

# Comparing Internet commerce adoption between the Finnish and the European independent accommodation companies

Juho Pesonen<sup>a</sup>  
Outi-Maaria Palo-oja<sup>a</sup>

<sup>a</sup>Centre for Tourism Studies  
University of Joensuu, Finland  
juho.pesonen@joensuu.fi

## Abstract

Travel and tourism is an information intensive industry. Internet is often used to plan and book holidays. This means that more and more effort should be paid to Internet marketing. This study uses the extended Model of Internet Commerce Adoption (eMICA) to compare the website features and the eCommerce adoption of the Finnish and the European independent accommodation companies. The goal is to find out, how Finnish hotels can improve their websites and gain competitive advantage. The results suggest that eMICA is a useful benchmarking tool to examine industry standards but it does not clearly indicate the phase of Internet commerce adoption among the independent accommodation providers. These often small companies may be active in eCommerce even though they do not have all the features of eMICA on their websites.

**Keywords:** eCommerce; eMICA; Internet marketing; hotel; websites

## 1 Introduction

Before the Internet era, travellers had to find the hotel information elsewhere. Brochures, other travellers' expectations through word-of-mouth, magazines and television provided little information for accommodation evaluation and selection. Today the situation is completely different, thanks to the Internet. Nowadays, Internet helps the potential travellers to find and evaluate accommodation services in advance, and quite often the first impression of the hotel is based on the hotel's online presence (Musante et al., 2009).

It is estimated that by the end of 2010, nearly half of all hotel bookings will be made online (Starkov & Price, 2008 [Jul 25, 2009]). Also the Finnish statistics back up this assumption. According to a 2008 survey, 83 percent of the Finnish adults and 62 percent the adults in the European Union have used Internet during the last three months. In Finland, 70 percent of the Internet users had browsed travel and tourism information, and 33 percent of the users had conducted online shopping. 60 percent of the value of eCommerce in Finland comes from the travel and tourism industry. (Statistics Finland [Aug 2, 2009])

As the importance of Internet for tourism increases, it is more and more important to be present on the Internet. This is the reason why almost every major European accommodation provider has their own web pages. Because of this competition is tough

and simple online presence is not enough; a good website should also provide competitive advantage. The level of Internet adoption has been proved to have significant positive relationship with competitive advantage (Teo & Pian, 2003).

Extended Model of Internet Commerce Adoption (eMICA) has been used in many occasions to measure the level of online presence, in tourism as well as in other contexts. The Model of Internet Commerce Adoption (MICA) was originally introduced by Burgess and Cooper (1998) to measure the status of Internet commerce in metal fabrication industries and it has been used by Pracy and Cooper (2000) to measure Internet commerce adoption by small and medium sized enterprises in the Illawarra, Australia. Burgess and Cooper (2000) later upgraded their model and renamed it extended MICA, or eMICA.

Besides Burgess and Cooper (2000), eMICA has been used in analyzing tourism websites by Burgess et al. (2001; 2003) and Doolin et al. (2002). Lemmetyinen and Suomi (2006) used eMICA to examine, which stages of application of www-based services can be seen in the case of small businesses in the tourism industry. Lemmetyinen and Suomi (2006) criticized eMICA for its difficulty in applying it to the tourism business and suggested its terminology and operationalization to be improved.

However, it has been almost ten years since the introduction of eMICA. This study aims to find out how well eMICA can be used to measure level of Internet commerce adoption in hotel industry now that some hotels or accommodation companies have websites before they even have any rooms to rent, while some hotels have had their own Internet pages for at least a decade. There has also been lack of research in the websites of independent accommodation companies, especially in Finland, where most of the tourism companies are SMEs (small and medium sized enterprises).

According to Chaffey et al. (2006), benchmarking of competitors' websites is vital in positioning a website to compete effectively with competitors that already have websites. This study uses eMICA to compare Finnish and other European websites that have high user ratings on a social media recommendation site Trivago.com. This information is then used to find out whether the Finnish accommodation companies conduct the Internet marketing differently from the European companies. Goal is to answer how websites of independent European accommodation companies differ from their Finnish counterparts and how this information can be used to develop Finnish websites. Also, we discuss our findings about the typical website features of a European independent accommodation company against Musante et al.'s (2009) findings about 5-star hotels. Thus, this study also illustrates current industry standards in website design and use of eMICA as a benchmarking tool

## **2 Background of the study**

Hotel website design is often researched topic in travel and tourism literature. For example, Musante et al. (2009) studied how hotel class affects the attribute utilization and effectiveness of the hotel website in Singapore. They found out that especially websites of 5-star hotels differ from other hotel websites. These hotels excelled others in every attribute studied: Their websites had more company information, product offerings, transaction functions, support services, and interactive functions. On the

other hand, budget hotels and especially independents did not exploit the benefits of the Internet and lagged far behind even the 3-star and 4-star hotels. Still, these budget hotels had customers enough to survive in the intense accommodation business.

