Factors Influencing E-Service Quality in Indian Tourism Industry

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ABSTRACT

The online tourism industry is growing at a fast pace in India. The traditional forms of tourism are being replaced by new form e-tourism. The internet has offered with easy and cost effective solution to people who go for online travel bookings. E-service tourism companies need to understand the customer requirement and meet their expectations by evaluating and improving their website quality. The paper explores the factors of E-service quality in Indian context. The results indicated eleven factors affecting of electronic service quality. The study found that mere online presence was not important but providing excellent e-services on websites was essential to retain customers.

Keywords: Online tourism industry, privacy, attractiveness, receptiveness, E-Services.

INTRODUCTION:

Internet usage over the years has grown tremendously and has given access to new ways of conducting business and commerce. This has given rise to the growth of electronic commerce (e-commerce). “E-commerce is an emerging concept that describes the process of buying and selling or exchanging of products, services and information via computer network including the internet (Voss, 2003). The advancement and spread in information and communication technology has spread a wave of competition among companies and brought about a change in their quality and methods of conducting business. According to Internet World Statistics (2014), nearly 40% of the world population is internet users. The percentage of population with internet has increased from 15.8% in 2005 to 40.5% in 2014 (www.internetlivestats.com/internet/users)

ONLINE TOURISM INDUSTRY:

Tourism is defined as ‘Services for the people travelling to and staying outside their usual environment for less than one consecutive year for leisure activities and could be more effectively viewed and evaluated as a market rather than an industry (Karekar, 2014). The spread of electronic network has greatly transformed the business and consumer behavior even in Tourism Industry. E-services have out shined and have become one of the star features of this transformation. Tourism and internet are intricately related in today’s world (Karekar, 2014). As a result a new way of conducting business has evolved, even in tourism industry i.e. e-tourism. In fact e-tourism has now come to the fore front due to surge in the tourist activities world over. The traditional forms of tourism are giving way to new forms of Tourism based on innovative customized services broadly influenced through e-tourism.

An Indian Perspective:

The Indian tourism industry, which is at the stage of an upward growth, can be greatly influenced by e-tourism. Tourism is stated to be the third largest net foreign exchange earner for our country and also one of the sectors which employees number of man power (Karekar, 2014). The online tourism and travel industry is evolving at a
fast pace in India Online travel (online gross bookings) now constitutes an estimated 41% of the overall Indian travel market (2014). The high degree of convenience, increasing e-Commerce penetration, rapidly increasing Internet and mobile penetration, and a growing middle-class population are some of the factors boosting online travel bookings. The online travel market in India, estimated at $9.1 bn (2014), comprised air travel ($5.1 bn), rail travel ($3.1 bn), hotels ($0.8 bn), and others ($0.1 bn). Online penetration in travel and tourism bookings is estimated to increase from 41% in 2014 to 46% in 2017, according to Phocuswright, a leading travel data aggregator.

According to IAMAI Digital Commerce Report 2014, online travel in India, over the years, has been the largest digital commerce segment in terms of revenue generation. According to a recent IAMAI report on online commerce, 80% of the market share of current online commerce industry is conquered by travel business and the rest by others (www.iamai.in/reports.aspx). The travel companies with web presence are increasing day by day and offering variety of products and services to consumers ranging from hotel and vacation package, booking for taxi or buses for sightseeing to flight booking. A study by comScore in 2011 for found that more and more people are opting to book their travel online.

Fig.1: Online Travel Market in India (Source: IAMAI Internet in India Report 2011)

REVIEW OF LITERATURE:

(Madu & Madu, 2002) identified factors that customers use to judge the quality of a Business to consumer B2C service process. Based on the review of literature the 15 dimensions for e-quality were identified- performance, features, structure, aesthetics, reliability, storage capability, serviceability, security and system integrity, trust, responsiveness, product/ service differentiation and customization, web store policies, reputation, assurance, empathy. (Wolfinbarger & Gilly, 2003) formed the elements of eTailQ. The main objective of the study was to find out features of e-tailQ that help to increase consumer satisfaction and provide them a great quality online shopping experience. Using exploratory and confirmatory factor analysis four factors (fulfillment/reliability, website design, Security/Privacy and customer service were extracted. Fulfillment/reliability and website design were most significant determinants of quality. (Parasuraman & Zeithaml, 2005) conducted study to develop and design two multiple item scale (E-S-QUAL to form opinions of customers with respect to online service quality and E-RecS-QUAL. It was concluded that efficiency and fulfillment are the most critical and important dimensions of web service quality as well as perceived value and loyalty intentions. Further system availability and privacy dimension do significantly influence customer’s evaluation of overall quality perceived value and loyalty intentions. (Ho & Lee, 2007) recognized the dimensions of e-travel service quality. Factor analysis was conducted and five factors were extracted- website functionality, responsiveness and fulfillment, customer relationship, information quality and security. The study found that website functionality and customer relationship were most imperative factors in evaluating e-travel service quality. The study further found that customer relationship, responsiveness, information quality and security were also considered important determinants by customers while assessing online service quality. (Lee & Lin, 2006) suggested five e-service quality dimensions- website design, reliability, responsiveness, trust and personalization. The results indicated the positive effect of trust, reliability, responsiveness and website design on overall service quality and customer satisfaction. Out of these dimensions, the strongest impact on overall service quality and satisfaction was that of trust. The results further indicated that personalization did not impact overall service quality significantly. The study found a positive association between overall service quality, satisfaction and purchase intentions.
(Tsang, Lai, & Law, 2010) investigated the elements used by online consumers to appraise the e-service quality of online travel agencies. Factor analysis was conducted and six factors were extracted (website functionality, information content and quality, fulfillment and responsiveness, safety and security, appearance and presentation and customer relationship. It was concluded that website functionality as most important aspect of e-service quality followed by information quality and content. (Kim & Lee, 2004) investigated the implementation of E-Service Quality dimensions in area of online hotel bookings.
A structured questionnaire adopted from Bauer et.al. (2006) with five dimension of e-service quality was measured with 25 items. Four factors (Process/reliability, Functionality/design, responsiveness and enjoyment) were extracted. Functionality/design was the most critical fact of e-service quality which impacted online hotel booking websites. Further process/reliability had the highest impact on overall quality. (Barrera & Carrion, 2013) developed a model based on two different scales and tested three services- online travel reservation, accommodation reservations, and online ticketing. The first scale developed electronic service quality which consisted of four dimensions- design, functionality, privacy and information/reliability. The other scale consisted of two dimensions-access/contact and responsiveness measured electronic recovery service which. The results of the study indicated that information quality was an important determinant of E-Service Quality. The next important determinant was functionality. (Zemblyte, 2015) established and verified an instrument for assessing e-service quality. The results indicated that e-service quality consisted of four proportions compensation, responsiveness and fulfillment, website operation and reliability. Out of these the most important dimension explained e-service quality was compensation.

From the above review of existing literature on E-service quality, it is clear that consumers perceive different elements of service quality while evaluating websites. It is important for marketers to deliver superior Web service quality to satisfy and retain the customers. Over the years extensive research has been carried out on traditional service quality. Only a few studies have been carried out in the context of electronic service quality especially in Indian Tourism Industry. This paper is an attempt to explore E-Service Quality factors from customer’s perspective.

**E-Service Quality:**
The internet has provided with easy solution to people who go for online travel bookings. The number of travel related websites has grown rapidly during the past decade and competition has become even more intense. To survive or even succeed, entrepreneurs need to be customer oriented (Ho & Lee, 2007). It has become vital for E-service tourism companies to understand the customer requirement and meet their expectations by evaluating and improving their website quality. The increasing growth of online consumer’s purchases offers both challenges and opportunities for hospitality and tourism business (Bai et al. 2008). Therefore it becomes important for tourism companies doing business on the web to understand their client’s perception about E-service quality and further satisfy their customers and build loyalty for long term customer value. Within the context of E-commerce, E-service quality is recognized as one of the key determinants for success or failure (Carlson & O’Cass, 2010).

According to (Santos, 2003), E-service quality as a customer’s perceptions judgments and evaluation of the quality of services acquired from an online shopping website. (Zeithaml, 2002) defined E-services quality as the extent to which a website provides efficient and effective purchasing and delivery of goods or services. The websites which satisfy the customers in terms of services quality are willing to revisit the website and repurchase it; however customers that experience low service quality favor other websites. A variation in instrument was developed for use in e-commerce context. (E-SERVQUAL model) by (Parasuraman & Zeithaml, 2005). E-SERVQUAL can be classified into two scales; E-S-QUAL or core scale, and E-RecS-QUAL or recovery scale. The four dimensions of E-S-QUAL used were efficiency, fulfillment, system availability and privacy and security with 22 items. For RecS-QUAL, two dimensions used were responsiveness and contact with eight items.

