

# A new e-Business Model for the Tourism Industry with Special Reference to Web 2.0

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**Abstract:** Greater the number of internet users greater will be the impact on tourism industry of Kashmir. More awareness with the information will lead to a culture of connectivity. Thus indispensable use of social media called attention towards measurement of effectiveness of web 2.0 web sites. The strategic adoption of the e-Business models has a significant impact on the tourism enterprises and its benefits are incremental and intangible in nature. Therefore, the websites used for promotion of the tourism services need to be assessed and evaluated from time to time to know the mental model of end users from time to time which itself is dynamic in nature. For this purpose, a thorough review of literature was done to identify the variable which could work as a benchmark for evaluating second generation websites. Thus in this research were the variables which were taken into consideration were; accessibility, user friendliness, attractiveness, appearance, contents, completeness, clarity, and accuracy. The data was collected from 295 tour operators of Srinagar city who were registered with J&K Tourism Department. A criterion for evaluating Web 2.0 websites was developed and the model was applied to empirical data. Pertinently, there is a continuous need of further refinement of the dimensions and fresh data need to be gathered to provide significant insights into the literature. Moreover the data was obtained in 2016 (post unrest). Thus, the chances of limited degree of inadequacy of data cannot be ruled out.

## I. INTRODUCTION

The world wide web was considered as a tool for destination branding during the advent of internet. The web developers were able to develop static pages which acted as information brochures which later on evolved as a dynamic feature of information technology (Bhat & Shah, 2012). The intermediation was reduced because the customers could choose, book and purchase tourism services directly from the web. The advent of broadband and 3G internet services allowed users to access the internet at mega bits per second speeds. The amount of content on the web increased on the web due to high speed. Podcasts, user generated content, user based web design, user centric web design and RSS feeds came into existence. It was Darcy who coined the term Web 2.0 in 1999 and later on O'Reilly, who popularized the term Web 2.0 or second generation websites in 2005 (Bhat & Shah, 2013).

Information and communication technology in general and web 2.0 websites in particular encourage branding of destinations. Virtual tourism is one such praise worthy example of information technology (Bhat & Shah, 2014). Increased number of mobile users and compatibility of web 2.0 websites have also increased web users. The mediation process from the market has also been finished. The information sharing has become very common on the social networking websites. The web culture has revolutionized and we can share now information through web 2.0 systems, which means that there is an interactive environment of sharing information and feedbacks that did not existed before (Elton Noti, 2013). Social networking is the outcome from the implementation of web 2.0 environment and social media has emerged as a tool to the business workplace (Richemond, 2011).

Tourism is treated as one of the largest and earliest industries to adopt technology (Antoniou, Skylogiannis, Bikakis and Bassiliades, 2005). Tourism industry has been foremost to welcome information and communication technology as an opportunity but it poses challenges also (Egger and Buhalis, 2008). While information Technology provides opportunities to hotel industry but the success depends upon its adoption and implementation (Nyheim, McFadden & Connolly, 2004). Therefore adoption of technology in tourism industry is sophisticated (Wang & Qualls, 2007).

Most of the literature is already outdated as the primary focus is on business adoption of Internet usage, online reservations or email (Gretzel and Yoo, 2008). These are all older technologies. Technological trends surface at rapid speeds and the most recent major development, Web 2.0, is a term that was only introduced in 2004 (O'Connor, 2008).

## II. LITERATURE REVIEW

An informal mode of communication known as electronic word of mouth occurs in user generated content (Henning-Thurau et al., 2004) is published by a user rather than a professional editor. User generated content is one of the examples of such blog entries and is affected by the user's motivation and attitude. It is therefore up to the targeted user group which applications should be offered on a website. This allows the development of long-standing communities of shared interests and sub-cultural identification (Schmidt, 2007). People use electronic word of mouth for saving decision-making time and to make better buying decisions (Henning-Thurau and Walsh, 2003). However Baily (2005) found three motivators of reading blogs by an open ended questionnaire: desire to use additional source of information, the need for assurance of a purchase done, and a wish to know what consumers think. Creative expression and documentation of personal experience are among the main motivational factors but also meeting and influencing other people were also added (Lenhart and Fox, 2006; Nardi et al., 2004). According to Henning-Thurau et al., (2004) three motives influence the frequency of visiting a platform. These are: social benefits, extraversion/positive self-enhancement, and concern for other consumers.

A website designer has to focus on the needs of the target group (Sullivan, 1997). The design of a website should satisfy usability and content requirements of its users (Di Mascio Tarantino, 2003; Schaupp et al., 2006). Traditionally design is subdivided into three categories: information presentation and appearance, access-navigation-orientation, and informative content architecture (DeMarsico and Livialdi, 2004). All design issues need to be consistent with the user's objectives. Hence, only content which is relevant to the targeted group should be offered. Then, the design and visual presentation needs to be realized according to user's needs (Visciola, 2003). In this context each element on the web site has an influence on user's attention and