Website effectiveness was also a focus in Schmidt et al.'s (2008) study. They investigated the characteristics of hotel websites and how they interacted with website effectiveness. Schmidt et al. (2008) found that promotion by informational texts, illustrative photos, and location descriptions were associated with effectiveness of hotel websites. Interestingly, the study also indicated a gap between consumer expectations for commercial transactions and the hotels' policy to encourage customers to use traditional distributions.

Jeong et al. (2003) noticed that website content and information availability precedes online lodging purchases. Law and Hsu (2005) studied how each website feature is valued by the customers. The study showed that reservation information, facilities information, and contact information were the most important dimensions for those who purchased online, and the information about the surrounding area and the website management were the least rated dimensions.

Nysveen et al. (2003) studied mostly valued website features in details and called them value-added services. They found that customers preferred the availability of search engines, service integration, and website personalisation but did not value as much social interaction in customer communities. In general, company websites did not coincide with customer preferences at all. Service integration, i.e. a bundle of complementary services and information, was the only value-added service in accordance with preferences. Nysveen et al. (2003) determined also companies' plans to fill the gap between customer preferences and current offerings.

Hashim, Murphy and Law (2007) have reviewed hospitality website design frameworks. According to their review, there are five dimensions of website quality: information and process, value added, relationships, trust, and design and usability. These dimensions are reflected by 74 website features.

There are also a few models to analyse website content. For example von Dran et al. (1999) have applied Kano's Model of Quality to the Web environment to explain which website features fill a certain user expectations. However, there are some models that do not necessitate subjective analysis but are only committed to the existence or non-existence of the certain website features. One of them is eMICA (Burgess & Cooper 2000).

### **2.1 The extended model of Internet Commerce Adoption (eMICA)**

Burgess and Cooper (2000) presented the extended model of Internet Commerce Adoption that illustrates how organisations typically start by simply establishing a presence on the Internet. The functionality of the website increases over time as the expertise of the use of Internet technologies increases.

The model consists of three stages: promotion, provision of information and services, and transaction processing. As sites move from promotion to processing through provision, layers of complexity and functionality are added to the site (Burgess et al. 2003). This is the transition from a static website to a dynamic site to add value

through information management and rich functionality (Timmers, 1998). eMICA incorporates many layers of complexity, ranging from very simple to highly sophisticated, within the identified main stages of the MICA. The eMICA is summarised in Table 1.

**Table 1.** The extended model of Internet Commerce Adoption (eMICA) (Doolin et al. 2002, adapted from Burgess and Cooper (2000).

EMICA	Examples of functionality
Stage 1: promotion	
Layer 1: basic information	Company name, physical address and contact details, area of business
Layer 2: rich information	Annual report, email contact, information on company activities
Stage 2: provision	
Layer 1: low interactivity	Basic product catalogue, hyperlinks to further information, online enquiry form
Layer 2: medium interactivity	Higher-level product catalogues, customer support (e.g., FAQs, sitemaps), industry-specific value added features
Layer 3: high interactivity	Chat room, discussion forum, multimedia, newsletters or updates by email
Stage 3: processing	Secure online transactions, order status and tracking, interaction with corporate servers

Law and Hsu's (2005) study supports eMICA model because they found that the second and third most valued website dimensions for online bookers were the facilities information and contact information, respectively. The highest rated indicators for facilities information were hotel location maps (mean 6.0855; scale from 1=very unimportant to 7=very important), hotel features (5.851), and for contact information they were telephone number (6.3059) and address (6.2072) as identified also in the basic information level in the eMICA.

However, according to Law and Hsu (2005), the reservation information is the most important dimension driving online purchases. This information is called rich information in the eMICA. The room rates (mean 6.5428) and check rates and availability (mean 6.4013) were the highest rated attributes indicating reservation information in Law and Hsu's (2005) study.

