A Study of E-commerce Adoption by Nepalese Tourism Website: Contain Analysis

Puran Khattri   Wumaierjiang Aishan*
School of Economics and Management, Xinjiang University, Urumqi Xinjiang, China

Abstract
This study conduct to evaluate e-commerce features adopt by Nepalese tourism websites through content analysis. Information on the website plays a vital role to influence traveler. This study analyses 41 different features of the website of the Nepalese tourism industry. In this research in total examining 120 website's features, and these features are divided into six dimensions: product information, non-product information, reservation, payment, functionality and customer relationship management. The researcher found that there is a significant difference between hotel and travel agencies websites on adopting feature and information provided to their customers. The finding shows that e-commerce is still in the introduction phase in the Nepalese tourism industry. Tourism companies are failing to deliver adequate information on their website. Websites are only focused on product information rather than other information, and there is a significant difference between hotel website and travel agencies websites on adopting features. Websites need to improve their payment, reservation and functionality features on their website.
Keywords: E-commerce, content analysis, tourism website
DOI: 10.7176/JTHS/46-04
Publication date: January 31st 2020

Introduction

Tourism industries is one of the fundamental backbones of countries especially under-developing and developing countries. And it is one of the major sources of the exchequer. The tourism industries regarded as one of the biggest sectors in the world contributing 10.2% of world GDP and generating 222 million jobs *(world travel and tourism council 2017)*. Along with rapidly increasing internet user. Almost all tourist are seeking information, facilities and make travel plane through the internet. E-commerce has significantly changed the business model and find a different way to attract final customer of the tourism industries *(Hsien-Tang Tsai 2005)*. The internet capacitates the traveler to gather appropriate information as well as reduction of time, cost, and inconvenience in a suitable way *(O'connor and Murphy 2004, Young Shin Lim and Eunice Eunjung Yoo 2012)*.   Information technology (IT) has dramatically revolutionized travel and tourism *(Sheldon, 1997; Werthner and Kelin, 1999)* the rise of new technological development has always been encountered two approach opportunities and challenges *(Buhalis and law 2008)*.

With natural beauty and political stability, nowadays the arrival of tourist increasing every year. According to the Department of Immigration of Nepal 520,000 tourist is arrival in the first six months of 2018 rise 13% compared to corresponding last year. Mostly Chinese and Indian tourist are increasing. Because of the increasing number of tourist, the contribution of travel and tourism on GDP also increase by 4.3% and total contribution to GDP of 6.2% *(world travel and tourism council 2017)*. This scenario highlights the huge potential of e-commerce in the Nepalese tourism industry.

Tourism industries (TI) fully depend on the distribution of information about their product and services, and to uplift TI e-commerce play key role, by the use of internet they can expand their business channel and can reach the final customer in a more efficient and effective way. The internet is the medium for revolution in the tourism industry. Now the web is the most commonly used tool in conducting research on tourism information and promoting regional tourism; it is also comparatively cheaper than other promotion and advertising form *(Horng and Tsai, 2010; Standing and Vasudavan, 2000; stepchenkova, et al.., 2010; Wen-Chih Chiou et al.., 2010)* tourism website provides detail information about destination and price for facilities, transportation and fundamental require components during the trip. It helps to traveler planning and budgeting before their trip. Such kind of information available to individual travelers, it play significant role on various phase of the traveler's decision making especially choosing a destination to visit and price comparison *(Bieger and Laesser, 2004; Fodness and Murray, 1997; Gursoy and McMleary, 2004; Jeng and Fesenmaier, 2002; Vogt and Fesenmaier, 1998; Zheng Xiang et al.., 2014)*.

The internet is moving into a new era of e-commerce and communication *(Chlou, Lin and Perng, 2011; Kim and Han, 2007; Kaijun Cao and Zhaoping Yang, 2016)*. E-commerce helps to increase both sales and market. Understanding the adoption of e-commerce impact on consumer behavior can serve for businesses to identify and develop effective and sustainable marketing strategies *(Zheng Xiang 2014)*. So it is very important for businesses. The main propose of this paper to find the feature or attributes adopt by Nepalese tourism industries (Hotels and Travel agencies). This paper highlights the level of e-commerce in Nepalese tourism

industries website in terms of communicating and doing business transaction such as online booking, consulting, payments, customer relationship management, etc.