facilitates navigation (Nielsen, 1999; Levi 2008). The mental model of the user needs to be understood. Thus, closer understanding of user's mental model will result higher user satisfaction (Norman, 2002). According to Raskin (1999), a website has to account for different senses (ergonomic aspects), as well as for emotional, and effective response (cognitive aspects). Graphical representation of data is used to support the contents, combining or replacing textual links and has own format. In the same manner different types of information will have different formats (Reed, 2000). Physiological and psychological factors play an important in understanding of the content and different interpretations of the data done. Thus Web designers need to communicate the information to the users which do not communicate wrong meanings (Mandel, 2002). Web designers need to know the facial and expression movements of the users to understand their behavior. However questionnaire could be used to measure the attractiveness, enjoyment and informativeness (Davis, 1989; Novak et al., 2000; Barnes and Vidgen 2000). The term ethnography adapted to the internet may reveal more truthful information because the expressed satisfaction may not match actual behavior (Kozinets, 1998, 2002, 2006; Langer and C., 2005; Beckmann and Langer, 2005).

The online trends outlined above all have one underlying theme, that is, they are consumer-centric. Social media and user-generated content are all technologies driven by the consumer. An implication of these online trends means that consumers are having more control over their travel decision making process (Cox et al. 2007). Hence, marketers have less control over what messages reach their audience. This loss of control does not necessarily have negative ramifications as user-generated web sites can build brand loyalty and it can be a way of forming a relationship with the traveller (Cox et al. 2007).

There are conflicting arguments within the literature on the impact of UGC on travel. Although Frommer (2007) is skeptical of UGC due to the lack of travel expertise held by the majority of individuals who contribute content, the overwhelming belief is that the significance of Web 2.0 cannot be ignored if tourism businesses are to survive (Cox et al. 2007; O'Connor, 2008; Gretzel and Yoo, 2008; & Schegg, Liebrich, Scaglinone and Ahmad, 2008).

O'Connor, Höpken and Gretzel (2008) note that tourism is an information-intensive service that suits digital delivery as it is typically targeted at customers that are not local. Moreover, as travel is an intangible service that cannot be easily described, travellers often rely on word of mouth to decrease their uncertainty and perceived risk (Gretzel and Yoo, 2008). It is for these reasons that Hanlan and Kelly (2005) have predicted that Web 2.0 will only grow in its influence in transforming the traditional word of mouth marketing (as cited in Gretzel and Yoo, 2008). As a result, current online technological developments have the strong potential to continue changing the tourism landscape and tourism business will need to keep up with these trends to remain competitive (Scheidegger, 2006).

### III. RESEARCH METHODOLOGY

To develop a comprehensive evaluation framework and to measure effectiveness of Web 2.0 websites from a variety of perspectives an effective design is required. The proposed research began by outlining the objectives of the research and then deciding on whether qualitative methods, quantitative methods, or a combination of both will be the best approach to achieve the research objectives. Questionnaire surveys are a common method of gauging satisfaction levels with websites – they are easily disseminated and replicated electronically (Burton and Walther, 2001). Surveys are useful in providing useful business with customer's motivations for actions they have conducted on a website but one has to be cautious as a lot of customers are not aware of the factors which lead to certain decisions being made (Eisenberg, 2003). Therefore, survey method was used for primary data collection. The instrumentation technique which was employed in this study was a structured non-disguised questionnaire. The contents of the questionnaire specifically addressed the objectives of the research. A self-administered questionnaire based on five-point Likert scale (1 being extremely satisfied and 5 being extremely dissatisfied) was used for collecting data. The question consisted of two parts. The first part of questionnaire was about the demographic profile of the respondents and second part consisted of questions regarding the identified variables. The questionnaire began by attempting to gain an understanding of the respondent's level of satisfaction with the Web 2.0 websites. The satisfaction was measured by asking the respondents to indicate their level of satisfaction on accessibility, user-friendliness, attractiveness, appearance, contents, completeness, clarity and accuracy. The reliability analysis was done with Chronbec's  $\alpha$  and the value obtained was 0.82.

#### *Sampling*

Sampling is a process of learning about the population on the bases of sample drawn from it. Therefore, instead of studying every unit of the universe only a part or it was studied and conclusions were drawn on the entire universe. Target population was defined in such a manner that problem definition is translated into a precise statement of who and who should not be included in the sample, and defined in terms of elements, sampling units, extent and time. A sampling frame was compiled to choose the appropriate sample. A subgroup of the elements of the population selected for the participation in the research were the Travel agents, Hoteliers, Excursionists and Guest houses of Jammu and Kashmir. Therefore a total 295 respondents were interviewed in this study.

#### *Data Analysis*

Data analysis consists of examining, categorizing, tabulating, or recombining the data. Every investigation should have a strategy to study the data collected to draw accurate results and avoid misinterpretation of the collected data (Yin, 1994). The survey data was analyzed using SPSS and MS-Excel. The analysis started with uni-variate analysis such as frequency distributions and descriptive statistics to gain an understanding of the data collected. However bi-variate analysis was used to extract the meaningful information out of the data collected

### IV. ANALYSIS

Internet Technology as a booking tool has greatly impacted the tourism industry while simultaneously calling attention to research on website performance and evaluation. However, most researchers agree on the fact that it is important to have a specific set of

criteria in place in order to evaluate tourism based websites ((Law and Hsu, 2006); (O'Connor and Frew, 2004b)). There are a variety of systems, scales and guidelines available to aid in the assessment of websites, but as of yet there is no universally accepted list of key criteria that must be included in a comprehensive website evaluation ((Parasuraman et al., 2005); (Sigala, 2004); (Ranganathan and Ganapathy, 2002)).