The features used in eMICA are quite similar to features used in other studies assessing website design in hospitality (Hashim et al., 2007). The only dimension absent in eMICA is trust, but information and process, value added, relationships, and design and usability are included in some measure.

### 3 Method and Data

In this study, the level of Internet commerce adoption in accommodation companies is determined through website content analysis according to eMICA model. As presented in Table 1, the eMICA consists of five layers in three stages. In this study, following functionalities were used to measure the adoption of Internet commerce:

In Layer 1 of Stage 1, company name, physical address, phone number and area of business are all important basic features on a website. In this study, all these features are combined into single factor: basic information. A company must have all the information mentioned in the eMICA model in their websites in order to be counted as having basic information.

In eMICA Layer 2 of Stage 1 consists of annual report, email contact and information on company activities, that is rich information content. For this study, following features were chosen to represent high information content: e-mail address, description of the company activities, accommodation prices or special offers, a map guiding travellers to the company (Lexhagen, 2005) location and information on the area surrounding the company.

Layer 1 of Stage 2 is low interactivity. In this study it includes basic product catalogue, i.e. description of the company facilities and rooms, including pictures. Also hyperlinks to further information and to other sites and online enquiry form, which can be used to contact the personnel in the accommodation company, are included in this layer.

In Layer 2 of Stage 2 the level of interactivity develops further. These features that enable interactivity are called as the higher-level product catalogues in eMICA. These can include panorama pictures, video, and flash-animation. Customer support is also important at this stage. In this study, customer support is counted if there is a single customer support feature on the site. Onsite search engine, FAQ, and chat service are used to represent customer support. This layer also includes industry-specific value added features. Only one such feature was included in this study: the use of recommendation sites such as Tripadvisor ([www.tripadvisor.com](http://www.tripadvisor.com)). These recommendation sites provide the user the possibility to e.g. compare prices that is very important value-adding feature on travel websites (Lexhagen 2005).

In the third and final layer of Stage 2 there is high interactivity such as chat room, discussion forum, multimedia, and newsletters. For this study three features were measured: use of multimedia, possibility to subscribe a newsletter, and whether there exists a guestbook, forum or any kind of social media interface (e.g. Facebook, Twitter) on the website. Multimedia included among other things sounds, video, web cam or panoramas and flash-animation not included in higher-level product catalogues.

The last, third stage in the eMICA is processing. The processing stage was divided into two features, online booking or reservation and online transaction. According to eMICA, this is the final stage of the Internet commerce adoption.

Focus in this study was on independent and often smaller Finnish accommodation companies and their European counterparts. Thus, the hotel chains were excluded from the study. Choosing the websites for this study proved to be difficult. On one

hand there is no list for independent accommodation providers in Finland. On the other hand, the websites included in this study should be important for those who use Internet to plan and book their holidays. Therefore, the websites were chosen for this study based on their ranking at Trivago ([www.trivago.com](http://www.trivago.com)).

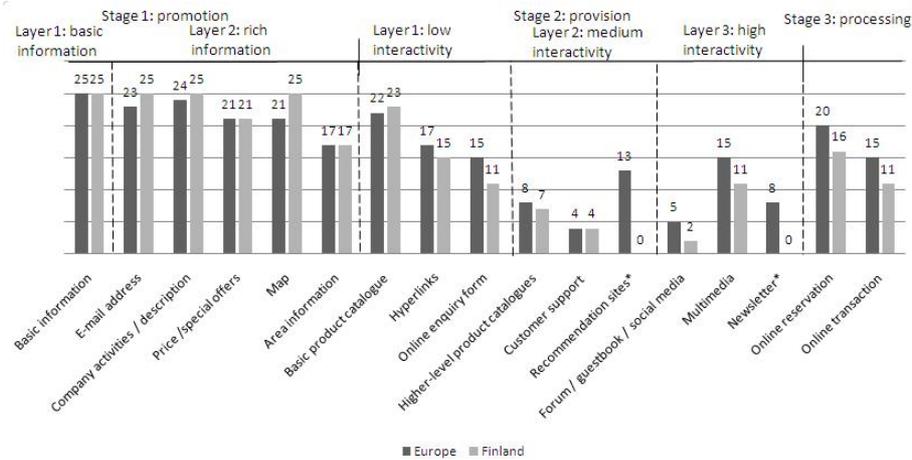
Trivago is a European online-service for travellers seeking advice regarding their travel destination and hotel selection. At the moment, 7 million people visit Trivago a month. The service has over 15 million hotel reviews and 7 million photos for 300 000 destinations. (Trivago Hotelier 2009 [Sep 12, 2009]). Users also can rate the hotels and in this study user-generated ranking was chosen as the selection criteria for accommodation companies, as companies for high ranking are assumed to be more interesting for travellers than companies with low ranking. Trivago collects user reviews from multiple sources, including TripAdvisor, and therefore should provide good listing of accommodation companies.