Literature review
E-commerce in developing countries
Buying and selling product and services is known as e-commerce and it has an effect on information technology, economic sectors and enhance productivity ((Nahari & Krutz, 2011)). Repaid growth of e-commerce technology in developing countries increase the volume of transaction. In developing countries e-commerce able to support to develop business and find great opportunities from the global market. The organization can compete in the international market through e-commerce but need a government role to create a business environment by introduction of the power of the internet (Pittawat Ueasangkomsate, 2015). Many studies carried out the problem on e-commerce adoption especially in developing countries like consumer attitudes, infrastructure, political issues, socio-economic issues, language barriers, computer knowledge, technical, legal, societal and financial problems (Anzaki, 2014, Aleid, 2012). There are many problems in developing countries that hindering the development of e-commerce, such as consumer's attitudes towards e-commerce system, privacy, consumer information security and trust (Wei et al., 2010). (Wei et al., 2010).

E-commerce and tourism industries in Nepal
The arrival of new technology and influence from neighbor countries such as China and India. Nepal is also on way to develop e-commerce activities. Generally believed that Nepal has been conducting online transaction since 2000 by the initiation of online shopping site thamel.com. Nowadays, e-commerce is not limited to only online shopping. People are expanding their businesses, selling goods and providing online services and facilities through websites and Facebook social site which is famous in Nepal. Facebook gives a good platform for the young entrepreneur. These all e-commerce activities accelerate with high and cheap 4G internet facilities. According to the Nepal telecom authority (NTA), a total of internet user reached to 63% at the end of 2017. Increase in the young generation in the internet and growth of IT companies create more opportunities in e-commerce in Nepal.

The tourism industry is one of the biggest industry in Nepal. It directly impacts on Nepalese economy. The tourism industry is the main source of foreign revenue. In Nepal, all total 1101 star and tourist standard hotel are operated, travel agencies and trekking agencies reached up to 3824 and 2647 respectively in 2017. Every year tour guide, tour operators, rafting agencies, and guides all are in increasing trend (Nepal ministry of culture, Tourism and Civil Aviation, 2018). E-commerce is emerging in service sectors especially in hotels and travel agencies. Now it's common to book the hotel's room, buy air ticket and travel package. Tourism suppliers and agencies offer certain discount and more facilities by booking from online. The adoption of e-commerce still remains a huge challenge for Nepal's tourism industry. Compared with other developed countries, Nepal's hotel industry and tourism companies have less experience in using e-commerce.

Research Review on e-commerce in the tourism industry
Repaid growth of technology and online transaction tourism agencies establish direct distribution channel ca use reduction of intermediator role and their commission. Many scholars and researcher are using many theories and model about travel and tourism and interpret the effect of adopting new technology

Kaijun Cao & Zhaoping Yang; discussed the planning and booking a trip is now increasingly common for the traveler.

This study evaluates travel website and their performance in term of e-commerce adoption using a content analysis approach. The study analysis the present status of Chinese website performance in term of adoption of e-commerce. The research indicates that Chinese tourism website is not effectively utilizing the internet to its full potential and inadequate investment in e-commerce. Most tourism websites are focusing on providing information about location destination, facilities, and services. Most of the websites are established scenic area management team, so it creates a lack of product information or package, reservation, and payment system.

Hsien Tang Tsai, et al present after 3 years survey, the e-commerce model has a significant impact on travel industries. With new technology, the customer starts to buy directly from suppliers and cut commission of travel agencies. Only those agencies are survived who successfully adopt e-commerce and other agencies are going on bankrupt. All travel agencies are should improve their customer services and maintain their intermediary roles and function through ecommerce.

Patrick McCole and Elaine Ramsy 2005. The new spatial possibilities of internet-based technology provide a powerful route to innovative marketing strategies. The researcher found significantly different between a firm that adopts and those that do not adopt e-commerce technology. The adopters are more proactive, creative and more aware of opportunities afforded by new technology (in terms of offering new services idea). And non-adopters believe that there are still many barriers hindering them from selling goods and service online.

