I Am off Then: Drivers of Travellers' Intentions to Book Trips Online
An Integrated Study on Technology Acceptance and Satisfaction

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Abstract: The tourism industry has undergone a substantial transformation since the emergence of electronic commerce. Especially travel agencies that are faced with growing online competition are increasingly dependent on achieving online sales. This study investigates antecedents of consumers' intention to book a trip online at a travel agency's website. The research draws on an integrated research model based on the technology acceptance model and customer satisfaction as introduced in the DeLone and McNeal model on information system success. An online survey among 292 consumers largely supports the hypothesized impact factors. Information quality serves as a significant object-based belief that influences satisfaction as an object-based attitude. In contrast, system quality has no impact on satisfaction. Satisfaction influences perceived usefulness, a key driver of online booking intention and perceived ease of use. The study provides several scholarly and managerial implications for the online distribution of tourism services.

1 INTRODUCTION

Online distribution of services constantly increased significantly the last years. One service sector that experienced substantial transformation is the tourism and travel industry. Travel agencies are a prominent example of e-commerce-induced disintermediation since their business has been increasingly replaced by direct online distribution of flights, hotel rooms, rental cars, organized tours, and other travel services. Worldwide, sales of traditional offline travel agencies are declining sharply (eMarketer, 2012).

However, travel agencies can offer online service provision themselves and thus defend their position in the distribution of tourism services. Many travel agencies operate websites that offer online search and online booking tools. The emergence of online mediators such as Expedia.com demonstrates that there is a significant demand for online platforms that offer a variety of tourism services which complement service providers' Web presences, such as airline or hotel websites. Furthermore, travel agencies frequently offer services that differ from single travel components. Especially when it comes to packaged tours or holiday arrangements travel agencies take the work of selecting the trip

components out of the consumers' hands. Further, from a legal perspective, consumers who book services via a domestic travel agency may be in a better position in case of a dispute as their domestic law is applied instead of the law of the foreign country the service provider (e.g., a hotel) resides in.

Hence, despite the increased competition by tourism service providers, online intermediaries, and even consumers who plan their trips themselves, travel agencies offer a substantial value-added. On the other hand, more and more consumers expect online booking facilities and therefore travel agencies are increasingly dependent on attracting consumers who prefer to book online. The most obvious measure for a travel agency to gain online consumers is operating a website and/or mobile application that allows online booking of trips or single tourism services. For this purpose, deeper insights into drivers of online purchasing behavior are of crucial importance for travel agencies.

Although extensive research has been done on online consumer and purchasing behavior, findings on online booking behavior on travel agencies' websites are still limited. There is especially incomplete knowledge on antecedents that are based on external stimuli which can be controlled by companies when designing their websites. In order

to shed light on a comprehensive model on drivers of online booking intentions, we develop a research model that integrates two seminal theories in information systems (IS) and e-commerce research: the technology acceptance model (TAM; Davis, 1989) and the notion of satisfaction grounded in the DeLone and McNeal information system success model (DeLone and McLean, 1992; DeLone and McLean, 2003). In doing so, our study follows the theoretical approach developed by Wixom and Todd (2005) and further extended by Xu et al. (2013). In line with the suggestion by Ajzen and Fishbein (1980), we contend that online booking intention is the result of a chain of impacts that starts with external stimuli that lead to object-based beliefs (information quality and system quality) and object-based attitude (satisfaction with the website) which itself influences behavioral beliefs and behavioral attitudes or behavioral intentions (Wixom and Todd, 2005; Xu et al., 2013). The proposed structural model is tested with data collected from an online survey among 292 consumers. The partial least squares (PLS) analysis results confirm most of the proposed hypotheses.

The study contributes to research by stressing the relevance, particularly of information quality, and satisfaction for booking intention on travel agencies' websites. It further demonstrates the relevance of the TAM in the online journey booking context. This research also offers important managerial implications by showing key design issues of travel agencies' websites to maximize online booking intention. The paper is organized as follows: The next section presents the theoretical background, particularly on the TAM and the role of service quality and satisfaction in the online tourism sector. The following section three presents the research model and the hypotheses development. The subsequent section four shows the research methodology of the survey. Section five presents the results which are discussed in section six. The paper proposes research and managerial implications and closes with further research directions.