The list for independent accommodation companies was collected in August 2009 during a four day period. The rankings were used to find the most popular independent accommodation companies in Europe and in Finland. Accommodation providers in Finland and in Europe were listed by their rankings at Trivago.com and the first 25 independent accommodation providers were chosen. Content analysis was conducted on these 50 web pages. Each site was examined in details and the properties and different features on the site were identified. This study was only interested in the level of eMICA, and only measures used were ordinal, meaning the website either has the feature or does not have the feature.

The data was then analysed by using cross tabulations with Fischer's exact test to find out if the Finnish and the European websites differ from each other statistically in their use of different features. Finnish and European websites are also compared in their number of features measured in this study by using F-test (ANOVA). ANOVA is used to test the hypothesis that means are equal between the number of Finnish and European website features.

## **4 Results**

Results of this study are depicted in Figure 1 and Figure 2. In Figure 1, the levels of the eMICA can be found from the top of the Figure. As noted previously, the three stages are divided into six layers. In the Figure 1, the level of adoption grows from left to right. Different website properties and the number of Finnish and European accommodation companies having those properties on their websites are on the vertical axis.



\*p<0.05

**Fig. 1.** Level of Internet Commerce Adoption in the websites of independent European and Finnish accommodation companies

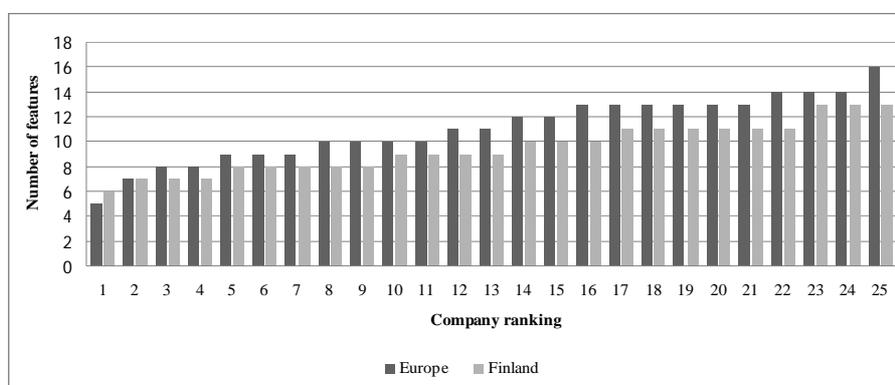
All companies in this study, both Finnish and European, have the basic information about their company on their website. Differences between company websites begin arising when the second layer of the first stage is examined. All the Finnish companies have e-mail address, description of company or its activities and a map on their websites. The same is not true for European travel websites, as there are some websites that lack these features. There are also some Finnish and European websites that do not have price information or information on surrounding area on their websites. Still, majority of the websites have at least some of these features, i.e. rich information.

As stage 2 progresses, the level of interactivity intensifies. Majority of the companies have basic product catalogue and hyperlinks on their websites. European companies have more often online enquiry form on their websites than Finnish companies, but the difference is not statistically significant. The number of websites having medium interactivity features is much lower than in Layer 1 of Stage 2. Especially in Finnish websites the use of recommendation sites is non-existent, whereas more than half of the European websites utilize some form of recommendation site features. This difference is statistically significant ( $\chi^2=17.6$ ,  $p<0.001$ ).

The number of high interactivity features in Layer 3 of Stage 2 is also quite low, except for the use of multimedia. Some websites provide guestbook for their visitors, but there is not a website in this study that has some kind of forum for its users or that utilizes social media elements in their websites, not including the use of recommendation sites. There is a possibility of subscribing a newsletter on eight European websites, whereas no Finnish website in this study offered newsletter subscription. The difference is also statistically significant ( $\chi^2=9.5$ ,  $p=0.004$ ).