Mohamed A. Abou-Shouk *et al* find the factors that influence e-commerce adoption in SME in travel agents in a developing country. Some benefits factor influence on the decision to adopt-commerce by tourism industries. This paper reviled three categories of benefits essential, marketing and competition, and international business efficiency. On the other hand, reveals that barrier to e-commerce adoption such as poor infrastructure. This revel four categories of the barrier to adoption: attributes of adopting technology, external business environment, internal environment, and resource limitations.

Zheng Xiang *et al* discuss the nature of the use of the internet by an American traveler. The use of the internet is reaching a saturation level and still traditional channel dominant travel planning. In the context of technology, there is a significant impact on travel and tourism. The internet has a primary information source for travel planning. Different information tools help and serve different propose at a different stage of travel planning such as search engine, travel portal, virtual communication, and website of a destination marketing organization.

Young Shim Lim and Eunice Eunjung Yoo 2012, describe that travelers tend to be browser multiple websites to find the destination information. They have researched on two types of websites, generalists such as tripadviser.com and specialist such as NYCgo.com. Specialist websites are better in the adoption of several web features like a trip plane, event information, and theme menu. And they are more likely to report paper base brochure, attraction and event ticket reservation, and special offer or package to the traveler. While generalist websites are more like to report destination background information and travel tips, user gallery and review, transportation and accommodation reservation, multimedia and multiple languages.

Website evaluation studies

Research on the tourism website, generally concern about tourism information system, electronic tourism commerce, data warehousing, information search and interface design (*Quan Zhou and RichSantis 2005*). There is no standard way to analysis of websites. Web site evaluation is broadly defined as ensuring that website provides a useful content, correct and comprehensive set of requirement that meets the user expectation and usability of setting a goal *(law et al 2010; 2019)*. Researchers are adopting a various approach to evaluating websites on their academic research. The most common approaches are contained analysis, benchmarking, survey, experiment, case study and automatic evaluation *(Law et al 2010; Kaijun Cao 2016).*

Table 1: Detail description of research methodology

Research method	Description
Contain analysis:	Contain analysis is a systematic technique for coding text, image, message lengths, and semantic themes, hyperlinks and textual exchanges and features of the websites (Vincent J. Duriau 2007).
Survey:	It a technique investigating and gathering data by direct personal contract and interview. (Prabhat Pandey, 2015)
Case study	In-depth study of organization strength, weakness, progress, and effect of the particular situation
Experiment :	Experiment research is a description and analysis of the effect on the dependent variable of manipulation of the independent variable (Prabhat Pandey, 2015)
Counting method:	Count the number of features of the website.
Benchmarking:	Benchmarking is the continuing process of comprising business performance with other company.

Content analysis is a generally accepted methodology of social science, which has attracted wide attention, logical and quantitative description of communication content (Baran, 2002). Contain analysis is most widely used in tourism websites analysis.

The main motivation of website development is to improve business performance, sales and provide better customer satisfaction and most research focuses on the adoption of e-commerce and how they can get benefit from the Internet. So this study focus on exploring the website content, features, and information of tourism website and analyses ecommerce adoption in Nepalese tourism sectors.

Methodology

In this study, the Nepalese tourism industry refers to the hotel industry and travel agencies. Travel agencies and trekking agencies are laid into one column as a travel agency. Research methods differ dependent on

requirement and nature of the business. In this research, content analysis was conducted to analyze and better understand of Nepalese tourism website's (NTB) feature and performance in terms of e-commerce adoption. To minimize error and making simplicity on research, the researcher uses the counting method. First, prepare a checklist to analyze the feature of website or attributes, these features and attributes are related to the context of Nepal tourism. In this research 41 features are analyzed and these features were established by review of the literature.

Research dimension

For making simple and give the qualitative structure on research. Website attributes and features are divided into six dimensions: Product information, Non-Product information, Reservation, Payment, Functionality and Customer Relationship Management (CRM). These dimensions are also taken from the literature review. Every features are more relevant to the Nepal context. These features are included a variety of information, services and product description, FQAs, reciprocal link, online consulting, etc. the complete set of feature is given in the table.

