# E-Marketing for Small and Medium Tourism Enterprises in Mauritius and Andaman Islands




**Anandkumar S. Victor**
*Pondicherry University*
(victor@victoronline.net)

*DOI: 10.26573/2008.2.2.2*
*Volume* 2, *Number* 2
*May* 2008, *pp.* 93-114

*This research examines the motivators, inhibitors and critical success factors of e-marketing for Small and Medium Tourism Enterprises (SMTEs) in Mauritius and Andaman Islands, India. Front-end gains and lack of confidence proved to be the chief motivator and inhibitor respectively. Early adopters showed a higher pay-off from e-marketing. A factor analysis identified four underlying dimensions of the critical success factors: relationship factors, resource factors, demand-supply factors and synergy factors. The association between e-marketing pay-off and website elements (based on Rayport-Jaworski's 7Cs framework) was plotted using correspondence analysis and SMTEs with high e-marketing pay-off were particularly superior at elements such as content, communication and connection. The implications of the findings for SMTEs are discussed.*

**Keywords**: Internet and Tourism, E-Marketing, SMTEs, E-Marketing Critical Success Factors, Website Design

## 1. Introduction and Motivation

The last decade of the twentieth century was a revolutionary period of time for the marketing discipline. Its subject matter did not change: marketing still pertains to the exchange of value between buyers and sellers. However, the routes and dynamics of the systems accommodating these exchange processes and transactions are challenged strongly by the "Internet" phenomenon [27].

One of the industries to adapt quickly to the Internet technology and the e-marketing practice is the tourism and travel industry. The transition has been swift and comprehensive to such an extent that the structure of the industry is changing [20, 30] and the competitiveness of the marketplace is altered [6] whereas other industries have held on to traditional processes. The heterogeneous, intangible and perishable nature of tourism products distinguishes them from other industrial sectors and explains the importance of information and the relevance of Information and Communication Technologies (ICTs) in this industry. The international dimensions of tourism and the fact that tourism is a service industry also contribute to the central role of information. E-marketing is attractive to the tourism industry as "travel is an information-based product and the Internet is full of information" [13].

In many emerging economies, the tourism industry is dominated by private sector, comprising largely of small and medium enterprises (SMEs). These entities find opportunity to expand their businesses through online channels with very low entry barriers and reach large markets that would never be accessible to them offline [23]. Although small and medium enterprises do not have an established place in the Internet economy yet, they are making rapid strides to become an integral part of e-business and marketing environment in the tourism industry.

This research examines the motivators, inhibitors and critical success factors of e-marketing among the SMTEs sampled from two popular island destinations. Islands are unique when compared to other geographical attractions. Island tourists are characterized by likeness in intent and oneness in activity (centered on the sun, sea and sand). Free from many intervening variables (such as distractions and counter-attractions), island tourism lends itself to a focused research leading to realistic findings and plausible suggestions. Mauritius in the Indian Ocean and Andaman Islands (India) in the Bay of Bengal are the sampled island destinations for the purpose of study. Endowed with similar natural resources and attractions these remote destinations differ in terms of their tourism infrastructure development and marketing strategy and hence represent the whole spectrum of destination marketing strategies. They are dominated by SMTEs and virtually un-researched in this aspect.

A review of relevant literature (pertaining to e-marketing, e-tourism and SMTEs) points to a paucity of research into the e-marketing practices of SMTEs and prompted this research that will go someway towards contributing to knowledge in this area. The paper discusses the practical implications of the findings for the SMTEs. The study is largely exploratory in nature.

## 2. Review of Literature

The online tourism and travel sales are a substantial and growing proportion of total sales in one of the world's largest industries. Tourism and travel industry was the largest source of business-to-consumer (B2C) e-commerce revenues with $52.4 billion in 2004, and is predicted to reach over $119 billion by 2010 [41]. Despite these facts, there still exists a lack of comprehensive literature on the practice of e-marketing among the SMEs in this sector.

The birth of the e-marketing literature can be approximated as the early 1990s. Business articles, popular press and white papers by various vendors and consultants dominate the literature in this area, apart from serious academic research. The importance of and necessity for using ICT in the travel and tourism industry is a relatively new topic in the literature. The subjects of the research have mostly been big and global firms in developed markets whereas a few studies have focused on the SMTEs in developing markets. The review of literature highlighted the avenue for this research and clarified certain under-investigated or unsettled areas of study. The relevant literature was reviewed with the following deductive framework:

- What happened to the marketing function with the introduction of the Internet?
- What has been the resultant spill-out in tourism marketing?
- How are the SMTEs influenced?

Hoffman *et al*. [21] and Hoffman and Novak [22] recognized that the Web possesses unique characteristics such as interactivity in a many-to-many communications environment, flow and experiential and goal-directed behaviors. The Web was seen as a dis-intermediated market in which the customer goes to the marketer rather than the vice versa [3, 10]. Several studies, most notably those of Peterson *et al*. [34] and Kiang *et al*. [26], discussed what can/cannot sell online focusing on the product characteristics. Lages *et al*. [28] have articulated an approach to critical e-marketing tasks (namely, web design, promotion, pricing and customer relationship management), relating to e-marketing performance. The review of literature highlighted how the Internet has challenged the rules of marketing. While its impact on the marketing definition, environment, mix and process has been studied, the impact on the marketing activities has not been highlighted sufficiently. The Internet presents a fundamentally different environment for marketing activities compared to traditional media. This study has attempted to research the e-marketing activities of SMTEs vis-à-vis their demographics. It intends to add to previous research by using a framework to study e-marketing not only as an antecedent but also as an outcome of performance.

Following the general routes of ICT penetration into business environments, several authors have demonstrated the benefits of ICTs for the operation of tourism enterprises [35, 33, 38, 24, 41, 6 and 44]. Many studies have highlighted the fit between the Internet and the travel and tourism industry. Tourism products appear to be well suited to e-marketing because of their distinctive high-priced, high-involvement, intangible, heterogeneous, high-risk and well-differentiated characteristics [8, 34, 4 and 39]. Internet has become an essential and growing channel of distribution where tourism providers are 'coopetitors', balancing between cooperation and competition [41]. Tourism enterprises that adopt e-commerce 'evidently expect to gain an advantage over their competitors' [2] and they will succeed in e-commerce if they use the Internet as a complement to traditional ways of competing [32]. A functional orientation dominates the e-marketing literature whereas an application orientation (for example, e-marketing in the tourism industry dominated by SMEs) will offer insights on what works and where it works.