Last stage of the eMICA, i.e. processing, includes online reservations and online transactions. The companies having possibility of online transaction also had the reservation option. Almost all the European accommodation companies had some kind of reservation option on their websites. Of these sites, 15 had the possibility of online transactions. Many Finnish companies had also invested in this third stage, as over half had the possibility of online reservation and 11 companies provided online transactions.

Number of measured features was also examined between the Finnish and the European companies. In Figure 2 the accommodation companies' websites have been organized according to the number of features they have on their websites from the website with the lowest number of features to the website with the highest number.



**Fig. 2.** Number of features on a website: comparison by ranking

As can be seen from Figure 2, European websites have more features than Finnish websites. The difference is statistically significant ( $F=5.658 / p=0.021$ ). Only the Finnish websites with the lowest number of features can compete with their European counterparts; otherwise European websites have more features.

## 5 Discussion

Burgess and Cooper's (2000) eMICA supposed that more mature websites have more functions and features because the expertise of the use of Internet technologies increases. We did not study the age of the websites but the results indicate clearly that eMICA does not progress linearly from simple to more sophisticated features with time. As shown in Figure 1, the level of eMICA is very high at the Stage 1, but gradually gets lower until the second and the third layer of stage 2, in which it is very low, particularly among the Finnish websites. In Stage 3 there is a high increase when comparing to previous layers. Many accommodation companies in this study offer their customer either the chance to reserve a hotel room and about half of the companies offer their customers a chance to pay their purchase online. This finding was not congruent with Schmidt et al.'s (2008) notice about the gap between customer expectations to book online and hotels' policies to encourage internet users to do business with the traditional distributors.

The companies in this study prefer to provide their customers a brochure and booking services at the same time, mostly neglecting interactivity. The high proportion of the companies using multimedia, thus investing in high interactivity, can be explained by incorporation of Flash-animation in their websites. Flash-animations are used in many ways, and one company used only Flash in its website. If the use of Flash-animation would be part of the basic or higher-level product catalogue, the use of high interactivity features would be almost non-existent, especially in Finnish websites.

The only statistically significant differences between Finnish and European websites exist in the second and third layer of Stage 2, medium and high interactivity. It seems that even though interactivity is not of the highest importance in European websites, the accommodation companies have invested in it more than in Finland. Especially in the Finnish websites the lack of use of recommendation websites could be observed. The Finnish accommodation companies chosen for this study had top rankings in recommendation websites and could use these rankings as a marketing tool as their European counterparts do. Also, the use of newsletter as a marketing channel is far more advanced in European accommodation companies than in Finnish companies. Newsletters are a good way to collect customer information, in this case their e-mail addresses and to post marketing material for customers.

The results suggest that, if measured by eMICA model, the independent Finnish accommodation companies are lagging behind in their Internet marketing efforts compared to European independent accommodation companies. This can be seen from Figure 2. Figure 1 indicates that when it comes to promotion, Finnish websites are equal or even better than European websites, but in stages two and three European websites take the lead.

## **6 Conclusions, limitations and further research**

The eMICA is a useful but not foolproof model to examine the important properties of websites. It is especially useful as a benchmarking tool. By using eMICA, it was possible to systematically identify the features the independent accommodation companies have and do not have on their websites. This provides opportunity for companies to gain competitive advantage by investing on value adding features that their competitors do not have. It is relatively easy to see industry standards, that is the features that customer expects, and also the features that are not common and produce additional value for customer (Lexhagen, 2005). In the context of the websites in this study, competitive advantage could be gained by investing in interactivity and social media. It seems that in current industry standards company must have basic and rich information on their websites, and even a low level of interactivity. Especially the Finnish websites lack features that encourage customers to interact. The use of recommendation sites or newsletter subscription would be easy and inexpensive tools to stand out from the other accommodation providers.

The eMICA suggests that companies with processing features are at the highest level of the Internet commerce adoption. The results of this study suggest otherwise, particularly in the context of independent accommodation companies. Most of the companies had at least some kind of processing features in their websites, even though Stage 2 features could not be found. This means that companies with only basic pro-

motion features on their websites can also provide a possibility for online reservation or even for transaction. The reason for this could be found from the resources of companies in question. The study was taken among independent and thus in many cases quite small companies. We did not compare the financial or human resources of the companies. The criteria to choose the companies into the study were their rating in Trivago.com. Because the website design is dependent on the amount of resources used, according to this study it seems that the companies with limited amount of resources have decided to invest them straight away into the processing stage.

