

The Contribution of E-Marketing to Functional Competency and Profitability Among Tourism Business Firms in India

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Abstract

The present study discovers tourism business reactions towards e-marketing usage and investigates its relationship with functional competencies and profitability among tourism firms in India. With a quantitative approach the study found an extensive usage of e-marketing in tourism firms was noted from descriptive tables. The application of regression analysis indicated positive and significant impact of e-marketing on functional competencies and profitability of tourism firms in India. A positive and significant correlation was also noted among these two due to adoption of e-marketing. This study provides insights to formulate comprehensive e-marketing strategies to fulfil growing customer needs.

Keywords: E-marketing, extensive, usage, functional competency, profitability.

Introduction

The Indian tourism and hospitality industry is growing aggressively and contributing highly in foreign exchange earnings and strengthening India economically. This sector is presenting services and customary facilities of very high value (Dhankhar & Singh, 2014). Therefore, different firms showed their very strong attendance in the country's tourism sector. The growing numbers of tourism and hospitality firms increase the competitiveness among different competitors and put pressures to provide excellence in services and to earn more profit to survive their businesses.

Olifer and Olifer (2006) have brought in to notice that technology has genuinely done maximum to outline the preferences and opportunities of present and potential guests and tourists. The technology in the form of computers and related devices have simplified firms to collect, manipulate, share and data storage at error free, exact and faster rate (Ansah, Kontoh & Balnkson, 2012). The tourism and hospitality industry of India have promptly accepted to used this technology to offer better and advanced services to covered new avenues of the business (Grandson & Pearson, 2004; Barnes & Hinton, 2007) by upgrading their different business operations.

This increased acceptability of ICT tools in tourism and hospitality sector has brought the expansion of concept of 'e-marketing' which integrate the business operations such as providing tools for marketing research; improving overall efficiency of business; and partnership building. E-marketing is actually a technology based interactivity as it comprises establishing an e-dialogue that enable individual customers access to information, and in return these customers to provide information to the business (Brodie, Winklhofer, Coviello & Johnston, 2007). The application of various e-marketing practices has provided chances for tourism sector to expand their customer number, shape positive communication with customers in a more cost-effective manner as comprehended different studies (Lo & Darma 2000; Ozituran & Roney, 2003; Singh & Harmon, 2003; Shin, 2006).

Sahadev & Islam, (2005) confirmed that the growing expansion of e-marketing practices adoption are advantageous to this industry as hotels and other tourism-related companies are encouraged to accept these fruitful technologies, but Indian firms in the sector still appear in the nascent stage. It is expected that e-marketing adoption is to enhance operational efficiency, improve service quality and decrease costs (Law et al., 2009) and to provide a global platform too (Sahadev & Islam, 2005). The application of e-marketing in hospitality and tourism firms brings quick and economical promotion of their products and services to gain a share of online market (Leung & Law, 2005; Gratzer & Winiwarter, 2003). Thus, the application of e-marketing is advantageous for this sector as it help their managerial decision-making and daily operations (Leung & Law, 2005).

A substantial part of the previous studies indicating a positive bang of e-marketing on the performance of hospitality firms in foreign countries (Chaston & Mangles, 2003; Ozituran & Roney, 2003; Sunny et al., 2004; Salwani et al., 2009). Though, not much of the literary evidence is available on the influence of e-marketing practices on the hotel and tourist firms in India, past researches on e-marketing are available on the global context (Maswera et al., 2008; Elliott & Sewry, 2006; Elliott & Boshoff, 2009) worldwide. Resultantly, the impact of e-marketing adoption on the performance of the Indian tourism sector needs to be examined, especially because it is an area which has acknowledged little research attention. Hence, the requirement to understand the importance of e-marketing to functional competencies and business profitability remain effective and reasonable in tourism sector which lends justification to researcher's claim of conducting this study in the field of tourism industry in India. The study focus to highlight the e-marketing usage and its influence on functional competencies and profitability among tourism firms in India.