SMEs make up the majority in the tourism industry. There has been a steady growth in interest in SMTEs since the late 1980s, but there has not been a concomitant growth in marketing-related studies. Not to mention, very few studies have addressed the e-marketing aspect of SMTEs. Keeping up with rapidly changing marketing trends is a challenge for all firms, particularly for the resource- and time-poor SMEs [19]. The SMTEs have enormous difficulties in marketing their products globally and competing with larger counterparts [17]. Unless SMTEs find mechanisms to establish their online presence and to communicate effectively with their clientele, they will suffer competitive disadvantages [6]. Yet, opportunities abound for the SMTEs who are willing to change. The Internet provides them with two major opportunities: *the direct customer contact* and *a new worldwide distribution channel* [20]. SMTEs have often used their nimble-footedness and effective networking using ICTs to achieve remarkable success and dominance in the tourism sector [5]. From a strategic context, the Internet was used mainly as a marketing tool, mostly for promotional activities, by the SMTEs [16, 11]. However, the Web could provide the means for numerous initiatives able to consistently

generate value-added products/services for tourist destinations as a whole. This study investigates e-marketing as practiced by the SMTEs with a view to identify activities beyond mere promotion.

## 3. Scope of the Study

The aim of this research is to study the SMTEs' response to e-marketing opportunities and challenges and also their e-marketing activities. Only the individual SMEs are taken into consideration. They represent the bricks-and-clicks model of e-commerce. This study covers the popular e-marketing activities and the experience of SMTEs in the chosen island destinations. The e-marketing decision makers at the SMTEs have been considered as the key informants for obtaining the e-marketing-related information.

The main research questions are: What is the state of e-marketing in SMTEs? What motivates/inhibits the SMTEs to endeavor e-marketing? What factors contribute to e-marketing success? What sets apart the website of an SMTE that accrues a high pay-off from its e-marketing? In order to answer the above mentioned questions, it is imperative to:

- Profile the SMTEs in terms of their line of business, annual sales volume, e-marketing tenure and pay-off (as a percentage of impact on total sales),
- Identify the e-marketing activities among SMTEs and their level of involvement,
- Find out the motivators for using and inhibitors for not using e-marketing,
- Look for a first-mover advantage (in terms of higher e-marketing pay-off) among SMTEs with a long e-marketing tenure,
- Classify and analyze the critical success factors of e-marketing, and
- Compare the website design elements (based on Rayport-Jaworski's 7*C*s framework) of SMTEs having high e-marketing pay-off and those having low e-marketing pay-off with an intention to find out what makes the difference.

This research is specific to place (Mauritius and Andaman Islands) and time (2005-2006). Several interviews with SMTE managers in Andaman Islands had to be rescheduled in the aftermath of the December 2004 Tsunami tragedy. In a few cases, the e-marketing activities were outsourced and hence the ignorance and lack of knowledge on part of the respondents (SMTE managers) might have introduced a degree of inaccuracy in the research data. The consistency of the websites in different languages and across different browsers was not studied. Challenged on one side by scarce professional research and on the other side by new and emerging technologies, this research was a journey on the road less traveled!

## 4. Research Methodology and Data Collection

To study the e-marketing initiatives and practices of SMTEs, two prominent island destinations - the Andaman Islands, India and Mauritius in the Indian Ocean - were chosen as the study locations. The study was based mainly on primary data collected from the respondents and the websites. Secondary sources were used as background material. The websites and promotional literature (such as brochures and newsletters) of the SMTEs and Destination Marketing Organizations (DMOs) were the secondary sources scrutinized for collecting the background data for conducting the study.

Active primary data was collected from the e-marketing decision makers of SMTEs through interviews and passive primary data was collected from the SMTE websites through observation. These SMTEs were identified through disproportionate stratified random sampling with the line of business as the strata (for example, the accommodation sector). The sample size was fixed as 20 percent of the sampling frame, that is, the directory provided by the respective DMOs. It translated to 40 SMTEs (20 in Mauritius and 20 in Andaman Islands) in four diverse lines of business – accommodation (hotels, villas and bungalows), access (tour operators, travel companies and car/bike rentals), attractions (places of interest and leisure/adventure activities like SCUBA diving and game fishing) and auxiliary products (video/photo services, souvenirs and specialty restaurants). The sample inclusion criteria of 'SMTEs having an own website' and 'respondent to be an e-marketing decision maker' were followed. SMTEs (such as tourism/travel portals) with a 'pure click' or 'aggregator' models of e-commerce were excluded since the study focused on the supplier's e-marketing practices rather than the intermediary's or the infomediary's e-marketing practices. SMTEs with an over-reliance on their channel partners for marketing (for example, a hotel depending extensively on tour operators to bring in business) were also excluded.

A structured questionnaire (as given in Annexure-1) was developed after an extensive review of the relevant literature and was used for collecting data through personal interviews. The questionnaire consisted of six sections that asked the respondents about their level of involvement in e-marketing activities, perceived criticality of e-marketing to their success, e-marketing motivators (benefits), inhibitors (barriers) and critical success factors of e-marketing and profiling information. Product category, sales turnover, e-marketing tenure and e-marketing pay-off (as a percentage contribution to sales) were used to profile the SMTEs. As a result, firm performance as well as site (e-marketing) performance evaluations are included [9]. Studies exploring the post-adoption effect of Internet solutions incorporate measures such as firm revenues, direct and indirect costs, and investment satisfaction [18, 42]. Another approach that is increasingly relied upon is the aggregation of various performance measures into a single measure of performance [28]. Revenue throughput (that is, e-marketing's share in the firm's revenue) is one of the standard metrics for e-commerce sites [25].

A pre-test of the questionnaire was carried out with five SMTE managers. The pre-test did not indicate any problems except the difficulty with English language in the case of a few Mauritian SMTE managers. Following this, a French translation of the questionnaire was made available on request. Data collection meeting was followed by a guided tour of the enterprise. This approach allowed the SMTE managers to offer unsolicited evaluations and responses that were taken note of.

### 4.1 Characteristics of the SMTEs

The surveyed SMTEs were profiled using categorizing variables like the product category, sales turnover, e-marketing tenure (described in terms of years of e-marketing) and e-marketing impact on sales (as a percentage of sales volume). Table 1 describes the distribution of the respondents in terms of these characteristics.

The SMTEs were well diversified, representing an amalgam of tourism products. The annual sales turnover of a majority of SMTEs falls in the range of $2-4 million. Based on e-marketing tenure, there were more late entrants (e-marketing tenure <2

years) than early adopters. Majority of the SMTEs attributed 10-20 percent of their sales to e-marketing. In order to assess the relative e-marketing performance for research purpose, a pay-off of less than 20 percent was considered low and more than 20 percent was considered high. It may be justified by the descriptive measures of e-marketing pay-off data as observed from Table 1.