Table 1: Feature of website

Website feature

Product information	TAT	HT	NTU
Product description and services	100	100	100
Fare/ price	41	86	60
Photo gallery	51	92	68
Privacy and security	29	8	20
FQA	41	12	29
Non product information			
Weather climate	17	12	15
Travel direction	59	2	35
Local transportation	6	0	3
Safety	17	0	10
Where to stay	11	0	7
News and blogs	70	14	47
Travel tips	66	22	48
Multiple language	14	10	13
Visa information	36	2	22
Reservation			
Making online reservation	71	80	75
Online quotation/ checking availability	86	66	78
Advance payment for booking	34	6	23
Cancellation policy	33	14	25
Creation customer account	9	6	8
Payment			
Credit card	51	30	49
Debit card	49	26	39
Online payment gateway	11	4	8
Electronic cash	0	0	0
Bank transfer	44	2	27
Functionality			
Reciprocal link and numbers	63	10	41
Search function	76	22	53
Site map	16	6	12
Maps	27	68	44
Shopping cart	4	2	3
Mobile app	9	0	5
Customer Relation Management			
Community /forum	81	46	67
Email address	100	100	100
Feedback	33	16	26

Promotion and special offer	40	28	35
Customer survey	1	0	1
Online consulting	21	8	16
Social site account info	57	26	44
Exchange rate	11	0	7
Email newsletter	20	8	15
Email to friend	11	0	7
Comment box	16	0	9

Sample size: HT-Hotel website- 50, TAT-Travel agencies website-70, NTU- Nepal tourism website

The clarity of coding is an essential consideration in contain analysis *(shah ram Salvati et al, 2015).* Before coding of each website features. Both hotel and travel agencies websites features are divided into six dimensions. The detail information of the dimension is following.

Product information: Information regarding product & services, rates, and FQA provide on websites.

Non-product information: Apart from the product information website provide other information such as weather, visa information, and travel tips, etc.

Reservation: feature involving online booking, checking online availability or inquire about product and services.

Payment: payment method.

Functionality: available of a link to other important information, a function that makes easy to use the website.

Customer Relation Management (CRM): a way of handling customer and provide service through online.

Website sampling and evaluation process

In this study, the researcher used random selection approach to analyses Nepalese tourism website and used such a search engine to select website such search engine are google.com, bing.com, and baidu.com. Researcher evaluates in a total of 120 websites in November and December 2018. And then count the number of features adopt by website using MS Excel. Like '1' was recorded if tourism website provider related information or features a '0' if not. In this research, there is 2 independent variable TH, TAT, and 1 dependent variable NTU, and every independent variable has sub-variables so Multivariate Analysis Variance (MONAVO) used to find significance level. MANAVO analysis was analyze using STATA 9.

Result

Overall Statistics Description

The descriptive statistics provide a simple summary or basic website features adopt by tourism industries. In Nepal currently 7572 tourism organization are operating including hotel, travel and trekking agencies but out of these organization hardly found 120 tourism organization's website. It means that most of the tourism organization are still carry on without a website. During the analysis of websites and also noticed that out of 120 tourism website only 8 websites host their website in Nepal's country domain .np though companies can register a domain name by .np in Nepal official domain register free of charge.

In table no. 1, Overall data show that 100% of tourism websites display their detail information about a product, services, and email address. Over 80% of hotel websites provide the price of their products and photo gallery information. While 80% of travel agencies perform well in the online quotation or inquire bottom and community/forum information. Approximately 60% of travel agencies provide a search function, reciprocal link, social site information, travel tips, travel direction, news, and blogs. But hotel websites are indigent in providing news and blogs. Less than 10% of travel agencies website provide create customer account facilities, shopping cart, mobile application, and local transportation information. In the context of hotel websites, less than 10% of websites provide subscription of the email newsletter, online consulting, travel direction, privacy, and security policy.

In addition, more than 70% of websites provide online booking option but most of them are not working properly when clicking on 'book now' bottom it leads to contact information page. Nearly 40% of travel agencies website provides their product price information in the dollar, in the context of hotel more than 80%. It means both websites are focusing on the international market but they failed on providing exchange rate and multi-language**.**

Analysis of 120 websites (by random selection) features both sectors focus on product & services description. These are the most common feature in tourism website. Beside product & service description some of the tourism websites also good on presenting photo gallery, travel tips, maps social site info and community/forum information. Most distinguishing features of travel agencies travel direction, visa information, reciprocal link, search function, and privacy policy. On other hand hotel websites are good on the map, making online reservation photo gallery and price of the product.