**E-Service Quality Dimensions:**

Information Quality- Information quality in context of E-SQ includes providing reliable, dependable, trustworthy information by the e-tourism companies. Correct information of the various products, services should be continuously updated and provided by the companies.

Security- refers to the aspects of privacy that are vital for making transactions online. In online bookings, there is absence of physical exchange of cash or card so its becomes vital that online payments are secure and privacy is maintained.

Easy to Use- Ease of use include easy navigation and search for information, effortless use and maneuver within the website pages, simple and user friendly website as well easy access to the website.
Website Design- This dimension includes the layout and attractiveness of the website. E-tourism websites needs to display good quality pictures of the hotels, rooms, the various attractions around. The use of multimedia features as well as, good images attracts and retains the customers.

Customization- The aspect includes the ability of the website to provide product and services according to the need and preferences of the people.

Reliability/Fulfillment- The ability of the company to deliver the same product/service at the right time as well as correct the mistakes that occur during the transaction.

Responsiveness- Responsiveness refers to speedy response from the company. It refers to immediate and timely retort in case of any problem.

Access/Contact- This dimension refers to ability to talk to company’s representative online or through a phone as well as providing helpline numbers on the website.

RESEARCH METHODOLOGY:

Questionnaire Development:
The objective of the study is to identify the factors influencing E-Service Quality in Indian Tourism Industry. A questionnaire was developed for eight factors. The scale items were adapted from previous studies of empirical studies of (Ho & Lee, 2007) (Parasuraman & Zeithaml, 2005); (Anderson & Srinivasan, 2003); (Kaynama & Black, 2000), (Madu & Madu, 2002), (Barrera & Carrion, 2013). A pilot study and pretest of the questionnaire was conducted using 50 post graduate students in Chandigarh who had prior experience of online booking of hotel or a tour package in India.

The close ended questionnaire with five point Likert scale ranging from 5="Strongly Agree” to 1= “Strongly Disagree” was administered to 520 respondents in the region of Chandigarh having prior experience of online booking of a hotel or a tour package in India in the month of June 2017. Out of 520, 505 questionnaires were returned back and 500 were complete. Snowball sampling technique was used to collect the data. To check the positive correlation among the statements and to identify the adequate number of respondents Chronbach’s Alpha and KMO techniques were used. After extracting the reliability of the statements the analysis of the data was done through factor analysis to extract the factors influencing E-Service Quality in Indian Tourism Industry. As a means of data reduction exploratory factor analysis was conducted using SPSS

| Variables          | Communalities | Corrected Item-Total correlation | Cronbach’s alpha if item deleted | Mean | Standard deviation |
|--------------------|---------------|----------------------------------|----------------------------------|------|-------------------|
| Security E1        | .816          | .387                             | .817                             | 3.83 | .727              |
| Customization E2   | .775          | .160                             | .822                             | 3.73 | .898              |
| Contact E3         | .677          | .128                             | .823                             | 3.69 | .899              |
| Security E4        | .862          | .352                             | .817                             | 3.78 | .782              |
| Reliability E5     | .799          | .353                             | .817                             | 3.73 | .843              |
| Customization E6   | .883          | .274                             | .819                             | 3.77 | 1.072             |
| Contact E7         | .610          | .170                             | .822                             | 3.91 | 1.106             |
| Information quality E8 | .908     | .246                             | .820                             | 3.58 | .874              |
| Security E9        | .494          | .111                             | .823                             | 3.42 | .956              |

Reliability of the questionnaire is measured through Cronbach Alpha which is .822, which is greater than .75. Hence measurement tools and measure are reliable