**Table 1:** *Characteristics of the Small and Medium Tourism Enterprises (SMTEs)*

| Characteristics | No. of respondents (n = 40) | Percent of respondents |
|---|---|---|
| **Product category** | | |
| • Accommodation | 11 | 27.5 |
| • Access | 9 | 22.5 |
| • Attractions | 11 | 27.5 |
| • Auxiliary services | 9 | 22.5 |
| **Sales turnover** | | |
| • Up to $1 million | 4 | 10.0 |
| • $1-2 million | 8 | 20.0 |
| • $2-3 million | 8 | 20.0 |
| • $3-4 million | 12 | 30.0 |
| • Above $4 million | 8 | 20.0 |
| **E-marketing tenure** | | |
| • Less than 1 year | 8 | 20.0 |
| • 1-2 years | 13 | 32.5 |
| • 2-3 years | 4 | 10.0 |
| • 3-4 years | 7 | 17.5 |
| • More than 4 years | 8 | 20.0 |
| **E-marketing pay-off** | | |
| • Less than 10 % | 5 | 12.5 |
| • 10-20 % | 15 | 37.5 |
| • 20-30 % | 10 | 25.0 |
| • 30-40 % | 6 | 15.0 |
| • More than 40 % | 4 | 10.0 |

**Table 2:** *7Cs and their Indicators for Website Evaluation*

| Dimension | Indicators |
|---|---|
| Content (C1) | Essential information, itineraries/tour/product info, maps, security/privacy statement, click-through content, quality assurance and price information |
| Community (C2) | Customer postings and user-to-user interaction |
| Customization (C3) | Multi-language service, personalized service, loading specifications and search function |

| | |
|---|---|
| Communication (C4) | FAQs, email form, online registration, newsletters, call center and offline contact details |
| Connection (C5) | Useful links and affiliate links |
| Commerce (C6) | Online reservation, online payment, online cancellation and cross-selling |
| Context (C7) | Sitemap, main menu, multimedia contents, cookies placement, search engine optimized, resident software required, look and feel, transactional utility and alias |

### 4.2 Rayport-Jaworski's 7*C*s Framework

To record the observation data, a structured data entry table was designed based on the Rayport-Jaworski's [37] 7*C*s framework of website evaluation from a marketing perspective. Review of literature on website design and customer interface dimensions and a pilot observation helped compile the appropriate indicators (as described in Table 2) under each of the 7*C*s.

## 5. Analysis and Findings

SPSS (version 12.0) software was used to analyze the data. Apart from the frequency and central tendency analysis, Pearson chi-square test, Friedman test and one-way analysis of variance (ANOVA) were used to analyze the data. Factor analysis was used to identify the underlying dimensions of the critical success factors of e-marketing. Correspondence analysis was used to map the association between the e-marketing pay-off and the 7*C*s.

### 5.1 E-Marketing Activities of the SMTEs

The SMTEs were found to be using e-marketing for the following activities: general marketing, customer communication, market research, market intelligence, after-sales service, online reservation, online payment, and B2B transactions. The level of involvement in these activities was measured using a 5-point Likert scale and the mean results are shown in Figure 1. The most popular e-marketing activity was found to be customer communication and the least popular was online payments, closely followed by market research and intelligence gathering. Access and attractions categories expected e-marketing to be more critical to their success than the other categories. A Pearson chi-square [29] test pointed to a relationship between e-marketing tenure and its perceived criticality as shown in Table 3.

### 5.2 E-Marketing Motivators and Inhibitors

Among the motivators of e-marketing, 'convenience to customer' and 'access to new markets' dominated an exhaustive list of perceived benefits as shown in Figure 2. B2B e-commerce benefits and the mass customization ability of the Internet did not seem to be appreciated much. A careful observation of the motivators and their degree of motivation revealed that front-end improvements/gains (such as providing better information, access and convenience to the customer) served as strong motivators for the SMTEs to endeavor e-marketing.

Figure 3 shows the distribution of respondents by their Friedman's mean ranking (higher the rank, bigger the inhibitor) of e-marketing inhibitors. This ranking was further subjected to a Friedman test [14] to determine if mean rankings differed

across the inhibitors. The test statistic indicated that at least one of the inhibitors differed from the others.

Inhibitors like 'lack of confidence' and 'lack of awareness' ranked the highest. It may be summarized that lack of belief/confidence in e-marketing is the biggest hindrance to the SMTEs. The other inhibitors may be summarized as falling into the categories of lack of 'know-how' and resources, and the cost involved.

### 5.3 First-Mover Advantage in the e-Marketing of SMTEs

The association between perceived criticality and tenure of e-marketing was established by a Pearson chi-square test [29]. It was further substantiated when a positive, though weak, correlation was observed (as shown in Tables 4a and 4b)

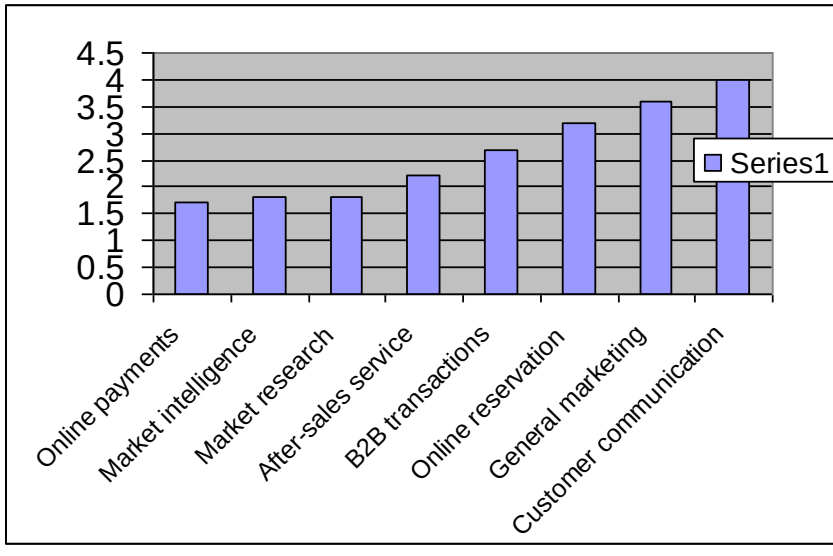



**Figure 1** *The SMTEs Level of Involvement in the e-marketing Activities*

**Table 3**
*Association between e-Marketing Tenure and Perceived Criticality of e-Marketing to Success*

| **E-marketing tenure** | **Various Factors** | | **Statistical Inference** |
|---|---|---|---|
| | *Low* | *High* | |
| Criticality of e-marketing | n :17 | n :23 | |
| Less than 1 year | 5 | 3 | $X^2 = 10.838$ |
| 1 – 2 years | 9 | 4 | df = 4 |
| 2 – 3 years | 1 | 3 | P < 0.05 |
| 3 – 4 years | 1 | 6 | Significant |
| More than 4 years | 1 | 7 | |