2 THEORETICAL BACKGROUND

2.1 TAM and Satisfaction in Online User Behavior

Like other IS-related issues on user behavior, online consumer behavior, especially usage and intention to use has been extensively and successfully investigated through the theoretical lens of TAM (Davis, 1989; Davis et al., 1989). TAM is grounded in the theory of reasoned action (TRA; Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975) and its extension, the theory of planned behavior (TPB; Ajzen, 1985; Ajzen, 1989). TPB extends the notion of TRA that beliefs influence attitudes which themselves have an impact on behavioral intentions. The TAM applies this theory to the context of IS usage where perceived usefulness (PU) and perceived ease of use (PEOU) are considered main drivers of behavioral attitude, intention, and behavior. PU, the main impact factor, is defined as "the degree to which a person believes that a particular system would enhance his job or performance" (Davis, 1989, p. 320) while PEOU is a secondary impact factor and denotes "the degree to which a person believes that using a particular system would be free of effort" (Davis, 1989, p. 320). Further, PEOU has an indirect positive impact on system usage via PU (Davis, 1989).

In IS and e-commerce research TAM was constantly extended and further developed. An early extension was suggested by Davis (1993) who considers system design features an external stimulus that precedes PU and PEOU. In e-commerce research TAM was applied and extended to predict website use and online shopping behavior in numerous studies (for example Ahn et al., 2004; Ha and Stoel, 2009; Klopping and McKinney, 2004; Lin and Lu, 2000; Liu and Forsythe, 2010; McCloskey, 2004; McCloskey, 2006; Moon and Kim, 2000; Shih, 2004; Wang and Benbasat, 2005). Significant modifications of TAM in the context of e-commerce and WWW usage were made by Gefen and Straub (2000), Lederer et al. (2000), Teo et al. (1999), and Klopping and McKinney (2004) who successfully simplify the TAM model by eliminating behavioral attitude and confirming a direct impact of PU and PEOU on behavioral intention. Another significant contribution was made by researchers who drew on Davis' (1993) extension of TAM by external stimuli. Several researchers adopted the components of the DeLone and McLean IS success model (DeLone and McLean, 1992) or the updated DeLone and McLean IS success model (DeLone and McLean, 2003) including information quality, system quality, and service quality (see Brown and Jayakody, 2008 for a review). Examples of studies using information quality, system quality, and service quality as extensions of TAM in e-commerce are Shih (2004) and Ahn et al. (2004). Another construct of the DeLone and McLean model,

satisfaction, was compared with TAM (Wang, 2008) or successfully integrated into TAM-based research on system use as in the seminal studies by Wixom and Todd (2005) and Xu et al. (2013). These studies consider object-based beliefs in the form of information quality and system quality (Wixom and Todd, 2005) as well as service quality (Xu et al., 2013) as antecedents of object-based attitude, expressed as satisfaction with these quality dimensions which further influence PU and PEOU.

2.2 Consumer Behavior in Online Tourism

The tourism industry is characterized by a number of particularities that differentiate it from other domains, such as durable and non-durable consumer goods. Like many services, tourism services are perishable, non-storable, differing in quality, and largely influenced by the consumers themselves. Particularly vacation trips can be highly complex products consisting of a number of single components that are difficult to assess by consumers. Since the prices of travel products are usually high in relation to the income, consumers travel rather rarely and thus are often not very experienced (Järveläinen, 2007). Travel services are further a typical experience good, that is, consumers can evaluate it only after consumption. As a result, consumers' expectations when purchasing travel services are different from expectations when purchasing physical consumer goods. For example, prior to booking, consumers need information on hotel locations, flight times, or costs and distances of rental cars or public transportation (Petre et al., 2006). Thus an e-commerce site that offers tourism services needs to provide necessary information that allows a sufficient assessment of the travel products prior to booking a trip.