ANALYSIS AND FINDINGS:
The factor analysis technique was applied on the responses of the various respondents regarding the factors influencing the perception towards E-Service Quality in Indian Tourism Industry. Eleven factors were extracted from fifty statements which showed 79.02% variance. Item wise reliability analysis was done to know the reliability Cronbach’s alpha was used.
| Variables            | Communalities | Corrected Item-Total correlation | Cronbach’s alpha if item deleted | Mean   | Standard deviation |
|----------------------|---------------|----------------------------------|----------------------------------|--------|--------------------|
|                      | Initial       | Extraction                       |                                  |        |                    |
| Website Design E10   | 1             | .515                             | .268                             | .819   | 4.20               | .714               |
| Customization E11    | 1             | .971                             | .269                             | .819   | 3.44               | 1.061              |
| Reliability E12      | 1             | .958                             | .280                             | .819   | 3.48               | 1.039              |
| Security E13         | 1             | .902                             | .408                             | .816   | 3.84               | .820               |
| Website Design E14   | 1             | .691                             | .390                             | .817   | 3.91               | .736               |
| Responsiveness E15   | 1             | .983                             | .280                             | .819   | 3.47               | 1.053              |
| Reliability E16      | 1             | .978                             | .286                             | .819   | 3.48               | 1.039              |
| Customization E17    | 1             | .923                             | .236                             | .820   | 3.56               | .887               |
| Customization E18    | 1             | .661                             | .288                             | .819   | 3.64               | .808               |
| Responsiveness E19   | 1             | .681                             | .254                             | .820   | 3.75               | .783               |
| Security E20         | 1             | .893                             | .398                             | .818   | 3.85               | .820               |
| Responsiveness E21   | 1             | .941                             | .181                             | .822   | 3.36               | 1.050              |
| Ease of Use E22      | 1             | .937                             | .202                             | .821   | 3.34               | 1.064              |
| Responsiveness E23   | 1             | .864                             | .339                             | .818   | 3.78               | .796               |
| Ease of Use E24      | 1             | .493                             | .300                             | .819   | 3.82               | .730               |
| Ease of Use E25      | 1             | .546                             | .212                             | .821   | 3.75               | .894               |
| Responsiveness E26   | 1             | .861                             | .260                             | .818   | 3.98               | 1.047              |
| Website Design E27   | 1             | .932                             | .234                             | .819   | 3.37               | 1.043              |
| Ease of Use E28      | 1             | .627                             | .180                             | .821   | 4.10               | .842               |
| Ease of Use E29      | 1             | .876                             | .285                             | .819   | 4.00               | 1.069              |
| Responsiveness E30   | 1             | .345                             | .093                             | .820   | 3.20               | 1.044              |
| Information Quality E31 | 1            | .564                             | .272                             | .821   | 3.93               | .852               |
| Information Quality E32 | 1            | .893                             | .386                             | .819   | 3.87               | .808               |
| Ease of Use E33      | 1             | .663                             | .313                             | .817   | 4.21               | .732               |
| Information Quality E34 | 1            | .581                             | .286                             | .818   | 3.94               | .952               |
| Ease of Use E35      | 1             | .732                             | .343                             | .819   | 3.67               | .893               |
| Ease of Use E36      | 1             | .940                             | .316                             | .818   | 3.74               | 1.081              |
| Information quality E37 | 1            | .850                             | .427                             | .816   | 3.89               | .757               |
| Information quality E38 | 1            | .713                             | .422                             | .817   | 3.94               | .586               |
| Website Design E39   | 1             | .892                             | .384                             | .817   | 3.88               | .794               |
| Website Design E40   | 1             | .940                             | .305                             | .818   | 3.73               | 1.084              |
| Information Quality E41 | 1            | .962                             | .207                             | .821   | 3.90               | .673               |
| Ease of Use E42      | 1             | .807                             | .378                             | .816   | 3.73               | .892               |
| Website Design E43   | 1             | .963                             | .205                             | .821   | 3.90               | .677               |
| Responsiveness E44   | 1             | .750                             | .303                             | .818   | 3.79               | .835               |
| Reliability E45      | 1             | .889                             | .168                             | .822   | 3.16               | 1.070              |
| Ease of Use E46      | 1             | .545                             | .163                             | .822   | 3.68               | .945               |
| Website Design E47   | 1             | .959                             | .205                             | .821   | 3.90               | .681               |
| Information Quality E48 | 1            | .866                             | .201                             | .821   | 3.06               | 1.047              |
| Customization E49    | 1             | .796                             | .387                             | .816   | 3.74               | .906               |
| Responsiveness E50   | 1             | .825                             | .157                             | .822   | 3.20               | 1.060              |

**Extraction Method:** Principal Component Analysis

**Table 3: KMO and Bartlett's Test**
A sample was adequate which was appropriate to use factor analysis. For factor analysis, KMO test and Bartlett’s test were used to assure that the sample was adequate and data was spherical. KMO value more than 0.5 and significant chi-square value confirmed that the data was spherical and sample was adequate which was appropriate to use factor analysis.

Table 3 presents the Kaiser- Meyer measure of sampling adequacy and Bartlett’s of sphericity. Before going for factor analysis, KMO test and Bartlett’s test were used to assure that the sample was adequate and data was spherical. KMO value more than 0.5 and significant chi-square value confirmed that the data was spherical and sample was adequate which was appropriate to use factor analysis.