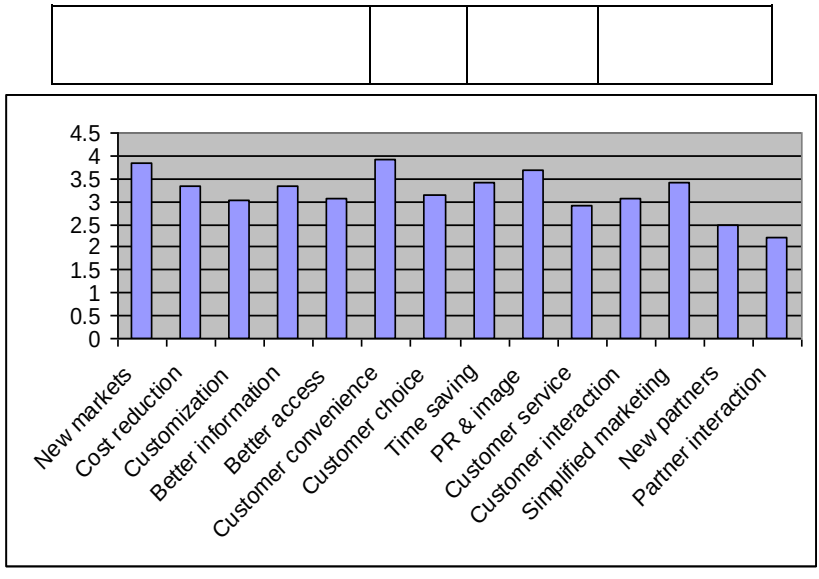



**Figure 2:** *E-marketing Motivators (shown with the degree of motivation)*

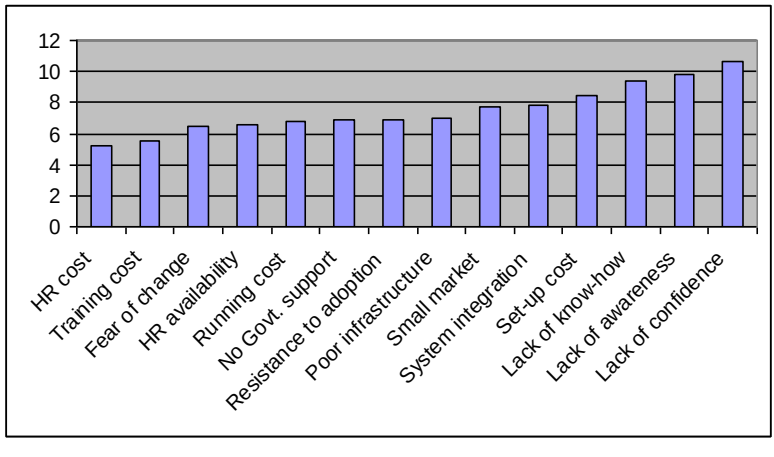



**Figure 3:** *E-Marketing Inhibitors (shown with mean ranks)*

between e-marketing tenure and e-marketing pay-off. This may be interpreted as early adopters reaping a higher pay-off from their e-marketing initiatives when compared to the late entrants and thus enjoying a first-mover advantage.

**Table 4a:** *Regression Model Summary*

| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate |
|---|---|---|---|---|

| | | | | |
|---|---|---|---|---|
| 1 | .573 | .328 | .310 | .977 |

a Predictors: (Constant), e-marketing tenure

**Table 4b:** *Correlation between e-marketing Tenure and Pay-off*

| | | E-marketing pay-off | E-marketing Tenure |
|---|---|---|---|
| **E-marketing pay-off** | Pearson Correlation | 1 | .573 |
| | Sig. (2-tailed) | . | .000 |
| | N | 40 | 40 |
| **E-marketing tenure** | Pearson Correlation | .573 | 1 |
| | Sig. (2-tailed) | .000 | . |
| | N | 40 | 40 |

** Correlation is significant at the 0.01 level (2-tailed)

### 5.4 Critical Success Factors of e-Marketing

Factor analysis (using principal component analysis) was used to identify the underlying dimensions of the critical success factors of e-marketing. Its appropriateness was verified using the Bartlett's test of sphericity (significant at 0.05 level) and Kaiser-Meyer-Olkin (KMO) statistic (>0.5) [15, 31]. Out of the 14 variables used in the analysis, one was dropped as it had a small extraction value (using the principal component analysis) that would not fit well with the factor solution [36]. The number of factors to be extracted was determined based on Eigenvalues (> 1.0) and Screen plot. The factor analysis yielded four dimensions (as shown in Table 5 along with the comprising items and their absolute loadings) that were labeled as: relationship factor, resource factor, demand-supply factor and synergy factor. To ensure that the variables for each of the factors were internally related, their Cronbach's coefficient alpha were measured and found to have acceptable internal consistency reliabilities [12].

**Table 5:** *Final Factors, Items and Loadings*

| Factors | Items | Loadings |
|---|---|---|
| F1: Relationship | ▪ Customer acceptance | 0.840 |
| | ▪ Level of trust between customer and company | 0.809 |
| | ▪ Relationship with business partners | 0.761 |
| F2: Resources | ▪ IT infrastructure | 0.745 |
| | ▪ Government support | 0.727 |
| | ▪ Human resources (skills availability) | 0.604 |
| F3: Demand-supply | ▪ Market readiness (demand) | 0.483 |
| | ▪ User-friendly web interface (supply) | 0.467 |
| | ▪ Continuity (setup and running cost) | 0.407 |

| | | |
|---|---|---|
| F4: Synergy | ▪ Networking among SMTEs<br>▪ Integration with the existing system | 0.508<br>0.477 |

### 5.5 Best practices in SMTE Website Design: A Correspondence Analysis

An analysis of variance was performed to look for any group differences (in terms of their website design elements) among the four tourism product categories (accommodation, access, attractions and auxiliary products). The results are shown in Table 6. As it can be observed, no significant difference was observed. As a result, it can be inferred that the website design elements of a hotel are not necessarily different from, say, a car rental company.

A multiple correspondence analysis was performed on a three-way contingency table (as shown in Tables 7a and 7b). SPSS has computed the inter-point distances and subjected the distance matrix to principal components analysis [40], yielding in this case six dimensions. Only the interpretable dimensions are reported, not the full solution, which is why the eigenvalues (labeled 'inertia' in the summary table, representing the percent of variance explained by each dimension) add to something less than 100 percent, in this case only 9.5 percent. The eigenvalues reflect the relative importance of each dimension, with the first always being the most important, the next second most important and so on. The 'Proportion of Inertia' column represents the percent of variance each dimension explains of the variance explained: thus the first dimension explains 68.7 percent of the 9.5 percent of the variance explained by the model. Though it is an exploratory and not a confirmatory technique, the correspondence map gives a powerful representation of association