Again, the results show that although the independent accommodation providers do not have some features identified in eMICA model (e.g. higher-level product catalogues, customer support, and recommendation sites), they are valued by customers in recommendation services. Interestingly, the Finnish companies were rated high even though they did not use any of the recommendation features on their own website. This could indicate that Finnish accommodation companies are lagging behind their customers in the use of Internet as a medium.

The results clearly demonstrated that eMICA could not be used as the model to measure the level of Internet commerce adoption for the independent accommodation companies. Websites of independent accommodation companies do not follow the eMICA model, but prefer to skip layers and stages in order to emphasize on processing features. That is why the websites could not be distinguished as clearly being at a certain stage of website development. The strength of eMICA, however, is that it does not require subjective judgment compared to measures used in other studies (e.g. Musante et al., 2009). In eMICA the feature is either present or it is not, meaning that results from different studies can be compared.

During the decade since MICA and eMICA were introduced, a lot has changed. We can see that by comparing recent studies to the studies made by Burgess and Cooper (2000, Burgess et al. (2001), Doolin et al. (2002), Burgess et al. (2003) as well as Pracy and Cooper (2000). The results of this study and the study by Lemmetyinen and Suomi (2006) show that nowadays level of Internet adoption cannot be categorized into levels or stages as eMICA suggests because websites emphasize different things. Earlier studies conducted in the early 2000s could clearly categorize websites into different stages based on their eCommerce adoption.

There are several limitations for this study, but they are also very interesting topics for future research. The number of websites included in this study is relatively low and includes only websites from the lists of a recommendation service. It is a challenge to obtain scientifically sound list of hotel websites, but this study presents one option for it. In further research more accommodation websites from several regions or destination should be included. The accommodation companies of this study also have to compete with hotel chains. Thus, further research should take hotel chain websites into comparison.

Also, the features included here are only small part of features present at different accommodation websites. There could be hundreds of features on a single website and this study included only some of those. The features chosen for this study are important for many hotel websites (Zafiropoulos & Vrana, 2006) and are based on the eMICA model and the studies of Lexhagen (2005) and Burgess and Cooper (2002) as

well as Hashim et al. (2007). In the future it could be useful to include some measures of trust, such as date of the last update or privacy statements, when comparing websites.

It was assumed in this study that Internet marketing and website design is important for all accommodation companies. In reality it might not be the case as different companies have different marketing strategies. Some companies can emphasize on traditional brochures to reach their target markets whereas some use radio or other media as a marketing channel. Different marketing strategies can also affect website design, some segments can for example use Internet only to find information and then book their holidays through travel agency. This is the reason why eCommerce adoption cannot be measured by only using website design. Interviews or questionnaires to accompany website evaluation would probably provide better results, even though answers can be difficult to obtain.

This study used Internet recommendation service Trivago.com to choose accommodation companies and their websites to be analyzed. Recommendation sites are very useful in finding out who the competitors are among those markets that use these sites to choose their holiday destination or accommodation company. Especially those companies that rent high proportion of their rooms online should pay attention to Internet recommendation services.

It would be important to develop the eMICA to be better suitable for comparing hotel websites. The results should not encourage practitioners to add all features to their websites, but only those that are expected and those that produce additional value for customers and users.