Table 4: Total Variance Explained

| Component | Initial Eigenvalues | Extraction Sums of Squared Loadings | Rotation Sums of Squared Loadings |
|-----------|---------------------|-------------------------------------|----------------------------------|
|           | Total               | % of Variance | Cumulative % | Total          | % of Variance | Cumulative % | Total          | % of Variance | Cumulative % |
| 1         | 6.557               | 13.114        | 13.114       | 6.557          | 13.114        | 13.114       | 5.229          | 10.457        | 10.457        |
| 2         | 4.786               | 9.572         | 22.686       | 4.786          | 9.572         | 22.686       | 4.117          | 8.233         | 18.690        |
| 3         | 4.495               | 8.989         | 31.675       | 4.495          | 8.989         | 31.675       | 4.089          | 8.178         | 26.869        |
| 4         | 3.993               | 7.986         | 39.661       | 3.993          | 7.986         | 39.661       | 4.086          | 8.172         | 35.041        |
| 5         | 3.432               | 6.864         | 46.525       | 3.432          | 6.864         | 46.525       | 3.450          | 6.900         | 41.941        |
| 6         | 3.187               | 6.374         | 52.899       | 3.187          | 6.374         | 52.899       | 3.346          | 6.692         | 48.634        |
| 7         | 3.074               | 6.148         | 59.048       | 3.074          | 6.148         | 59.048       | 3.322          | 6.645         | 55.278        |
| 8         | 2.914               | 5.829         | 64.876       | 2.914          | 5.829         | 64.876       | 3.027          | 6.054         | 61.333        |
| 9         | 2.572               | 5.145         | 70.021       | 2.572          | 5.145         | 70.021       | 3.023          | 6.046         | 67.379        |
| 10        | 2.402               | 4.804         | 74.825       | 2.402          | 4.804         | 74.825       | 2.932          | 5.865         | 73.244        |
| 11        | 2.123               | 4.247         | 79.072       | 2.123          | 4.247         | 79.072       | 2.914          | 5.828         | 79.072        |
| 12        | .908                | 1.817         | 80.889       |               |              |             |               |              |              |
| 13        | .819                | 1.638         | 82.527       |               |              |             |               |              |              |
| 14        | .767                | 1.535         | 84.061       |               |              |             |               |              |              |
| 15        | .692                | 1.384         | 85.445       |               |              |             |               |              |              |
| 16        | .669                | 1.338         | 86.784       |               |              |             |               |              |              |
| 17        | .589                | 1.179         | 87.963       |               |              |             |               |              |              |
| 18        | .555                | 1.110         | 89.073       |               |              |             |               |              |              |
| 19        | .540                | 1.080         | 90.153       |               |              |             |               |              |              |
| 20        | .471                | .941          | 91.094       |               |              |             |               |              |              |
| 21        | .450                | .900          | 91.994       |               |              |             |               |              |              |
| 22        | .436                | .871          | 92.866       |               |              |             |               |              |              |
| 23        | .394                | .788          | 93.653       |               |              |             |               |              |              |
| 24        | .347                | .695          | 94.348       |               |              |             |               |              |              |
| 25        | .333                | .666          | 95.014       |               |              |             |               |              |              |
| 26        | .313                | .625          | 95.640       |               |              |             |               |              |              |
| 27        | .300                | .601          | 96.241       |               |              |             |               |              |              |
| 28        | .264                | .528          | 96.769       |               |              |             |               |              |              |
| 29        | .213                | .426          | 97.194       |               |              |             |               |              |              |
| 30        | .208                | .416          | 97.610       |               |              |             |               |              |              |
| 31        | .167                | .334          | 97.945       |               |              |             |               |              |              |
| 32        | .153                | .307          | 98.251       |               |              |             |               |              |              |
| 33        | .132                | .264          | 98.516       |               |              |             |               |              |              |
| 34        | .114                | .229          | 98.744       |               |              |             |               |              |              |
| 35        | .102                | .204          | 98.948       |               |              |             |               |              |              |
| 36        | .090                | .179          | 99.127       |               |              |             |               |              |              |
| 37        | .080                | .161          | 99.288       |               |              |             |               |              |              |
| 38        | .074                | .147          | 99.435       |               |              |             |               |              |              |
| 39        | .063                | .125          | 99.561       |               |              |             |               |              |              |
| 40        | .048                | .095          | 99.656       |               |              |             |               |              |              |
| 41        | .034                | .069          | 99.725       |               |              |             |               |              |              |
| 42        | .028                | .055          | 99.780       |               |              |             |               |              |              |
Table 4 lists the eigenvalue associated with each linear component (factor) before extraction, after extraction and after rotation. Before extraction there are 50 linear components. 11 factors are extracted with eigenvalues greater than 1. The eigenvalue associated with each factor represents the variance explained by that particular linear component. The Table 4 also shows the eigenvalues in terms of the percentage of variance explained (factor 1 explained 13.114% of the total variance).