The tourism industry is one of the service sectors that was most influenced by e-commerce (Kim et al., 2011; Lin et al., 2009). Especially the number of traditional offline travel agencies declined with increased competition from service providers such as airlines or hotels, but also online intermediaries like Expedia or Travelocity. Worldwide total travel sales reached estimated $ 962 billion in 2012, with $ 374 billion or 38.9 percent share achieved online. In the United States this share is 51.5 percent, in Europe it amounts to 45.1 percent.

Classical travel agencies were constantly losing market shares. This development can be observed throughout Western Europe where in 2012 only a fifth of trips was booked via travel agencies while in 2008 it was every third trip (Hotelmarketing.com, 2013). Data from the United States indicate that this trend does not necessarily affect travel agencies as an institution, but the offline distribution channel. In 2011, 91 percent of active travelers booked their trips online whereas the traditional offline travel agency was employed in 9 percent of the cases. 62 percent of travelers used online travel agencies, followed by branded supplier sites (e.g., airlines) with 46 percent, meta search sites (14 percent) and collective buying as well as private sales sites (5 percent each; Mashable, 2013). This evidence stresses the relevance of the Internet as a distribution channel that is increasingly becoming a "must" for travel agencies. Whereas these figures evoke the impression that travel agencies are in a good position in the online business, these numbers also show that particularly classical travel agencies nowadays are faced with a much larger and more complex competition than they were in the declining offline distribution. For example, travel agencies are becoming increasingly challenged by online platforms such as Expedia.com in the domain of packaged tours (Dooley, 2009), a very important business segment of travel agencies.

Online consumer behavior in the tourism industry was subject of several empirical studies. Particular focus is put on satisfaction and website quality. For example, Jeong et al. (2003) investigate website quality and information satisfaction as impact factors of behavioral intention. Law and Ngai (2005) consider the usability of a website a key dimension of website quality. Tsang et al. (2010) analyze dimensions of service quality of travel agencies and distinguish website functionality, information quality and content, fulfillment and responsiveness, safety and security, appearance and presentation, and customer relationship and confirm their significant impact on satisfaction. The relations between process and outcome quality, satisfaction, and behavioral intention are investigated by Chen and Kao (2010). Similar findings are achieved by Hsu et al. (2012) who add perceived playfulness and perceived flow as variables. A comprehensive model including website quality, satisfaction, trust, attitude, and behavioral intention is provided by Wen (2012).

Also research based on TAM was carried out in several empirical studies. TAM was augmented with various factors, such as trust and perceived risks (Nunkoo and Ramkissoon, 2013), task ambiguity, product complexity, and consumer experience (Järveläinen, 2007), or more comprehensive sets of variables like website content issues, previous visits, and accessibility (Kaplanidou and Vogt, 2006).

Chang et al. (2012) integrate perceived website quality into the TAM by considering perceived website quality gain and loss (quality appraisal) as antecedents of PU and PEOU. Quality appraisal is derived from the IS success model by DeLone and McLean (2003) and is composed of information, system, and service quality. Park et al. (2007) investigate the impact of several dimensions of website quality including PEOU on willingness to use. Ryan and Rao (2008) test the TAM in the tourism context in its original form, supplemented by system security. The above-mentioned studies highlight the appropriateness of the TAM as well as the DeLone and McNeal IS success model for explaining drivers of website use in the context of traveling and tourism.

3 RESEARCH MODEL AND HYPOTHESES DEVELOPMENT

The proposed research model is grounded in TAM and its extension by Wixom and Todd (2005). In line with the original DeLone and McLean IS success model (DeLone and McLean, 1992), Seddon (1997), and Wixom and Todd (2005), we consider two dimensions of website quality perception, that is information quality and system quality, as we are solely focusing on the intention to use a travel agency's website and not the full offered spectrum of a travel agency's services.

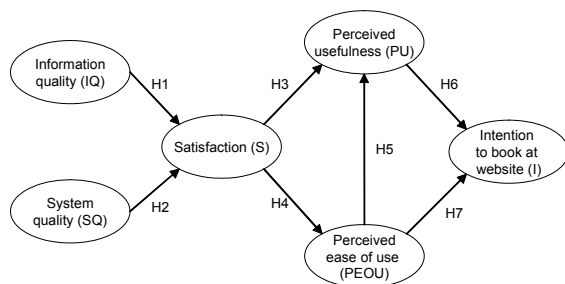Figure 1 summarizes the research model.