**Table 6**
*One Way ANOVA among Tourism Product Categories with regard to Various Elements of Website Design*

| No. | Dimensions of website evaluation (7*C*s) | df | SS | MS | $\overline{X}$ | Statistical Inference |
|---|---|---|---|---|---|---|
| 1 | *Content*<br>Between groups<br>Within groups | 3<br>36 | 0.555<br>60.545 | 0.185<br>1.682 | G1 = 3.90<br>G2 = 4.00<br>G3 = 3.81<br>G4 = 3.66 | F = 0.110<br>P > 0.05<br>Not Significant |
| 2 | Community<br>Between groups<br>Within groups | 3<br>36 | 1.573<br>14.202 | 0.524<br>0.395 | G1 = 0.63<br>G2 = 0.55<br>G3 = 0.36<br>G4 = 0.11 | F = 1.329<br>P > 0.05<br>Not Significant |
| 3 | Customization<br>Between groups<br>Within groups | 3<br>36 | 2.068<br>28.707 | 0.689<br>0.797 | G1 = 1.18<br>G2 = 1.11<br>G3 = 0.72<br>G4 = 1.33 | F = 0.864<br>P > 0.05<br>Not Significant |
| 4 | Communication<br>Between groups | 3 | 1.996 | 0.665 | G1 = 2.00<br>G2 = 1.44<br>G3 = 1.72 | F = 0.907<br>P > 0.05<br>Not Significant |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Within groups | 36 | 26.404 | 0.733 | G4 = 2.00 | |
| 5 | *Connection* | | | | | |
| | Between groups | 3 | 1.035 | 0.345 | G1 = 0.54<br>G2 = 1.00<br>G3 = 0.72 | F = 0.508<br>P > 0.05<br>Not Significant |
| | Within groups | 36 | 24.465 | 0.680 | G4 = 0.77 | |
| 6 | *Commerce* | | | | | |
| | Between groups | 3 | 3.969 | 1.323 | G1 = 2.45<br>G2 = 2.44<br>G3 = 1.72 | F = 1.283<br>P > 0.05<br>Not Significant |
| | Within groups | 36 | 37.131 | 1.031 | G4 = 2.00 | |
| 7 | *Context* | | | | | |
| | Between groups | 3 | 2.773 | 0.924 | G1 = 2.90<br>G2 = 3.44<br>G3 = 2.72 | F = 0.426<br>P > 0.05<br>Not Significant |
| | Within groups | 36 | 78.202 | 2.172 | G4 = 2.88 | |
| 8 | Overall | | | | | |
| | Between groups | 3 | 29.238 | 9.746 | G1 = 13.63<br>G2 = 14.00<br>G3 = 11.81 | F = 0.856<br>P > 0.05<br>Not Significant |
| | Within groups | 36 | 409.737 | 11.38 | G4 = 12.77 | |

G1 = Accommodation, G2 = Access, G3 = Attractions, G4 = Ancillary services

between categorical variables by giving a comprehensive view of the data for effective interpretation [1]. Figure 4 represents the correspondence map as a joint plot of a composite variable comprising the four categories (A1, A2, A3 and A4) of tourism products and the two levels (high and low) of e-marketing pay-off, and the seven (7*C*s) website design elements described earlier in Table 2. The correspondence map indicated that those SMTEs with high e-marketing payoff had a close proximity to the website design elements such as content, communication and connection.

**Table 7a:** *Correspondence Table*

| **Composite variable** | **Web site design elements** | | | | | | | **Active margin** |
|---|---|---|---|---|---|---|---|---|
| | C1 | C2 | C3 | C4 | C5 | C6 | C7 | |
| HiA1 | 20 | 3 | 6 | 9 | 3 | 12 | 18 | 71 |
| HiA2 | 18 | 3 | 3 | 7 | 6 | 12 | 13 | 62 |
| HiA3 | 28 | 2 | 6 | 11 | 6 | 12 | 19 | 84 |
| HiA4 | 12 | 3 | 3 | 8 | 2 | 3 | 11 | 42 |
| LoA1 | 21 | 3 | 6 | 12 | 2 | 16 | 0 | 60 |
| LoA2 | 17 | 2 | 6 | 8 | 4 | 11 | 32 | 80 |
| LoA3 | 17 | 1 | 5 | 7 | 3 | 8 | 11 | 52 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| LoA4 | 21 | 0 | 7 | 10 | 4 | 12 | 15 | 69 |
| Active margin | 154 | 17 | 42 | 72 | 30 | 86 | 119 | 520 |

An inter-correlation matrix was constructed to test for correlation among the website design elements (7*C*s). Pearson Correlation Coefficient was the measure used. 'Content' and 'Customization' had the highest positive correlation with the overall score and 'Community' had the lowest correlation.

**Table 7b:** *Correspondence Analysis SummaryTable*

| Dimension | Singular value | Inertia | Chi Square | Sig. | Proportion of Inertia Acc. for | Cum. | Confidence sing. value S.D. | Correlation |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | 2 |
| 1 | .255 | .065 | | | .687 | .687 | .032 | -.010 |
| 2 | .116 | .013 | | | .142 | .828 | .045 | |
| 3 | .094 | .009 | | | .094 | .922 | | |
| 4 | .081 | .006 | | | .069 | .991 | | |
| 5 | .027 | .001 | | | .008 | .999 | | |
| 6 | .012 | .000 | | | .001 | 1.000 | | |
| Total | | .095 | 49.203 | .207 | 1.000 | 1.000 | | |

a 42 degrees of freedom

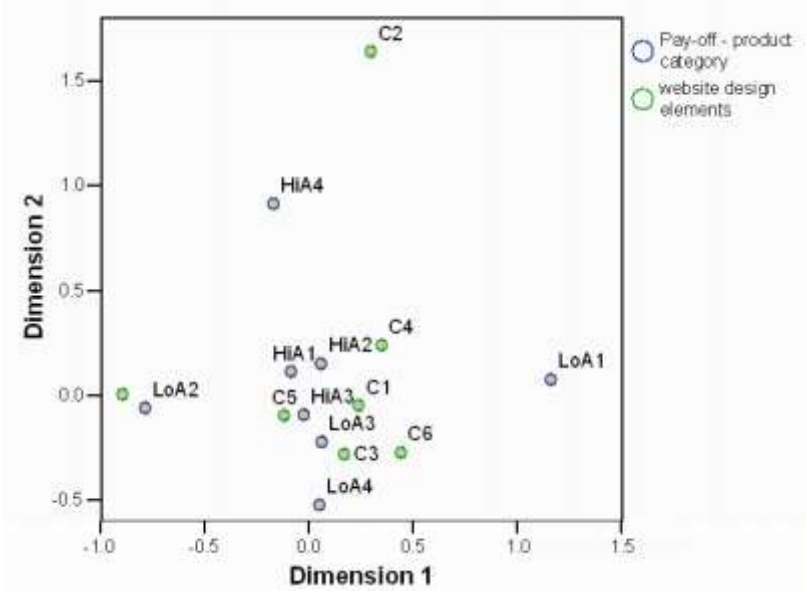



**Figure 4** *Correspondence Map*

## 6. Insights and Managerial Implications

In the space of a few years, ICTs have had an enormous impact on the tourism industry worldwide. The Internet provides them with two major opportunities: the direct customer contact and a new worldwide distribution channel. In this context, the following findings about SMTEs and their e-marketing perspectives and practices are discussed.