**Table 5: Rotated Component Matrix**

| Component | 1   | 2   | 3   | 4   | 5   | 6   | 7   | 8   | 9   | 10  | 11  |
|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| E13       | .940|     |     |     |     |     |     |     |     |     |     |
| E20       | .935|     |     |     |     |     |     |     |     |     |     |
| E32       | .934|     |     |     |     |     |     |     |     |     |     |
| E39       | .931|     |     |     |     |     |     |     |     |     |     |
| E42       | .889|     |     |     |     |     |     |     |     |     |     |
| E49       | .881|     |     |     |     |     |     |     |     |     |     |
| E37       |     | .882|     |     |     |     |     |     |     |     |     |
| E38       |     | .808|     |     |     |     |     |     |     |     |     |
| E35       |     | .807|     |     |     |     |     |     |     |     |     |
| E33       |     | .794|     |     |     |     |     |     |     |     |     |
| E41       |     |     | .785|     |     |     |     |     |     |     |     |
| E31       |     |     |     | .723|     |     |     |     |     |     |     |
| E15       |     |     |     |     | .984|     |     |     |     |     |     |
| E16       |     |     |     |     | .981|     |     |     |     |     |     |
| E11       |     |     |     |     | .978|     |     |     |     |     |     |
| E12       |     |     |     |     | .971|     |     |     |     |     |     |
| E23       |     |     |     |     |     | .921|     |     |     |     |     |
| E4        |     |     |     |     |     | .912|     |     |     |     |     |
| E1        |     |     |     |     |     | .881|     |     |     |     |     |
| E5        |     |     |     |     |     | .879|     |     |     |     |     |
| E44       |     |     |     |     |     |     | .848|     |     |     |     |
| E43       |     |     |     |     |     |     |     | .975|     |     |     |
| E41       |     |     |     |     |     |     |     | .974|     |     |     |
| E47       |     |     |     |     |     |     |     | .973|     |     |     |
| E46       |     |     |     |     |     |     |     |     | .733|     |     |
| E40       |     |     |     |     |     |     |     |     |     | .958|     |
| E36       |     |     |     |     |     |     |     |     |     | .956|     |
| E6        |     |     |     |     |     |     |     |     |     |     | .930 |
| E34       |     |     |     |     |     |     |     |     |     |     | .708 |
| E29       |     |     |     |     |     |     |     |     |     |     | .926 |
| E26       |     |     |     |     |     |     |     |     |     |     | .916 |

*Extraction Method:* Principal Component Analysis.
The first factor has been labeled as *Privacy related factor* and it occupies 13.114% of total variance in the factor analysis solution. It includes five items i.e. protecting information about credit/debit card, full confirmation on online payment, providing concise information, website providing multimedia features and websites providing platform for users to exchange travel information. The results reveal that privacy related factor influence the perceptions of consumers on E-service quality during online hotel or tour package booking. The factor loadings are from .881 to .940 and alpha reliability for this factor is .965. The Eigen values covered by this factor are 6.557. Privacy of the tourists should not be distributed and their financial and personal information should be
secured (Than and Grandson, 2002). (Parasuraman & Zeithaml, 2005) also found that privacy was important determinant of e-service quality. (Ho & Lee, 2007) also found that security of not only credit/debit card was important along with that, the standing of the company was important factor in winning the confidence of the customers. Online travel companies need to highlight on security of online transactions as well as protecting the data of the customers. The second factor has been labeled as Explanatory related factor. It occupies 9.572% of total variance and includes variables as websites providing useful, clear information, websites working correctly, websites providing numerous payment options, websites using fonts properly and displaying prices of different hotel rooms and tour packages on the screen. Revealing proper useful and clear information such as correct prices of hotel rooms and packages impacts the perceptions of the consumers regarding E-Service Quality. This factor explains 9.572% of variation and factor loadings range from .723-.882. The Eigen value covered by this factor is 4.786. (Kim & Lee, 2004) & Zeithmal et al. (2002) found that information content was an important factor determining Web service quality. The tourist rely on the information provided by tourism websites, so the marketers should concentrate on providing timely, up-to-date, accurate and reliable information otherwise the tourists could shift to other websites quickly. Four variables have been loaded in the third factor which was named as Receptiveness which explained 8.98% variation. The different variables under this factor includes travel websites taking care of the problems promptly, delivering services when promised, making reservations customized for online booking customers and delivering the same package and hotel room that was booked. According to (Wolfinbarger & Gilly, 2003) “Responsiveness is a web –based customer support which requires special attention.” The different factors under this variable reveal that customers perceive E-service quality better if the problems of the customers are taken care promptly. The factor loadings varies from .848 to .921. The Eigen value covered by this factor are 4.495. (Kayama & Black, 2000) and (Parasuraman & Zeithaml, 2005) revealed responsiveness as important factors used by customers to evaluate E-Service Quality. The fourth factor has been developed as customer friendly factor which includes five variables The items were customer friendly cancellation policies, protecting information about shopping, security of personal information, websites truthful about its offering and providing frequently asked questions information. Results reveal that customer friendly cancellation policies, as well as providing information about frequently asked question influence their opinions of E-Service quality while making online bookings. The online travel companies need to offer easy cancellation policies as well providing answers to frequently asked questions which would help build a good image in consumer’s mind and further boost confidence of customers in the travel website. The variance occupied by this factor is 7.986. The factor loading ranges from .848 to .921. Eigen value covered by this factor is 3.993.