Figure 1: Research model.

TAM proposes that behavioral attitudes and behavior are driven by the behavioral beliefs PU and PEOU. As Wixom and Todd (2005) and Xu et al. (2013) argue, these behavioral beliefs are themselves influenced by object-based beliefs and attitudes. In particular behavioral beliefs are influenced by object-based attitudes, that is, satisfaction with the system, which itself is impacted by object-based

beliefs, that is, quality perceptions. This approach is different from research that suggests quality perceptions as direct antecedents of PU and PEOU (Ahn et al., 2004; Shih, 2004).

Among the quality perception variables, information quality denotes the perceived quality of the offered content. Information quality should assist consumers in their shopping process by facilitating the comparison of products, increasing enjoyment, and improving decision-making. In the context of e-commerce, information quality is related to the content of the website (Ahn et al., 2004). Characteristics that represent information quality are timeliness, completeness, and accuracy of information (DeLone and McLean, 2003). We thus contend that websites that fulfill these criteria are perceived as well-performing on information quality. System quality describes the technical performance as well as the design of the web site as an information system and thus refers to the engineering perspective (Ahn et al., 2004). Perceived system quality includes attributes such as reliability, flexibility, or availability (DeLone and McLean, 2003; Wixom and Todd, 2005) as well as functionality that may influence an online shopping process (Shih, 2004).

There is ample e-commerce literature that demonstrates the relevance of information quality and system quality for perceptions of website quality (for example Aladwani and Palvia, 2002; Kim and Stoel, 2002; Lin and Lu, 2000; Liu and Arnett, 2000). While Wixom and Todd (2005) differentiate between information and system satisfaction and Xu et al. (2013) further introduce service satisfaction, we consider a more parsimonious model including general satisfaction with the website as proposed by DeLone and McLean (2003). We thus hypothesize:

H1: Perceived information quality of the website positively influences satisfaction with the website.

H2: Perceived system quality of the website positively influences satisfaction with the website.

Satisfaction with a website is an attitude toward an object (Ajzen and Fishbein, 1980; Wixom and Todd, 2005) that can be understood as an external variable that influences behavioral beliefs, namely PU and PEOU (Xu et al., 2013). Since PU is understood as the perceived degree to which a system increases the performance of the undertaken task (Davis, 1989), Wixom and Todd (2005) conclude that higher information satisfaction will be positively associated with PU. Likewise, as PEOU describes the perception that using a system does not require much effort (Davis, 1989), satisfaction with the system is expected to impact PEOU (Wixom and

Todd, 2005). In our more parsimonious approach, we expect that the object-based attitude satisfaction will positively influence the behavioral beliefs simultaneously. We therefore hypothesize:

H3: Satisfaction with the website positively influences perceived usefulness of the website.

H4: Satisfaction with the website positively influences perceived ease of use of the website.

The remaining variables are directly derived from the rich literature on TAM which consistently investigates and empirically confirms the impact of the behavioral beliefs PU and PEOU on behavioral attitude (for example Ahn et al., 2004; Ha and Stoel, 2009; Lin and Lu, 2000; McCloskey, 2004; McCloskey, 2006; Shih, 2004) or, in a more parsimonious way, on behavioral intention (Gefen and Straub, 2000; Klopping and McKinney, 2004; Lederer et al., 2000; Teo et al., 1999). In line with this literature as well as Wixom and Todd (2005) and Xu et al. (2013), we hypothesize:

H5: Perceived ease of use of a website positively influences perceived usefulness of the website.

H6: Perceived usefulness of a website positively influences the intention to use the website for booking.

H7: Perceived ease of use of a website positively influences the intention to use the website for booking.