Literature Review

E-Marketing

F-Park & Gretzel (2007) stated that e-marketing includes all electronic data and applications used for the marketing of a firm's products, such as customer profile and marketing mix information, and their strategic use to increase sales or reduce marketing costs. According to Liu & Arnett (2000) tourism and tourism products are ideal for marketing on the Internet, because tourism is an information-intensive industry. Moreover, it helps tourism and hospitality organizations unparalleled chance to communicate directly with customers. Hence, some studies further described that time have come when tourism and hospitality companies should start thinking about to use this crucial marketing strategy in their business (Porter, 2001; Grazer et al. 2002; El-Gohary et al., 2010). Therefore, the tourism and hospitality industry extended electronic marketing to its different components such as accommodation inventory, guest details and billing information, central reservation system (CRS), global distribution systems (GDS) such as on-line travel agent. Research efforts concerning the impact of this emerging phenomena (e marketing and ICT) have leveraged on the quality of decision making process resulting in the enhancement of market monitoring, strategy development and implementation, and functional integration (Harmon, 2003). Al-Taie (2006) & Gourvenec (2005) have argued that the effective use of electronic marketing can improve not only the performance and functionality, but can also improve firm level productivity and innovation. Furthermore, using e-marketing facilitates tourism and hospitality businesses themselves to formulate effective strategies that improve their customer services as well as performances (UNCTAD, 2005). Scaglione et al. (2009) in a study analysed revenue per available room before and after hotels using internet based marketing and found a positive relationship performance. Hence some researchers (such as Harmon,2003) recommended understanding internet based marketing tools in tourism sector.

E-Marketing and Functional Competencies

It has been well established that electronic marketing pump the development of functional competencies in the firms. E-marketing which has been functionally dependent on such tools of information technology, is thus affected by the degree to which electronic market platform have been able to influence the functional capabilities of the firms. Under context, Savory (2006) dwelling on competencies and said that competence is the ability to use resources to an acceptable level of performance. The functional competence relevant to the tourism and hospitality as an analogy can be drawn from the study of Hill & Jones (2001) who indicated that competencies at functional-level can be sources of competitive advantage through assessing the four factors of competitive advantage including marketing, information systems, production and human resources competencies have a positive significant impact on firm performance. In terms of marketing competencies, Li (2000)

specified that enterprises can increase their market competitiveness only by coordinating functional area competencies. Wang, Lo, & Yang, (2004) defined dimensions identified as firms' marketing competencies including product development skills, marketing research, strategy & planning, marketing program implementation, after-sales services, pricing skills, competitiveness, and customer relationship management, and measuring effectiveness. The information systems competencies considered by Kamasak & Bulutlar (2010) and viewed critical role of information sharing among all functions in an organization. Jaspersen, Carter, & Zmud, (2005) considered the information systems competencies in the form of capability to react more quickly to their environment, decrease the cost, time savings. Wheelen & Hunger (2004) refer to information system competencies to stay closer to its customer and manage customer relationship. Furthermore, Morgan, Kaleka, & Katsikeas (2004) considered production competencies such as working with suppliers, warehousing raw materials and supplies, installing machines and equipment, and making the most use of materials with as little waste as possible. Finally, development of human resource competencies studied by Hill & Jones (2001) who pointed to competency-based management as enabling organizations to integrate strategic human resources and business plans, by allowing organizations to assess the current human resource capacity based on their competencies against the capacity needed for translating the strategic vision of an organization into the behaviour of employees.