The fifth factor was named as Attractiveness which included four variables. The items were clear pictures of hotel rooms and tour packages, accurate content of the website, website using colours properly and website providing valid hyperlinks. Website with good images of hotel, hotel rooms with good use of colours and hyperlinks helps to enhance the E-Service Quality. The Eigen value of this factor is 3.432 and the factor loading ranges from .733 to .975. The variation covered by this factor is 3.432%. (Wolfinbarger & Gilly, 2003) & (Kim & Lee, 2010) found that website design was important determinant of e-service quality. (Lin, 2007) found that website design significantly influenced satisfaction towards the website. An attractive an appealing tourism websites not only retains a customer for longer time but helps them to revisit the website. It is important for tourism marketers to design their websites by displaying colourful pictures, animation and photo gallery of the hotels as well sightseeing areas. The sixth factor was categorized as Uncomplicatedness includes four factors such as Intuitive navigation, website does not waste much time, website understands specific needs and gives personalized attention and content of the website is complete. Easy navigation through website and booking without much efforts helps to enhance the E-Service Quality of tourism websites. The variation explained by this factor was 6.347% eigen value is 3.187. (Collier & Beinstock, 2006) found that ease of use was important factor to hold customers on the website. If websites are difficult to use or manage, customers quickly shift to other websites. The online tourism websites should not be poorly designed and must be easy to navigate.

Factor 7, Effortlessness, referred to five items and explained 6.148% of the variance in data, with an eigen value of 3.074. The four items were simplicity of the website, reasonable response time, fast loading of pages, easy to get anywhere on the site and ease of finding what is required. Taherikia & Shamsi(2014) found that website content, website ease of use, website appearance influenced the website quality E-tourism companies need to keep their websites simple so that customers find what they require. If the visitor gets lost while searching for information he would not revisit the site. The travel websites must be designed to have friendly search function and easy browsing Factor 8, Specific need related factor contained four items and explained 5.829% variation in data with eigen value of 2.194. The four items were giving an impression of special customer, availability of
current information, service personal always willing to help and advertisement and promotions according to needs of customers. The tourism website service providers need to give an impression personal attention to customer and make him feel a distinct customer by providing him products according to his/her requirement. Factor 9, labeled as *User friendly* factors contained five items, explained 5.14% variance in data with eigen value of 2.572. The five items were website having features personalized for users, ability to talk to personnel if some problem occurs, websites provides telephone number to reach the company, do not share personal information with other site and website is attractive. (Radziszewska & Czestochowska, 2013) found that personalization had a strong effect on consumer’s satisfaction. By customizing the travel websites for each user, the company can give an impression that it cares for tourists. The 10 factor *dependability factors* contained four items explaining 4.804% of variation in data with an eigen value of 2.402. The items were, no problem with respect to billing, providing information in various languages on the website, sending confirmation on booking within 24 hours and giving information if transaction does not process. The e-marketers have to take care how the outcome quality delivered to customer. If the consumer incurs billing problem does not a confirmation on booking, then his assessment of quality will be affected. Factor 11, *Accessibility* factors explained 4.247% variance in data and included three items with eigen value of 2.. The three items were, responsiveness to the problems encountered, bookings does not take long time and inviting website. Lin( 2004) & Li et.al (2009) found that responsiveness had a significant impact in increasing customers satisfaction. Online travel companies have to look into the problems of customers and respond to their queries.