## References

- Burgess, L. & Cooper J. (1998). The Status of Internet Commerce in the Manufacturing Industry in Australia: A Survey of Metal Fabrication Industries. *COLLECTeR '98 Conference Proceedings, September 1998, Sydney, Australia*. URL: [http://www.collector.org/archives/1998\\_September/06.pdf](http://www.collector.org/archives/1998_September/06.pdf).
- Burgess, L. & Cooper J. (2000). Extending the viability of MICA (Model of Internet Commerce Adoption) as a metric for explaining the process of business adoption of Internet commerce. *Paper presented at the International Conference on Telecommunication and Electronic Commerce*, Dallas, November.
- Burgess, L. Cooper, J. Alcock, C. McNamee, K. & Doolin, B. (2003) Use of the web for destination marketing by regional tourism organisations in the Asia-Pacific region. In Andersen, K. Elliot, S. Swatman, P. Trauth E. & Bjorn-Andersen, N. (Eds.) *Seeking success in ebusiness*. USA: Springer.
- Chaffey, D. Ellis-Chadwick, F. Johnston, K. & Mayer, R. (2006). *Internet Marketing. Strategy, Implementation and Practice*. England: Pearson Education Ltd.
- Doolin, B. Burgess, L. & Cooper, J. (2002). Evaluating the use of the Web for tourism marketing: a case study from New Zealand. Research note. *Tourism Management*, 23(5): 557-561.
- von Dran, G.M. Zhang, P. & Small, R. (1999). Quality websites: An application of the Kano Model to website design. *Proceedings of the Fifth Americas Conference on Information Systems*, August 13-15.

- Hashim, N. Murphy, J. & Law, R. (2007). A Review of Hospitality Website Design Frameworks. In Sigala, M. Mich, L. & Murphy, J. (Eds.) *Information and Communication Technologies in Tourism 2007*. Austria: Springer.
- Jeong, M. Oh, H. & Gregoire, M. (2003). Conceptualizing website quality and its consequences in the lodging industry. *Hospitality Management*, 22(2): 161-175.
- Law, R. & Hsu, C. (2005). Customers' perceptions on the importance of hotel website dimensions and attributes. *International Journal of Contemporary Hospitality Management*, 17(6): 493-503.
- Lemmettyinen, A. & Suomi, R. (2006). Cooperation of small enterprises in a web-based tourism network – case of the Old Mail Road in Finland, Åland and Sweden. In Keller, P. & Bieger, T. (Eds.) *Marketing Efficiency in Tourism: Coping with Volatile Demand*. Berlin: Erich Schmidt Verlag GmbH & Co.
- Lexhagen, M. (2005). The importance of value-added services to support the customer search and purchase process on travel websites. *Information Technology & Tourism*, 7(1): 119-135.
- Musante, M. Bojanic D. & Zhang, J. (2009). An evaluation of hotel website attribute utilization and effectiveness by hotel class. *Journal of Vacation Marketing*, 15(3): 203-216.
- Nysveen, H. Methlie, L. & Pedersen, P. (2003). Tourism websites and value-added services: The gap between customer preferences and website offerings. *Information Technology & Tourism*, 5: 165-174.
- Pracy, D. & Cooper, J. (2000). Internet Commerce Adoption by Small and Medium Sized Enterprises in the Illawarra. *COLLECTeR 2000 Conference Proceedings, December 2000, Brisbane, Australia*. URL: [http://www.collector.org/archives/2000\\_December/01.PDF](http://www.collector.org/archives/2000_December/01.PDF).
- Schmidt, S. Serra Cantallops, A. & Pizzutti dos Santos, C. (2008). The characteristics of hotel websites and their implications for website effectiveness. *International Journal of Hospitality Management*, 27(4): 504-516.
- Starkov, M. & Price, J. (2006). Hotelier's 2008 Top Ten Internet Marketing Resolutions. URL: <http://www.hospitalitybusiness.com>. Jul 25, 2009.
- Statistics Finland (2009). Changes in Internet usage: Results from the 2008 survey on ICT usage. URL: [http://www.stat.fi/til/sutivi/2008/sutivi\\_2008\\_2009-04-27\\_tie\\_002\\_en.html](http://www.stat.fi/til/sutivi/2008/sutivi_2008_2009-04-27_tie_002_en.html). Aug 2, 2009.
- Teo, T. & Pian, Y. (2003). A contingency perspective on Internet adoption and competitive advantage. *European Journal of Information Systems*, 12(2): 78-92.
- Timmers, P. (1998). Business Models for Electronic Markets. *Electronic Markets*, 8(2): 3-8.
- Trivago Hotelier (2009). Trivago is Europe's biggest hotel search. URL: [http://www.hotelier.trivago.com/hotelgateway.php?pagetype=faq\\_aboutus](http://www.hotelier.trivago.com/hotelgateway.php?pagetype=faq_aboutus). Sep 12, 2009.
- Zafiroopoulos, C. & Vrana, V. (2006). A framework for the evaluation of hotel websites: the case of Greece. *Information Technology & Tourism*, 8(3-4): 239-254.