E-Marketing and Profitability

Considerable studies has been conducted to study the impact of e-marketing tools in business performance and profitability in tourism sector (Lo & Darma, 2000; Kim & Jeong, 2004; Song, 2005; Shin, 2006; Salwani, Marthandan, Norzaidi & Chong,2009). Further investigation in this area relating to investment in information systems and firm's performance, concluded that the relationship between the internet and company profitability is not clearly outlined. However, some research work (Sunny et al., 2004; Ulhas,2007; Salwani et al.,2009) believed that internet marketing brings about high profitability. Kivijarvi & Saarinen (1999) on the other hand concluded that although there are some considerable benefits of using the internet for marketing, investing in information technologies such as the internet pays back, but only in the long term. Their stunning and star revelation was investment in the internet does not guarantee profitability. Lo & Darma (2000) also (in Australian context) concluded that the use of electronic technology does not necessarily mean that an improvement in the performance of an organisation. Singh & Harmon (2003) also contended that investment in information technology, such as the internet, may not lead to profitability. Lacovou (2004) promulgated that proper integration of the internet as a marketing communication tool is able to enhance the performance of the firms in the field of hospitality and tourism sector. Ulhas (2007) observed that one of the main financial benefits of internet marketing is the reduction of annual

expenditure by making most of the process from advertising to purchase automatic. Armijos, et al. (2002) contended that technology applications and Internet usage have assisted companies in the realization of increases in most major industry indicators, such as gross revenue, average daily rate, revenue per available room, and net profitability.

The extensive review of earlier literature discovered the substantial attention of researchers on the impact of e-marketing adoption on business performance (Sunny, Kim & Jeong, 2004; Song 2005; Shin, 2006; Salwani, Marthandan, Norzaidi & Chong, 2009), but its brunt on tourism business performance/profitability has not been very clear. Moreover, the literature review does not deliver any firm overview between e-marketing usage and business profitability and performance (Powell & Dent-Micallef, 1997; Lo & Darma, 2000). Though some of the studies (Ulhas, 2007; Salwani et.al., 2009) narrated that e-marketing yields high performance, while others (Powell & Dent-Micallef, 1997; Lo & Darma 2000; Kivijarvi & Saarinen, 1995; Singh & Harmon, 2003; Shin, 2006) found no association between e-marketing usage and business profitability and performance. Thus the researcher interested to check following hypotheses

- H 1 the usage of e-marketing in tourism firms has a positive influence on their functional competencies such as (i) marketing competencies, (ii) research and development competencies, (iii) information system competencies and (iv) production competencies.
- H 2 the e-marketing usage positively influences a tourism firms' profitability through (i) return on equity, (ii) profit margins, (iii) sales volume, (iv) customer satisfaction, (v) efficiency, (vi) operating costs and (vii) relationship development.
- H 3 the functional competence significantly related to profitability of the tourism firms.

Methodology

The present study extended to selected tourism firms in India and selection of tourism firms for the study was made through the convenience sampling method. A total of 150 tourism firms were contacted and out of them 124 completely filled and returned the questionnaire. The study focussed on travel firms duly approved by Ministry of Tourism, Government of India. The list of travel and tourism firms was taken from the official website of ministry of tourism, India.

A questionnaire was framed to understand the e-marketing usage and their effects on functional competencies and profitability of firms. This questionnaire was systematically divided in three main parts. First part cover questions about the background of tourism firms. The second part covers profile of the respondents including gender, age and total working experience of contacted personnel in tourism firm (Owners/General Managers, Accounting Personnel, Marketing and Sales Personnel).

Third part of the questionnaire concerned e-marketing usage, and its effect on functional competencies of firm were asked on scale items like e-marketing increases marketing competencies, e-marketing increases research & development competencies, e-marketing increases information system competencies, e-marketing increases production competencies in details with various sub-segments. The profitability of firm was measured by focusing sales performance, dimensions of efficiency, customer satisfaction, and customer relationship development etc. The statements designed in the third part of the questionnaire were measured by using a 5-point Likert-type scale ranging from "strongly disagree" (1) to "strongly agree" (5).