Difference between website

These situations show that there are significant differences between hotel websites and travel agency websites. Hotel websites are the only emphasis on the product description. Price it directly effect to traveler perception, hotel products are less customizable and the most common product of hotels is room and facilities. So Price, room description and facilities is the most essential information to traveler. Travel agencies website along with price also focus on nonproduct information and customer relationship management like visa information, news, and blog, community/forum, social site information, travel tips and direction. Travel agency products are more customizable, depending on the traveler, so travel agencies also focus on non-production information that can entice travelers.

Table 2: MANOVA analysis and the average frequency of each dimension for tourism websites.

Dimension (no of Features)	TAT (n=70)	Hotel (n=50)	F-value	P-value
Product information (5)	2.07	4.14	0.15	0.97
Non product information (6)	2.96	1.72	5.93	0.00015
Reservation (5)	2.24	0.62	0.75	0.59
Payment (5)	1.56	0.124	2.01	0.097
Functionality (6)	1.94	1.08	1.07	0.39
Customer relation management (11)	3.93	2.32	1.64	0.12

By examining statistically the average frequency of each dimension is present on the table no 2 along with MANOVA test and average frequency. The overall MONOVA test of Pillai's Trace is significant (0.998; p<0.001) difference. Which suggest that the features and information of hotel and travel agencies websites are significantly differencing each other. The table no 2 results show that non-product information dimension of tourism website is significantly different. To analyses the average frequency of website, travel agency's CMR dimension is good but payment and reservation dimension are comparatively cast down. On the other hand hotel website is good on product dimension, because of most of the website provide hotel room price, room description, and photo but reservation and payment feature or information are completely discontents.

Discussion and conclusion

This empirical research result highlights several important issues. Having a website means to enter into the global market, Nepalese tourism websites are entering and performing in the global tourism market with basic product information and email address. This finding indicates that the Nepalese tourism websites are not fully utilizing the internet to its full potential. Travel agencies tried to give information other than product & service information but it is not sufficient. Other than product and service information like travel tips, payment method, maps transportation information plays a vital role to the traveler and facilitate them to make a travel plan. These information change the perception of the customer. The above result shows the hotel website performance is really poor. They only focus on room features, services, and facilities. In order to compete on a competitive market, both hotel and Travel agencies should add more e-commerce features like reservation, payment, CRM. It shows immature in the adoption of ecommerce. Need more investment. If tourism website provides such service and information it would facilitate travel and help to increase tourist in Nepal.

For an examination of the results, the following recommendations are made.

Tourism website needs to assure customers that their personal information will not be disclosed. Customer's sensitive data such as credit card detail and other personal information enter into e-commerce system need to protect. A potential customer will feel safe to use the website. In order to do this tourism website should add privacy and security policy on their website, especially hotel website. Hotel websites are really poor on providing privacy and security policy on their website.

To compete in the international market, tourism website needs to add more features. In order to get benefits from global market tourism website need to add, visa information, currency converter or current exchange rate, etc. According to the Nepal immigration department recently Chinese tourist is increasing. It is recommended that a tourism website need to add multiple language feature, at least the Chinese language need to add on their website.

Tourism website needs to adopt e-commerce fully, both hotel and travel agencies need to improve their payment option, payment option should be flexible. Online reservation or booking, booking policy, cancellation policy and check availability features, so visitors easily understand and complete online transaction through internet channel.

On non-product information dimension, hotel website needs to add local transportation information or information of how to get into the hotel and surrounding area information. Both website, hotel and travel agencies need to update their news and blog, travel tips and weather information.

On CRM dimensions, tourism website needs to enhance their CRM services. It is suggested that websites add customer feedback, customer survey, online consulting to solve customers' problem immediately and community/forum information that built customers trust. Another important thing, provide social site

information, this is the best way to socialize, nowadays many people are involving in the social site where tourist can share their experience, feedback, and suggestion.