The data analysis started with calculation of averages to generalize the results on behalf of the entire tourism industry of Kashmir valley. It was observed that the levels of satisfaction were higher amongst respondents with less web experience than those with higher levels of experience. It is imperative to mention here that in the three cases i.e; travel agents, excursionists and guest houses a considerable rate of respondents were dissatisfied with accessibility of web 2.0 websites. It may have been because of the reason of e-Curfew for a long period of time in Kashmir when the tour operators were unable to access the social media websites for more than five months till the techies found an alternate way of accessing the social media by creating and availing Virtual private Networks to the common users. The most prominently used VPNs were Tor browser on computer systems and ultrasurf app on mobile phones. Thus it was very difficult to assess if the respondents could express their level of satisfaction with other dimensions of web 2.0 websites as well. Despite the lack of accessibility we were successful in obtaining the responses of tour operators under terrible circumstance from the different stakeholders because the data for this very research was obtained in 2016 when there was political unrest in entire valley.

*Table 1 Descriptive Statistics*

Variable	Mean	Standard Deviation
Accessibility	2.017	1.012
User-friendliness	2.424	1.413
Attractiveness	2.325	1.063
Appearance	2.462	1.096
Contents	2.281	1.101
Completeness	2.272	1.003
Clarity	2.370	1.154
Accuracy	2.225	1.402

The bi-variate analysis started with co-relation analysis in which Karl Pearson's rank correlation coefficient was measured using SPSS to find out the relationship between variables. The first variable, 'accessibility' was compared with the other variables and in only one instance (user friendliness) the value came as negative (-0.091). All other variables were found positively correlated. Though it had a limited degree of negativity with user-friendliness and the variables have different directions. Therefore, if the social apps users are satisfied with user-friendly interface does not mean they are satisfied with the accessibility of these websites. The coefficient of correlation between user-friendliness and attractiveness, appearance completeness, clarity and accuracy were negative. However the value obtained for contents of web 2.0 websites were positive. It could therefore be interpreted that user-friendliness and user-generated contents are associated with each other. If a web 2.0 website is user-friendly, its contents may also be liked by the users. There was a limited degree of negativity in other variables, but the directions of variables were in opposite directions and attractiveness, appearance, completeness, and clarity could not be considered as associated to user-friendliness. Thus a web 2.0 website with a user friendly interface may not be attractive, good in appearance, complete and clear in providing information. On comparing appearance of web 2.0 websites with the variables, completeness, contents, accuracy and clarity the value obtained was approaching 1 which meant that the variables were co-related with each other and had same direction i.e; the positive value of one variable was associated with other. When the contents of web 2.0 websites were compared with the other variable the degree of negativity was found in clarity. Therefore if a user is satisfied with the contents of web 2.0 websites does not necessarily mean that the web site provides a clear information. In the completeness of web 2.0 websites and clarity of information the coefficient of correlation was obtained as 0 (Zero) which meant there is no co-relation between the two variables. When the coefficient of correlation for accuracy was calculated with the other variables all the values obtained were positive and more than +1 except 'user-friendliness'. There was a perfect positive correlation between 'Accuracy' and other variables and the positive values obtained were not by chance alone, and change in one variable may affect other variable.

## V. CONCLUSION

We conclude that the variables used to evaluate web 2.0 websites in this research are co-related with each other. The user-friendliness of a web 2.0 website does not affect the other variables. There are certain issues which need to be addressed like accessibility of web 2.0 websites. The tour operators are required to choose the correct platform by using strategic technology to reach the maximum number of customers. User-generated content and accuracy of the contents are negatively correlated with each other. Findings in this study revealed that clarity of information and completeness have no co-relation with each other. We further conclude that tour operators have a positive attitude towards user generated content. UGC helps tour operators in branding of destinations and acts as a feedback forum. UGC allows tour operators to build a relationship management system. However, user generated contents has a positive impact on tour operator's satisfaction. This research attempted to evaluate the web 2.0 websites by measuring certain dimensions and presented insights how tourism industry of Kashmir responds to web 2.0 websites.



## VI. LIMITATIONS AND SUGGESTIONS

Despite the insights into formative versus reflective measurement and the successful construction and cross validation of an index for website performance the study has some limitations that should be dealt with in future research. A larger sample may be used for drawing conclusions on the entire universe. The study was restricted to the surveys of tourism entrepreneurs only. Customer surveys were not included in the study. Therefore, measurement of dimensions like electronic word of mouth, ease of use, customer satisfaction and customer loyalty could not be addressed. A more comprehensive model could be developed which will address supply as well demand side. This evaluation framework needs to be tested with more transaction oriented websites which should lead to higher coefficients for system availability and trust since respondents in a transaction setting are more vulnerable to system failure (Gefen et al., 2000).

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