within the online secondary ticket marketplace. In addition, this research identified the relationship between trust and perceived risk associated with online secondary ticketing. The SEM results supported the study’s first hypothesis (H1) that trust significantly and negatively influenced perceived risk. This first finding is consistent with a previous study that trust might be a key antecedent factor of perceived risk (Gefen, 2002). This result is in line with earlier research that found that trust plays a significant role in reducing risk factors in the online environment (Kim et al., 2007). Thus, an increase in consumer trust might be related to a reduction in perceived risk in online transactions.

Sport marketers and managers can use this concept to make more reliable and trustworthy online environments in order to decrease some harmful elements (security issues, privacy concerns, non-immediate responses, technical problems), that at the time are affiliated with online secondary ticket websites. Providing precise regulations and consumer protection programmes make online secondary ticket websites more trustworthy and responsible. For instance, such websites should provide specific functions (frequently asked consumer questions), and options (online live chatting services), so that sport consumers can better understand the website operators’ attitudes and approaches related to problem-solving. Sport consumer behaviour and management professionals should create different marketing strategies for various sport consumer groups on both how to increase online trust and how to minimise perceived risk. Consumers should also be cautious when dealing with unauthorised ticket resellers as some unscrupulous ticket brokers and entrepreneurs can at times take advantage of their online buyers.

The research findings of the current investigation also supported the second hypothesis (H2) that online trust exerts a significant impact on consumers’ purchase intentions of online secondary tickets. This finding is in line with previous studies of Gefen (2002) and Pavlou (2003), and can be explained by noting that increases in trust, will directly and positively affect the purchase intentions of consumers. When a consumer purchases a sport industry ticket in the physical world, there are many potential bases of trust, such as a seller’s professional appearance or location. However, the online secondary ticket market has no physical cues and personal interactions and, furthermore, involves more risk than the general online, primary ticket market. Therefore, sport practitioners need to recognise that the real possible way to improve consumers’ purchase intentions for secondary tickets is to provide structural assurance, such as guarantees, which are important to build consumers’ trust in online transactions. This

<table>
<thead>
<tr>
<th>Path</th>
<th>Estimate</th>
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<tbody>
<tr>
<td>TR → PR</td>
<td>0.079</td>
<td></td>
</tr>
<tr>
<td>TR → PI</td>
<td>0.164*</td>
<td></td>
</tr>
<tr>
<td>PR → PI</td>
<td>0.658*</td>
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</table>

S-B \( \chi^2/df=2.73; \) RMSEA=0.086  
CFI=0.95;  NFI=0.92;  IFI=0.95;  TLI=0.94;  AIC=303.43

TR= Trust  PR= Perceived Risk  PI= Purchase Intention  * p <0.05
trust will then result in consumers’ performing actions, such as buying a ticket. Furthermore, detailed descriptions about customer support and service should be mentioned clearly on online secondary ticket websites in order to assist and ease the mind of consumers in their purchase processes.

Regarding the third hypothesis (H3) that consumers’ perceived risk has a direct negative effect on consumers’ online purchase intentions of secondary ticketing, the findings of the current study showed that the impact does not reach a significant level. Therefore, this finding does not match with the past studies of Gefen (2002) and Kesharwani and Bisht (2012). One possible explanation for this novel finding could be that perceived risks are not significantly related to consumers’ purchase intentions could be presented as an example. Certain consumers can simply make a risky online transaction with a low level of trust because there may be a highly discounted price. Alternatively, there may be some powerful incentives from a suspicious online seller that works to attract consumers into making a purchase decision. Furthermore, consumers may become less sceptical of online secondary ticket websites if those ticket-reselling portals offer some protection or potential reimbursement. Some recent online secondary ticket vendors have adopted new technologies and improved their expertise and offerings, which have in turn decreased the often latent risks that are at times associated with online transactions. For instance, a number of sellers include pictures of the secondary tickets with their websites, which may protect consumers from scammers. Thus, consumers’ purchase decisions can be made with a decreased concern related to the perceived risks involved with online secondary ticketing.

By identifying the relationship between trust, perceived risks and purchase intentions, this study provides a better understanding of the influences of trust and perceived risk on online secondary ticket websites. The current investigation sought to provide theoretical explanations and empirical validation of the understanding of the psychological components of consumers, as well as their behavioural intentions, especially how trust and perceived risk are linked to consumers’ purchase intentions. Therefore, the proposed theoretical model in this study might be helpful to understand consumers’ needs and concerns when they buy secondary tickets from online vendors. The results of this study also strongly support that trust plays a significant role to increase consumers’ purchase intentions, as well as to decrease risk perceptions associated with online secondary ticket websites.

Although the findings of this research provide some new insights to researchers and suggestions for practitioners, there are some limitations. The sample of the current study focused on only student populations who already have some experiences in engaging with online purchase transactions. This research did not include potential customers who may not have experience of the online secondary ticketing process, but have some intentions to engage in online purchase activities. By including these potential customers, it would enhance the generalisability of the results. It is recommended that future studies identify the impact of gender differences with the proposed model in this research because Jayawardhena et al. (2007), indicated that gender has a critical influence on online purchase intentions. Furthermore, it is proposed that an evaluation be made of the differences among online secondary ticketing, general online ticketing and on-site ticketing in terms of consumers’ psychological components (trust, perceived risk). The reason for this suggestion for future research is that online secondary ticketing has more perceived risk than other ticketing environments (Giovanetti, 2013).
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REFERENCES


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