The reliability of the measures was also checked as it is apprehensive and instrument's reliability level is depended upon on its capability to yield the same results when used repetitively (Cant, Gerbenel-nel, Nel & Kortze, 2005). The reliability scores of every construct were noted as more than cut off value for e-marketing usage, functional competencies and profitability. The study used different statistical tools such as frequency, percentage, mean and standard deviation to know about the background of the respondents, their e-marketing usage, and score of functional competencies and profitability of the selected tourism firms. Since this study pursues to find out the relationship between multiple independent variables and one variable - e-marketing usage, multiple linear regression analysis was resorted to check its relationship with functional competencies and business profitability. Correlation coefficient was also used to study the relationship between enhanced functional competencies and profitability of the tourism firms.

Data Analysis and Research Findings

The result of the study first provide the description of background of tourism firms and their employees, e-marketing usage among them, role of e-marketing to functional competency and profitability.

Background of tourism firms and their employees

The background of tourism firms and profile of the respondents is presented with help of frequency table as below:

TABLE 1: Background of tourism firms and their employees

Firm Information		Employee Information	
Type of Tourism Firms		Age of Managers/Personnel	
Travel Agency		21-30	

Tour Operator	35	31-40	
Transporter & ground service provider	20	41-50	
Hotels	26	Above 50	
Area of Business		Status of Employees	
Global Market	41	Marketing Personnel	
Domestic Market	22	Sales Personnel	
Regional Market	30	Accounting personnel	
Local Market	21	Owner/General Manager	
Location of Tourism Firm in India		Experience in Tourism Industry	
North India	39	1 -3 years	
West India	37	4-6 years	
South India	23	7-10 years	
East India	15	Above 10 years	

The description of data relating to the area of operation of selected tourism firms, the location of the firm and segment type of firms is presented first. This indicates that 41 out of one hundred and twenty four were providing services in global tourism market, followed by 30 covering regional tourism market, 22 were domestic tourism firms and 21 firms were providing services only in local tourism market. As far as the location of firms is concerned the most of the firms which comprise 39 were located in north India, 37 were located in west India followed by 23 in south India and remaining 15 were located in east India. It is also observed that every segment of tourism sector covered under selected one hundred and twenty four firms including 43 travel agency, 35 tour operators, 26 accommodation units and 20 were transport and ground service providers included in the sample. The demographic data of the employee respondents such as the age of the respondents, employment status of the respondents and the total number of years for which the respondents have been working in the tourism industry also presented in the table 1. It is indicated in the table that 28 out of one hundred and twenty four respondents were in the 21-30 age bracket, 48 were in the 31-40 age bracket, 30 were in the 41-50 age group and 18 out were in the above 50 age bracket. Further, out of total respondents, 52 were marketing personnel, the majority, 41 were sales personnel, 18 were accounting personnel and 13 were either owners or general managers. Respondents in the tourism industry were questioned to specify the total number of years for which they have been working in the tourism industry. The

question was necessitated as it was assumed that more the number of years one is employed in tourism industry, it increases their assessment capability to express whether e-marketing usage impacted the technical and financial profitability in their firms. 48 respondents indicated that they were employed for between one and three years, 32 respondents had and experience of four to six years, whilst 34 were employed for seven to ten years and 10 respondents were in employment for more than ten years. The results indicate that selected tourism firms respondents were capable enough to visualize and provide information about the profitability of the e-marketing tools in their respective firms.

E-marketing usage among tourism firms

To explore the extent of actual application of e-marketing in the firms in tourism industry, respondents were offered 30 statements and requested to rate their views with the statements on a scale from 1 (strongly disagree) to 5 (strongly agree). The results are shown in table 2.