In summary, this research conduct to evaluate website features adopts by tourism industry (hotel and travel agency) through contain analysis approach. With this close research show up the current features of travel agencies and hotels website. This research will help to improve their website features and can get the advantage of e-commerce especially hotel's manager and travel business entrepreneur.

This study has several shortcomings. First of all, hotel and travel agencies nature of business in some way different so both websites some features may not be comparable. This study evaluates 41 features of 120 websites. The website features and sampling may not be comprehensive. Second, all the data in this study collected by a single person with presence of supervisor there is an inevitable difference in defining and evaluating websites features.

References
Nir Kshetri *"Barrier to e-commerce and competitive business model in developing countries: A case study"* ECRA 6(2007) 443-452.

Hsien-Tang Tsai, Leo Huang, Chung-Gee Lin "*Emerging e-commerce development modal for Taiwanese travel agencies"* Tourism Management 26(2005)787-796.

Mohamed A. Abou-Shouk, Wai MunLim, Phil Megicks *"using competing model to evaluate the role of environmental pressure in e-commerce adoption by small and medium sized travel agents in a developing country"* Tourism Management 52 (2016) 327-339.

Wen-Chih Chiou, Chin-Chao Lin, Chyuan Perng "A strategic website evaluation of online travel agencies" Tourism Management 32 (2011)1463-1473.

Zheng Xiang, Vincent P. Magnin, Daniel R Fesenmaier *"information technology and consumer behavior in travel and tourism insights from travel planning using the internet"* Journal of Retailing of Consumer Services (2014).

Tonderai Maswera, Janet Edwards, Ray Dawson *" recommendations for e-commerce system in tourism industry of sub- Saharan Africa"* Telematics and Informatics 26 (2009) 12-19.

Patrick McMcole & Elaine Ramsey *"A profile of adopters and non-adopters of e-commerce in SME professional services firm"* Australasian Marketing Journal 13 (1) 2005.

World Travel and Tourism Council "*Travel and tourism economic impact 2017 Nepal*".

Prof. Dr. Anilkumar. L. Rathod "*A study on barriers in adoption of e-commerce*" Indian Journal of Research (2013) ISSN 2250-1991.

Li Li a, Maojuan Penga, Nan Jiang, Rob Law "*An empirical study on the influence of economy hotel website quality on online booking intentions*" International Journal of Hospitality Management 63 (2017) 1–10.

Aykan Akincilar∗, Metin Dagdeviren "*A hybrid multi-criteria decision making model to evaluate hotel websites*" International Journal of Hospitality Management 36 (2014) 263– 271.

Lauren M. Fryc "*Tourism-Marketing Performance Metrics and Usefulness Auditing of Destination Websites Advances in Culture*", Tourism and Hospitality Research, Volume 4(2010), 47–58.

Shahram Salavati, Noor Hazarina Hashim "*Website adoption and performance by Iranian hotels*" Tourism Management 46 (2015) 367-374.

Pierre Waltera, Kapil Dev Regmia, Pushpa Raj Khanal "*Host learning in community-based ecotourism in Nepal: The case of Sirubari and Ghalegaun homestays"*, Tourism Management Perspectives 26 (2018) 49–58.

Young Shin Lim and Eunice Eunjung Yoo "*Trip adviser.com vs NYCGO.com: Evaluation of functional components of generalist and specialist websites*", information and communication technology in tourism 2012.

Quan Zhou and Rich DeSantis "*Usability Issues in City Tourism Website Design: A Content Analysis*", IEEE International Professional Communication Conference Proceedings 2005.

Zheng Xiang "*From digitization to the age of acceleration: On information technology and tourism*", Tourism Management Perspectives 2017.

Liang Wanga, Rob Lawa, Basak Denizci Guilleta, Kam Hunga, Davis Ka Chio Fong "*Impact of hotel website quality on online booking intentions: eTrust as a mediator*" International Journal of Hospitality Management 47 (2015) 108– 115.

Nepal Ministry of Culture, Tourism & Civil Aviation "*Nepal tourism statistics 2017*", May 2018.

Pittawat Ueasangkomsate "*Adoption E-Commerce for Export Market of Small and Medium Enterprises in Thailand*" Procedia - Social and Behavioral Sciences 207 (2015) 111 – 120.