### Table 6: Name of the Factors

| Factor Loading | Factors Extracted | Construct                  |
|----------------|-------------------|----------------------------|
| Protects information about my debit/credit card (Security E13) | .940 | Factor 1 | Privacy related factor |
| The website makes full confirmation on online payment (Security E20) | .935 | | |
| Website provides concise information (Information Quality E32) | .934 | | |
| The website uses multimedia features (Website Design E39) | .931 | | |
| A first time buyer can easily buy from the website (Ease of Use E42) | .889 | | |
| The website provides platform for users to exchange travel information (Customization E49) | .881 | | |
| The content of the website is useful (Information quality E37) | .882 | Factor 2 | Explanatory related factor |
| The content of the website is clear (Information quality E38) | .808 | | |
| Travel website works correctly (Ease of Use E35) | .807 | | |
| The website provides numerous payment options (Ease of Use E33) | .794 | | |
| Websites uses fonts properly (Website Design E14) | .785 | | |
| Prices of the hotel rooms/ tour packages are displayed on the screen (Information Quality E31) | .723 | | |
| Website take care of problems promptly (Responsiveness E15) | .958 | Factor 3 | Receptiveness related factor |
| The website deliver services when promised(Reliability E16) | .956 | | |
| Website enables me to make reservations according to my requirements(Customization E11) | .930 | | |
| Website give the same package or hotel room that was booked (Reliability E12) | .708 | | |
| Cancellation policies are easy (Responsiveness E23) | .921 | Factor 4 | Customer friendly factor |
| Protects information about shopping from website (SecurityE4) | .912 | | |
| Secured Personal Information (Security E1) | .881 | | |
| Truthful about what the website offers (Reliability E5) | .879 | | |
| Information of frequently asked questions is provided (Responsiveness E44) | .848 | | |
| Images of the hotel rooms, hotels and tour packages is clear on the website (Website Design E43) | .975 | Factor 5 | Attractiveness related factor |
| The content of the website is accurate (Information Quality E41) | .974 | | |
| The website uses colors properly (Website Design E47) | .973 | | |
| The website has valid hyperlinks (Ease of Use E46) | .733 | | |
CONCLUSION AND DISCUSSION:

E-Service Quality plays an important role in satisfying the consumer with regard to their online purchases. Customer perceived e-service quality is one of the critical determinants of the success of online business (Yang & Jun, 2002). Satisfaction with tourism websites leads to establishing trust which further enhances repeat purchases. The study conducted an empirical analysis of various dimensions of E-Service Quality on the context of studies of (Parasuraman & Zeithaml, 2005), (Wolfinbarger & Gilly, 2003), (Kaynama & Black, 2000), (Madu & Madu, 2002), (Barrera & Carrion, 2013). Factor analysis was conducted to extract the factors which contributed to E-Service Quality. It was found that eleven factors contributed E-Service Quality. These elements were a) Privacy related factor b) Explanatory related factor c) Receptiveness related factors d) Customer friendly factor e) Attractiveness related factors f) Uncomplicatedness related factors g) Effortlessness related factors h) Specific need related factors i) User friendly related factors j) Dependability related factors k) Approachability related factors. The study would be helpful for e-service providers in framing policies through which they can enhance their e-service quality and provide the consumers with attractive, dependable, approachable and easy to use websites. By providing the consumers with variety and clear information and pictures of hotels and tour packages as well as surrounding areas, the satisfaction level of the consumers can be increased. It is important for e- tourisms service providers to develop trust so that customers feel secure in and safe in disclosing their information to the companies. The tourism websites companies need to pay attention to web site dimension related to personalization, approachability, ease of use factors. The solution does not lie in forming good websites but providing good service quality at all stages (prepurchase, during purchase and post purchase) stage. In order to enhance the E-Service Quality in Tourism websites, all eleven factors should be taken into consideration.
LIMITATIONS AND FUTURE RESEARCH:
The study has been carried out in Chandigarh region. The study can be conducted in other regions as well as comparative studies can be carried out. Further the research can be carried out by studying the impact of E-Service Quality factors on satisfaction and loyalty.

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