TABLE 2: E-marketing usage by tourism firms

E-Marketing Usage	Mean	SD
The Internet is part of our marketing strategy	3.83	0.38
<i>Having a website is a must in our business</i>	3.33	0.13
We consider the internet knowledge among job aspirants in interview	3.72	0.36
We change the website content based on the analysis of website usage	3.17	0.71
Clients are able to register for receiving a newsletter	3.33	1.22
Clients are able to post comments on the website	3.83	1.58
Clients are able to communicate with other website users	3.33	1.35
Clients are able to adjust pages to their needs	3.11	1.33
We build a community with our clients via the website.	3.09	1.13
Clients are able to assess the offer or comment on it on the website	3.33	1.50
We know our website clients by their name, last name or user name	1.61	1.13
Links to our website can be found in well-known on other websites	3.17	0.73
Our website directs the client to other websites	3.17	1.36
We have a database of users' e- mail addresses	3.61	0.78
We permanently monitor results of our web page usage	3.22	0.33
We use the website for investigating potential clients' needs	3.72	1.18
We use the website for investigating the existing clients' satisfaction	3.06	1.06
our website we also provide useful information on the environment – city, untry, other tourist offers, weather forecast, foreign exchange list, logistic information etc.)	3.00	1.08
Marketing over the Internet significantly contributes to the overall success of our marketing efforts	3.78	0.33
We are satisfied with the return on investment in e-marketing	3.17	0.73
E-marketing leads to boosting our image	3.67	0.53
E-marketing leads to the internationalization of our business	3.67	0.63
E-marketing provides my company with a competitive advantage	3.50	0.73
We have clearly defined parameters for measuring effects of website usage	3.78	1.11

We know what the return on our investment in e-marketing is	3.61	1.13
We know what visitors to our site do on the site	3.00	1.13
We know what proportion of visitors converts into clients	3.67	0.31
We know what proportion of clients' returns to our website	3.72	1.23
Investment in e-marketing reduces our investment in other media	3.28	0.83
We plan to increase activities related to e-marketing in the next year	3.50	0.62
Overall mean Score	3.53	0.78

The results show that respondents' score (>3) are in agreement with most of the statements. Having a website was essential to the tourism business received the highest average rating from respondents. In addition, respondents were aware of the importance of Internet marketing for business, and they highly agreed with the statement. The Internet is part of our marketing strategy, with an average of 3.83. Respondents gave the lowest average rating (M = 1.61, SD = 1.13) to the statement, we know the users of our website by name, last name or nickname, indicating that there is room for improvement. The statement referring to having plans received a high average of 3.50, which means that hoteliers were aware of the advantages that Internet marketing brings and are planning to use it more.

E-marketing business profitability in tourism firms

Performance evaluation can be done with financial gauges for example on, return on assets, return on equity and sales performance (Wiklund, 1999). Performance is also assessed by non-financial indicators such as perceived productivity, market share and consumer satisfaction compared to the competitors (Akimova, 2000). Tourism and hospitality firms should use both financial and non-financial measures composed, as any measures alone are an insufficient tool for measuring the performance, also analysts who believe in both financial and non-financial measures were found more precise in their decisions and actions (Dale, 1996; Joshi, 2001). Measuring the financial profitability and performance ratios was beyond the scope of this research effort. In the following section only the perceptual profitability was assessed through owners and hotel employees. It provides only an approximate insight into the financial benefits of e-marketing assessed on the basis of factors such as return on equity, average sale volume, profit margin and operating costs as was done by Rowely (2000). Here in this study, the researcher added efficiency, customer satisfaction and relationship development. The data was essentially extracted from the senior executives and employees who were more concerned with accounting and finance departments. Counter-In-Charges, Reservation Officers and some Marketing Executives were specifically requested to offer details over such measures. The data derived from respondents concerning their perception on the effect of e-marketing usage on the profitability of business is shown in table 3.

TABLE 3: Responses to the influence of e-marketing usage on profitability

Profitability	Strongly agree	Agree	Neutral	Disagree	Strongly disagreed	Mean
1. Return on equity	20	26	20	38	20	2.90
2. Operating cost	32	27	15	34	16	3.20
Sales volume	42	35	20	16	11	3.65
Profit margin	37	31	16	25	15	3.40
Efficiency	47	40	5	16	16	4.10
Customer Satisfaction	45	38	17	18	6	3.79
Relationship Development	41	37	15	21	10	3.63