The SMTEs were well diversified representing an amalgam of tourism products - accommodation, access, attractions and auxiliary services. By virtue of the sampling criteria applied for the study, these SMTEs practiced e-marketing. Hence it can be concluded that e-marketing was practiced across all tourism product categories. Even auxiliary services like tourist wedding photography (such as www.mauritiuswedding.com) and souvenir businesses (such as www.mauritiusshipmodels.com) had well-designed websites and successful e-marketing programs. The annual sales (including online sales) turnover of a majority of SMTEs fell in the range of $2-4 million. SMTEs in Mauritius and Andaman Islands, India experienced seasonal demand, by virtue of their geography and topography. The off-season was characterized by poor occupancy rates (in accommodation sector) or load factors (in access sector) and subsequently there was lot of promotional pricing to stimulate demand. Off-season promotions were used to attract the domestic segment also. Concerning e-marketing tenure, there were more late entrants (e-marketing tenure < 2 years) than early adopters. As is the case with the diffusion of any technology, the early adopters were few in number. Many of them were using other forms of electronic communication tools such as e-mail prior to having their own websites. Later those tools were integrated into their websites. The SMTEs had also revamped their websites since the launch, adding functionality

and updating contents. In respect to the pay-off from e-marketing, majority of the SMTEs attributed 10-20 percent of their sales to e-marketing. In moving from a brick-and-mortar format to a bricks-and-clicks format, the offline sales continue to bring in a major portion of the revenue. The sales revenue attributed to e-marketing show a steady though slow rise. Since the external drivers such as customer acceptance and readiness are high for the online mode, the percentage contribution of revenues through e-marketing is bound to increase. An SMTE with high e-marketing pay-off is dependent on the Internet as a major marketing channel for communication, transaction and distribution.

When questioned on 'how critical is e-marketing to succeed in the marketplace?' the access and attractions categories expected e-marketing to be more critical as compared to other categories. It may be because of their intermediary and dependent status in the industry. For example, a tour operator may feel threatened by a hotel using e-marketing to reach the customers directly. Moreover, once on the destination, the hotel may have a strong influence on the tourist activity. To counter the disintermediation threat facilitated by the Internet, these categories need to re-invent themselves (say, as infomediaries and e-marketers) and avail the opportunities on the Internet.

SMTEs involved in e-marketing activities like communication, transaction and planning. Online customer communication emerged as the most popular activity. An United Nation's study [41] reports that the distribution of tourism information and products over the Internet is the main area where technological innovation has had the most profound impact on tourism enterprises, thus supporting this finding. Activities such as market research and intelligence gathering, generally considered being of strategic significance, suffered poor patronage from the SMTEs. This may be due to a myopic view of the Internet as a popular media and not as a strategic tool. This finding is in conformance with previous studies [6, 11] which had concluded that till now the Internet has not been an enabler of processes for structural, managerial or commercial reorganization for SMTEs. The accommodation, access, attraction and auxiliary service business did not differ in their level of involvement in different e-marketing activities. They used e-marketing for customer communication and to carry out marketing transaction and planning. As a result, it emerges that though the perceived criticality of e-marketing differs among them, their involvement in e-marketing activities does not differ. Perceived criticality may be considered as a function of a firm's position in the industry structure. Hence intermediaries such as the access category perceive e-marketing to be more critical in the light of the disintermediation threat.

Among the e-marketing motivators, the demand-side motivators dominate the supply-side motivators. Many SMTEs use e-marketing because of the front-end improvements/gains like being able to provide better information, access and convenience to the customer. It indicates the customer orientation and growth aspiration of the SMTEs. E-marketing practices like collaborative/affiliate marketing have bright prospects for SMTEs. SMTEs can cooperate at the destination level in order to increase their total competitiveness as a destination (or as the total tourism product) against substitute tourism and leisure products or factors that reduce their profitability or market share [5]. SMTEs' often myopic perception of competition that concentrates exclusively on neighbouring similar enterprises should be

reconsidered. For example, a tourism producer may find it advantageous to establish and broaden its online offer by including booking for other local producers in an effort to offer consumers a comprehensive tourist product.

Among the e-marketing inhibitors, lack of awareness and confidence ranked high. It may be summarized that scepticism about the potential benefits of e-marketing is the biggest hindrance to the SMTEs' e-marketing initiatives. This finding differs from the earlier studies that had identified the following variables as key inhibitors: lack of resources and small size [43]; security aspect of Internet access, reliability of communications, lack of interest in e-commerce opportunities, insufficient e-commerce skills as well as initial and continuing costs of the Internet, telecommunication costs [7]. From the findings of this study, the need to educate the SMTEs about e-marketing arises. Destination Marketing Organizations (DMOs) and trade associations have a responsibility in educating and training SMTEs on e-marketing. Case studies of SMTEs (such as www.wildorchidandaman.com in Andaman Islands, India and www.sportfisher.com in Mauritius) demonstrating a high e-marketing pay-off will serve to alleviate the inhibitions and provide confidence and motivation for other SMTEs to follow suit. Marketing has generally been a weakness for the SMTEs. But e-marketing can take them to a level-playing field.

A first-mover advantage (in terms of e-marketing pay-off) was noticed among SMTEs practicing e-marketing. Early adopters had a higher pay-off from their e-marketing initiatives. They probably had a better e-marketing plan compared to the late entrants among whom a lot of 'me too'-ism prevails. Being first to the market offers opportunities to garner a greater share of the mind or market. It is more so in the online marketplace as evidenced from the success of the online brands like Amazon, Yahoo! and Google all of whom were first-movers in their respective e-commerce categories, namely e-retail, online portal and search business. This finding does not support the wait-and-watch policy of the overcautious SMTEs. Now is the time to take the plunge else it may be too late for them. SMTEs are strongly recommended to have a web presence at least on a small scale if not on a large scale. Recent trends in the use of ICTs in general and particularly for travel and tourism show that the more online experience consumers have, the more likely they are to look for tourism information and buy tourism products online. Being a first-mover gives an edge in e-marketing.

A factor analysis yielded four dimensions of e-marketing critical success factors. The relationship factor implied connection, communication, acceptance and trust in both B2B and B2C contexts. Tourism is a networked industry that bundles elements provided by different types of suppliers, mostly SMTEs and it is based on cooperation in the creation and distribution of the product. Hence the relationship with business partners is crucial to succeed in e-marketing. The resource factor referred to external sources that facilitate a SMTE's e-marketing. SMTEs are limited by their resources. At the destination level, the institutional support and guidance (say from the DMO) are essential for the success of SMTEs. The demand-supply factors indicate the need for sustainable supply to meet the demand. The challenge for SMTEs in developing nations is to meet the demand of the customers from developed nations. E-marketing can suffer from digital divide in the global economy. The synergy factors referred to an integrated marketing at the firm level and

collaborative marketing at the industry level. SMTEs should aim to increase the 'size of the pie' rather than the 'size of the slice'.