4 RESEARCH METHODOLOGY

4.1 Instrument Development

The empirical test of the research model took place by means of a quantitative consumer survey. In order to achieve comparable results, respondents were presented a website of a travel agency that was subject to evaluation based on the applied variables. The measurement of items was done on the basis of elaborated scales from IS literature (Ahn et al., 2004; Devaraj et al., 2002; McCloskey, 2004; Shang et al., 2005; Shih, 2004). All items on consumers' beliefs and behavioral intentions were related to the presented website. Where necessary, the formulation was adapted to that context (e.g., "booking on the Website"). PU was measured with items adapted from Shang et al. (2005), PEOU items were adapted from Shih (2004) and McCloskey (2004), the items on information and system quality are based on Shih (2004) and Ahn et al. (2004). Finally, satisfaction and intention to use were adapted from Devaraj et al. (2002). Since the used items were all developed in English language, they were translated into German

and back-translated by a native speaker. A pretest among eight students was made. According to these refinements a few wording modifications were done. All items were measured with a 5-point Likert scale ranging from 1 (totally disagree) to 5 (totally agree).

4.2 Sample

The research design comprised a quantitative online survey. In order to attract consumers who are interested in traveling, the online survey was announced at several German-speaking online forums. 324 questionnaires were completed, among which 32 contained incomplete answers so that 292 questionnaires were used for further analysis. The gender distribution in the sample is 54.3 percent males and 45.6 percent females. The average age is 33 years; 26.2 percent are younger than 25 years, 38.3 percent are between 25 and 34 years, 19.5 percent are between 35 and 44 years, and 16.1 percent are 45 years or older. A filter question ensured that respondents travel at least once per year.

5 RESULTS

5.1 Measurement Model

The research model was tested by means of a Partial Least Squares (PLS) analysis. The used analysis software was SmartPLS (Ringle et al., 2005). The test of the measurement model consists of analyzing the consistency (Cronbach's Alpha), the convergent and the discriminant validity. Table 1 shows the Cronbach's Alpha and AVE values of the variables.

Table 1: Realiability measures of variables.

Variable	Number of items	Cronbach's Alpha	AVE
Information quality (IQ)	3	0.70	0.61
System quality (SQ)	4	0.84	0.67
Perceived usefulness (PU)	4	0.69	0.51
Perceived ease of use (PEOU)	3	0.78	0.70
Satisfaction (S)	3	0.86	0.78
Intention to use (I)	3	0.90	0.83

The Cronbach's Alpha values are, with one exception, higher than the recommended value of 0.7 (Nunnally, 1978). For PU, Cronbach's Alpha is 0.69 and therefore very close to the recommended value. Convergent validity is satisfactory if the

average variance extracted (AVE) is higher than 0.5 (Fornell and Larcker, 1981). This condition is met for all variables. Table 2 displays the numbers concerning discriminant validity.

Table 2: Correlation matrix.

	IQ	SQ	PU	PEOU	S	I
IQ	*0.78*					
SQ	0.39	*0.82*				
PU	0.34	0.05	*0.71*			
PEOU	0.21	0.21	0.43	*0.84*		
S	0.35	0.18	0.52	0.48	*0.88*	
I	0.38	0.06	0.66	0.42	0.66	*0.91*

In Table 2, the correlations of the variables are shown. The numbers on the diagonal in italics are the square roots of the AVE. For adequate discriminant validity, these values should exceed the interconstruct correlations. This condition is met for all constructs. Further, the loadings of the individual items on the corresponding variables are well above the recommended value of 0.5 for appropriate discriminant validity. They range between 0.66 and 0.94. Thus overall the measurement model is highly satisfactory.

5.2 Hypotheses Test

The test of the structural model comprises the path coefficients, the R-square values of dependent variables as well as the p-values. The latter were obtained by bootstrapping with 100 cases and 1,000 samples. The R-square values are the following: 0.12 for satisfaction, 0.31 for PU, 0.23 for PEOU, and 0.46 for booking intention. Table 3 shows the results of the PLS analysis along with the p-values of the path coefficients.

Table 3: PLS analysis results.