The search for best practices in SMTE website design did not indicate differences among tourism product categories. In spite of the diversity of operations, the SMTE structure and the similarity in tourist information needs contribute to a unified approach to website design. However, some studies [1, 43] have suggested providing different interfaces depending on the complexity of the product. For instance, booking on a car rental site is considered 'less complex' than booking a tour package on a tour operator website. Therefore perceived ease of use from the customer's point of view is an issue for the SMTEs to consider. The aspects of the website that relate to perceived ease of use are the information, features and functionality available on the site. This is especially the case with complex products such as tours, packages and cruises, where consumers seek exhaustive information before making the purchase decision. One solution for the SMTEs is to offer different approaches for tasks (for example, a 'walk-me-through' approach for complicated tasks and a 'click-through' approach for simple tasks) on their website.

The SMTEs who enjoyed a high pay-off from their e-marketing initiatives had web design elements like content, communication and connection (from among the 7*C*s) working for them. Commerce is conspicuous by its absence. While commerce is the end, content, communication and connection represent the means to that end for a website. The transaction needs follow the information needs. Content indicators such as essential information, itineraries/tour/product information, maps, security/privacy statement, quality assurance and price information represent the information needs of website visitors.

This finding only reinforces the Internet adage – 'content is king'. A website is first a tool for marketing communication and then for transaction. Communication indicators such as FAQs, email form, opt-ins (for example, online registration), helpline and offline contact details offer interactivity (from limited to real-time interactivity) in communication with the visitors. Connection indicators such as useful links and affiliate links offer a directed flow of navigation with business opportunities. For the e-marketer, it offers scope for up and cross selling. For the visitor/customer, it offers continued and purposeful flow of navigation and convenience.

## 7. Conclusion

At the conceptual level, this research will be useful in developing an e-marketing model for SMTEs incorporating the best practices. At the implementation level, this study will result in the design and implementation of tourism websites and e-marketing programs that are better geared to meet the needs and wants of the online consumers. At the policy level, this research will aid the Destination Marketing Organizations (DMOs) to provide institutional direction and support for SMTEs to implement e-marketing. At the research level, it was an attempt to study destinations that were hitherto un-researched and it is also a pioneer Indian research in the area of tourism e-marketing.

Destinations and businesses eager to have an impact on the market must be online. Small or remote destinations and products with well-developed and innovative

websites can now have 'equal Internet access' to international markets. This study has identified several best practices from SMTEs with high e-marketing payoff. These include an early online presence, managerial importance to e-marketing as 'critical to success', relationship factor (both B2C and B2B) as a critical success factor and website design elements characterized by content, communication and connection. At the same time, reasons for failure include a prolonged 'wait and watch' before attempting e-marketing, not perceiving e-marketing to be critical to the firm's success and setting up a very commerce-oriented website without first appreciating the information needs of the website visitors.

As information is the lifeblood of tourism, ICTs provide both opportunities and challenges for the industry. Increasingly, organizations and destinations, which need to compete, will be forced to compute [5]. Although technology appears to threaten the very existence of small tourism firms without resources, know-how, and access to distribution channels, a more optimistic view counters that "competent entrepreneurs, regardless of their size or location, will take advantage of the opportunities that the Internet offers to obtain equal footage with larger companies" [6]. It is not the cost of being there on the online market place that must be reckoned with, but the cost of not being there.

**Acknowledgements:** The author acknowledges the support extended by the Association of Small and Medium Hotels of Mauritius, the Mauritius Tourism Promotion Authority and the Directorate of Information, Publicity and Tourism, Andaman and Nicobar administration while carrying out this research. The author is grateful for the comments and critique offered by the editor and the reviewers of the AIMS International Journal of Management.

## 8. References

1. Beldona, S., A.M. Morrison and J. O'Leary, "Online shopping motivations and pleasure travel products: a correspondence analysis," *Tourism Management*, 26(4), 2005, 561-570.
2. Berrill, A., S. Goode and D. Hart, "Managerial expectations of Internet commerce adoption after the 'Tech Wreck' of 2000 – An Australian perspective," *Journal of Global Information Technology Management*, 7/3, 2004, 45-61.
3. Berthon, P, "Marketing communication and the World Wide Web," *Business Horizons*, 39(5), 1996, 24.
4. Bonn, M.A., H.L. Furr and A.M. Susskind, "Using the Internet as a pleasure travel-planning tool: an examination of the socio-demographic and behavioral characteristics among Internet users and non-users," *Journal of Hospitality and Tourism Research*, 22(3), 1998, 303 –317.
5. Buhalis, D, "Enhancing the competitiveness of small and medium-sized tourism enterprises," *Electronic Markets*, 6(1), 1996, 1-6.

6. Buhalis, D., *eTourism: Information technology for strategic tourism management*, 2003, Pearson Education, Harlow.
7. Buhalis, D., and O. Deimezi, "Information technology penetration and e-commerce developments in Greece with a focus on small to medium-sized enterprises," *Electronic Markets*, 13(4), 2003, 309-324.
8. Burgur, F, "Web-database supported tourist information on the Web," in A. M. Tjoa (Ed.), *Conference proceedings: Information and communication technologies in tourism*, 1997, Springer, Wien, 39-46.
9. Chakraborty, G., V. Lala, and W. David, "Important Factors in Business to Business Web Site Evaluation: A Scale Development Study," in M. Evans and L. Sheer (Eds.) *Proceedings of the American Marketing Association Winter Conference*, 2002.
10. Choudhury, V., K.S. Hartzel and R.S. Konsynski, "Uses and consequences of electronic markets: An empirical investigation in the aircrafts parts industry," *MIS Quarterly*, 22(4), 1998, 471.
11. Collins, C., D. Buhalis and M. Peters, "Enhancing SMTEs' business performance through the Internet and e-learning platforms," *Education+Training*, 45(8/9), 2003, 483-494.
12. Cooley, W.W. and P. R. Lohnes, *Multivariate Data Analysis*, 1971, John Wiley & Sons Inc., New York.
13. Connolly, D.J., M.D. Olsen and R.G. Moore, "The Internet and travel: A good fit," *Cornell Hotel and Restaurant Administration Quarterly*, 39(4), 1998, 50.
14. Cramer, D., *Basic statistics for social research*, 1997, Routledge, New York.
15. Field, A.P., *Discovering statistics using SPSS*, 2005, Sage, London
16. Franch, M., U. Martín and P. L. Novi Inverardi, "Defining Internet marketing strategies for Alpine tourist destinations: Lessons from an empirical study of the Dolomite Area," in A. J. Frew, M. Hitz and P. O'Connor (Eds.), *Information and Communication Technologies in Tourism*, 2003, Springer-Verlag, Wien-New York, 402-411.
17. Frangialli, F, "A new era in Information Technology: Its implications for tourism policies," World Tourism Organization. Seoul, November 10-11, 1998.
18. Frew, A., P. McCarthy and P. Horan, "Analysis of the volume, value and conversion performance of a national destination marketing system website," *Information and Communication Technologies in Tourism*, 2002, Springer-Verlag, Wien, 77-86.
19. Gaulden, C. and W.T. Jackson, "Fuzzy marketing: Implications for small business," Association for Small Business and Entrepreneurship Conference, New Orleans, February 27-March 3, 2001. Available at: http://www.sbaer.uca.edu/research/asbe/2001/15.pdf. Retrieved 2004 May 8.
20. Gratzer, M. and W. Winiwarter, "The role of the Internet in the SME hotel sector in Austria," in G. Goos, J. Hartmanis and J. van Leeuwen (Eds.), *Web and Communication Technologies and Internet-related Social Issues*, 2003, Springer, Berlin, 85-95.