Hypothesized impact	Path coefficient	p-value
Information quality -> satisfaction (H1)	0.333	***
System quality -> satisfaction (H2)	0.045	n.s.
Satisfaction -> PU (H3)	0.409	***
Satisfaction -> PEOU (H4)	0.476	***
PEOU -> PU (H5)	0.235	*
PU -> Intention to book (H6)	0.593	***
PEOU -> Intention to book (H7)	0.163	n.s.
p-values: *** < 0.001, * < 0.05, n.s. not significant		

As the results of the PLS analysis show, five out of seven hypotheses are supported by data. Information quality shows a high positive impact on satisfaction with the travel agency website, supporting H1. In contrast, system quality shows a path coefficient close to zero, thus H2 is rejected. The impacts of satisfaction on PU and PEOU are both strong and highly significant (0.409 and 0.476, respectively), thus supporting H3 and H4. The impact of PEOU on PU is smaller (0.235), but still significant at the 5 percent level. Finally, intention to book at the travel agency's website is largely influenced by PU (0.593), supporting H6. The impact of PEOU is weak (0.163) and although there is a tendency of significance (less than ten percent), H7 is rejected.

6 DISCUSSION

6.1 Discussion of Results

The analyzed research model demonstrates the appropriateness of an integrated approach based on the DeLone and McNeal IS success model as well as TAM. The seminal work by Wixom and Todd (2005) could overall be confirmed in a service-oriented setting, that is, online booking at travel agencies' websites. The hypotheses tests, however, require a differentiated view on the analyzed variables. Perceived information quality shows a positive and highly significant impact on satisfaction, thus confirming our hypothesis.

Unlike expected, perceived system quality shows no significant effect. There are several possible reasons that system quality does not impact satisfaction. First, with increasing maturity and technical reliability of websites, the relevance of this factor may be decreasing over time. System quality is mainly caused by an advanced technical basis which can be expected to improve with growing IS sophistication of travel agencies. Second, system quality may play a minor role especially in the travel booking context where consumers may put a larger emphasis on the complex travel products and therefore on the information quality. Third, a possible explanation may lie in the parsimonious approach of this research that considered overall satisfaction rather than differentiation between information and system satisfaction. The results of this study, however, are consistent with a study on Web service quality differences between online travel agencies and online service providers that identifies information content as the most important dimension of Web service quality for online travel agencies (Kim and Lee, 2004).

The impact of satisfaction on the TAM-based constructs PU and PEOU could clearly be confirmed. With path coefficients higher than 0.40

(PU) and 0.47 (PEOU), these impacts are clearly shown. The results confirm the theoretical assumption based on Ajzen and Fishbein (1980) that object-based attitudes (satisfaction) have an impact on behavioral beliefs (PU and PEOU). The strongest impact throughout the model is found between PU and intention to book at the website (path coefficient of 0.593). This finding is highly consistent with previous research on TAM that identified PU as the primary impact factor on behavioral attitude and behavioral intention. On the other hand, the impact of PEOU on behavioral intention is not significant despite a slight tendency. This result is also consistent with previous research on TAM that shows mixed empirical evidence on the impact of PEOU (Lin and Lu, 2000; Moon and Kim, 2000; Venkatesh, 2000; Venkatesh and Davis, 2000). Further, a study on website quality and behavioral beliefs on websites of different tourism companies showed that PEOU is of less importance for travel agencies' websites while it is a primary factor for online service providers (Kim and Lee, 2004). Finally, as proposed in many TAM-based studies, the impact of PEOU on PU is significant, too.

6.2 Research Implications

The study at hand provides several theoretical and managerial implications. From the scholarly viewpoint, the results show the relevance of two seminal theories in IS research – the DeLone and McNeal IS success model and TAM – in the online tourism sector. It confirms the relevance of integrating both theories for a better understanding of online usage intention and thus supports Ajzen and Fishbein's (1980) notion of an impact chain starting with external stimuli of the website that drive object-based beliefs, object-based attitudes, behavioral beliefs, and behavioral intention. It particularly shows that the chain of impacts on intention to book online starts with information quality through satisfaction, PEOU, and PU, the latter being the main direct antecedent. Hence, both satisfaction and PEOU have a mediated impact on booking intention.

6.3 Managerial Implications

This research has important managerial implications. In the light of an increased dominance of online travel booking and a disintermediation threat of classical, offline travel agencies the drivers of online booking behavior at travel agencies' websites become increasingly essential. The significant role

of information quality that ultimately impacts the intention to book at the agency's website stresses the importance of a careful design of the offered content on the website. Perceived information quality can be controlled by a website operator. Information quality can be enhanced by a simple enrichment of the website content, for example by offering multimedia contents including animations and videos. A growing number of hotels offer virtual tours or 360 degree views of hotel facilities to give a realistic impression of the property. Besides operator-generated contents, travel agencies should further make use of user-generated contents by providing space for user recommendations, reviews, and numerical ratings. Such consumer reviews are a core part of online traveling platforms like Expedia.com or Tripadvisor.com (Park and Allen, 2013) and can further enhance the information quality of travel agency websites.

Although system quality does not show a significant impact on satisfaction, attention should be paid on a high degree of system availability, security, and reliability. Of further importance is the key role of PU that has a much higher weight compared with PEOU. Hence a travel agency website should offer not only all necessary information and functionalities that enable online booking, but support and facilitate the all transaction phases of a trip booking. This includes a comprehensive after-sales service, for example by offering the provision of online feedback by customers after the trip. Since travel agencies usually provide additional information in printed catalogs and the agency bureaus, they should pay large attention on avoiding outdated facts or information that is inconsistent with information provided on the website.

Recently, the use of mobile devices for information search and booking trips is increasing sharply along with a switch of users between devices. Today, a typical "journey" across the devices may start with information search on the smart phone or tablet and finish with the booking process via the laptop or PC (Marketingcharts.com, 2013). Travel agencies have to account for this development and must offer a seamless and integrated information provision and booking process across these access devices without interruption. In the light of these developments, the impact of system quality on satisfaction should be revisited.

In a further step, travel agencies could even start learning from successful e-commerce retailers like Amazon.com by offering recommendation systems

based on consumers' past search and booking behavior. Particularly vacation trips vary considerably in terms of destinations, trip duration, travel time, activities, hotel categories etc. that can serve as useful criteria for customized recommendations. Last but not least, experience goods, such as vacation travel is often subject to extensive word-of-mouth on travel experiences among consumers. Hence social media like Facebook or Twitter should be considered important elements of the online marketing mix of travel agencies (Sotiriadis and Zyl, 2013).

7 CONCLUSIONS

This study offers a parsimonious model on drivers of intentions to book at travel agencies' websites based on Wixom and Todd's (2005) integration of TAM with the DeLone and McNeal IS success model. The results stress the opportunities for travel agencies to influence online purchasing behavior positively by offering information quality that satisfies users. The main contribution of this study to research lies in the investigation of drivers of usage intention at travel agencies' e-commerce sites and thus confirming Wixom and Todd's (2005) model in this context. From the managerial perspective, the study provides a theory-based framework on important website design issues that are critical for satisfaction, PU, PEOU, and usage intention which are important prerequisites of online booking behavior. Although the study was done in the context of a rather complex product, the findings can be transferred to other domains that involve experience goods or complex shopping goods, too. Business models in practice show that useful key features on e-commerce sites, such as multimedia information or user-generated content are used in an ever-increasing number of industries and product categories.

Although the results largely support the assumptions of the research model, there are several limitations of this study. First, we consciously decided to consider information and system quality as object-based beliefs. Some studies on website quality in e-commerce also consider service quality which is worth being investigated as a further independent variable. Second, we did not differentiate between different kinds of trips and journeys which may result in different impact strengths of the antecedents. For example, a packaged far-distance tour that takes three weeks consists of a series of service components and thus

requires more information than booking a flight that can be described with few and structured pieces of information. Also differences between private and business trips may occur. Finally, socio-demographic factors and personal traits (e.g., traveling behavior or destination preferences) may have an impact on the overall proposed antecedents.

Further research should consider emerging e-commerce developments, especially the role of mobile devices and social media as well as the presence of online consumer reviews. Moreover, an analysis of different players in the online tourism sector (online service providers, electronic intermediaries etc.) should be compared with travel agencies to further increase the understanding of drivers of booking trips online.

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