21. Hoffman, D.L., T.P. Novak and P. Chatterjee, "Commercial scenarios for the Web: Opportunities and challenges," *Journal of Computer-Mediated Communications*, Special Issue on Electronic Commerce, 1 (3), 1995, 1-26.
22. Hoffman, D.L. and T.P. Novak, "Marketing in hypermedia computer-mediated environments: Conceptual foundations," *Journal of Marketing*, 60, 1996, 50-68.
23. Hormozi, A. M., W.T. Harding and U. Bose, "Is the Internet feasible and profitable for small businesses?" *SAM Advanced Management Journal*, 63(3), 1998, 20-26.
24. Ink pen, G., *Information technology for travel and tourism*, 1998, Addison-Wesley, Edinburgh.
25. Joseph, P. T., *E-commerce: an Indian perspective*, 2005, Prentice-Hall, New Delhi.
26. Kiang, M. Y., T.S. Raghu and K.H. Shang, "Marketing on the Internet – who can benefit from an online marketing approach?" *Decision Support Systems*, 27, 2000, 383-393.
27. Kimiloglu, H, "The E-Literature: A framework for understanding the accumulated knowledge about Internet Marketing," *Academy of Marketing Science Review* (online), 6, 2004. Available at: http://www.amsreview.org/articles/kimiloglu06-2004.pdf. Retrieved 2006 March 18.
28. Lages, C., L. F. Lages and R. Paulo, "The Relationship between E-Marketing Strategy and Performance: A Conceptual Framework in a Web Context," FEUNL Working Paper No. 446, 2004. Available at: http://ssrn.com/abstract=882427. Retrieved 2005 December 8
29. Levin, I. and S. Rubin, *Statistics for Management*, 1998, Prentice-Hall, New Delhi.
30. Lewis, I. and J. Semeijn, "The impact of information technology on travel agents," *Transportation Journal*, 37(4), 1998, 20-26.
31. Malhotra, N., *Marketing research: An applied orientation, 2005*, Prentice Hall, New Delhi.
32. Mistilis, N. and R. Daniele, "Challenges for competitive strategy in public and private sector partnerships in electronic national tourist destination marketing systems," *Journal of Travel & Tourism Marketing*, 17(4), 2004, 63-73.
33. O'Connor, P., *Using computers in hospitality management*, 1995, Cassell, London.
34. Peterson, R. A., S. Balasubramanian and B.J. Bronnenberg, "Exploring the implications of the Internet for consumer marketing," *Journal of the Academy of Marketing Science*, 24, 1997, 329-346.
35. Poon, A., *Tourism, technology and competitive strategies*, 1993, CAB International, Oxford.
36. Rao, C. R, "The use and interpretation of principal component analysis in applied research," *Sankhya*, A26, 1964, 329-358.

37. Rayport, J. and B. Jaworski, B., *Introduction to e-commerce*, 2002, McGraw-Hill, New York.
38. Sheldon, P., *Tourism information technology*, 1997, CAB International, Oxford.
39. Smith, C. and P. Jenner, "Tourism and the Internet," *Travel and Tourism Analyst*, 1, 1998, 62-81.
40. SPSS Inc., *Perceptual mapping using SPSS categories*, 1998, SPSS, Chicago.
41. United Nations Conference on Trade and Development. *ICT and tourism for development*, 2005, Geneva. Available at:

    http://www.unctad.org/en/docs/c3em25d2_en.pdf. Retrieved 2006 February 14.
42. Wade, M., D. Johnston and R. McClean, "Exploring the net impact of internet business solution adoption on SME performance," *International Journal of Electronic Business*, 2(4), 2004, 336-350.
43. Werthner, H. and S. Klein, *Information technology and tourism - A challenging relationship*, 1999, Springer-Verlag, New York.
44. Zhou, Z. *E-Commerce and Information Technology for the Hospitality and Tourism*, 2004, Thompson Learning, Canada.

## Annexure 1 - Structure of the Questionnaire

1. Level of involvement in the following e-marketing activities (5-point rating scale)
    a. General marketing activities
    b. Communication with customers
    c. Market research
    d. Market intelligence
    e. After-sales service
    f. Online reservation
    g. Online payment
    h. B2B transactions
2. How critical is e-marketing to succeed? (5-point rating scale)
3. Importance of the following benefits of e-marketing (5-point rating scale)
    a. Creating new markets
    b. Reducing marketing cost
    c. Providing customized/specialized products
    d. Providing better tourism info
    e. Providing better access to info
    f. Making it convenient to customers
    g. Providing choice to the customers
    h. Saving time for providing tourism services
    i. Improving image and public relations
    j. Improving customer services
    k. Establishing interactive customer relationship
    l. Simplifying the marketing process
    m. Finding new business partners
    n. Interacting with business partners
4. Barriers to e-marketing (ranking scale)

a. Lack of awareness of e-marketing
b. Limited knowledge of available technology
c. Lack of confidence in the benefits of e-marketing
d. Shortage of skilled human resources (to develop)
e. Cost of initial investment (set-up cost)
f. Cost of system maintenance
g. Cost of securing skilled human resources for e-marketing
h. Cost of training human resources for e-marketing (to manage)
i. Relatively small online market size (so, not cost-effective)
j. Insufficient e-commerce infrastructure
k. Difficulty with integrating e-marketing and the existing offline system
l. Resistance to adoption of e-marketing (on the SMTE side)
m. Fear of changes in the business system (say, technology obsolescence)
n. Lack of Government support

5. Critical Success Factors (5-point rating scale)
   a. Specific tourism products/services for e-com (available online only)
   b. Top management support
   c. IT infrastructure
   d. Customer acceptance
   e. User-friendly web interface
   f. Integration with the existing system
   g. Security of the e-com system
   h. Market situation/condition
   i. Set-up and running cost
   j. Level of trust between customer and company
   k. Government support
   l. Skilled human resources
   m. Sharing of knowledge and information among SMTEs
   n. Relationship with business partners
6. Profiling information
   a. Working/Business area
      A – Accommodation
      B – Access
      C – Attractions
      D – Auxiliary services
   b. Annual sales turnover
      A – Upto $1 million
      B – $1-2 million
      C – $2-3 million
      D – $3-4 million
      E – Above $4 million
   c. Time since the first e-marketing initiative
      A – Less than 1 year
      B – 1-2 Years

C – 2-3 Years
D – 3-4 Years
E – More than 4 years

d. Impact of e-marketing on sales (pay-off as percentage contribution)
A – Less than 10%
B – 10-20%
C – 20-30%
D – 30-40%
E – More than 40%