On the matter of return on equity, figures in the column first and second indicated that e-marketing does not bring in significant upsurge in return in equity. Thus, nothing conclusively could be said. At the same time in response to operating cost, the researcher could not do away with the observations of some of the executives such as the costs of production and transaction, (e.g. raw material order processing, warehousing, and scheduling costs) in our firm have been substantially reduced. Some managers were specific to point out that the costs of general management activities (e.g., planning and accounting costs) have been substantially reduced and the costs of coordinating with suppliers, customers, and business partners have been substantially reduced. Overall the expenses on marketing e.g., advertising and promotion expenses had reduced and the costs of acquiring new customers have been found to substantially reduce. On sales volume, responses sufficiently support that e-marketing usage significantly influenced their business's average sales volume in terms of bookings and sales. Consequently we can say that the market share of the firm increased, the sales volume increased, the number of new customers increased and the existing customers were retained with the usage of e-marketing tools. Again a divided opinion was obtained as far as the impact of e-marketing tools on the profit margin was concerned in the tourism firms. Continuing with the data, table 3, and the highest impact of e-marketing was found on efficiency in business operations of tourism. It indicates that the application of e-marketing help tourism firms to better manage their day to day business operations ranging from production or assembling of services to final delivery to the customer. The respondents further reported that overall, the customers were now more satisfied with the tourism firms, and customers tended to be more loyal to firms than before. Data points to last longer impact of e-marketing on firm's enhancing tourism business relationships with suppliers and partners more than

ever before because they distinguish it to be a suitable method of establishing successful relations with suppliers.

E-marketing and functional competencies

Present study, further attempted to examine the influence of e-marketing in tourism industry in enhancement of functional competencies and their role to improve the profitability of the firms. These competencies have been measured in the relationship development competencies, marketing competencies, information system development competencies, production competencies and the human resources competencies and were playing a main role in organizations performance. Each has its impact and its role on the performance measures (Fowler, King, Marsh, & Victor, 2000; Nguyen, 2008; Day, 1994; Song, & Xie, 2000; Doole, Grimes & Demack, 2006; Hill & Jones, 2001; Rauch, Wiklund, Lumpkin, & Frese, 2009). All of these studies have revolved around examining functional competencies on profitability of a firm. Though, no study could be outlined linking e-marketing impacting functional competencies of the hospitality firms and hence profitability.

TABLE 4: Impact of e-marketing in functional competencies

	Scale Items	Mean	S Dev.
E-marketing increases Marketing Competencies by		3.27	.33
1.	oping conduct the marketing research in the tourism market, commercial opportunities, and customer needs,	4.30	.76
2.	Suggesting competitive pricing policies	3.89	.10
3.	Providing the information for designing new products	3.78	.72
4.	Designing effective sales promotion campaigns	3.61	.15
5.	Creating, building and managing competitive brands	3.11	.61
6.	Providing post-sale service	3.11	.62
7.	maintaining a highly motivated and trained sales teams	2.27	.75
8.	veloping the product distributor relations and distribution networks in the hospitality market	2.12	.12
Marketing increases Research & development competencies by		3.24	.36
1.	Improving the research and new product development competences	3.37	.51
2.	Improving the existing products	3.35	.51
3.	atching the explicit strategy objectives and R&D objectives	3.32	.53
4.	operating with other functions, particularly manufacturing and marketing, in the overall development process	3.20	.51
5.	roviding <i>an</i> effective replacement policies and equipment maintenance	3.11	.57
E-marketing increases Information system competencies by		3.02	.37
1.	Automatization of the processes	3.16	.65
2.	Decreasing costs of coordination	3.03	.53
3.	Effective monitoring of the fault rates	3.03	.67
4.	ng web-based information system to increase the customer responsiveness	3.03	.67
5.	ing information systems to coordinate cross-company and	3.01	.61

	cross-functional product development work		
	E-marketing increases Production competencies by	3.52	.63
1.	aiding an operative equipment replacement and maintenance	3.73	.77
2.	Managing the production, overhead cost and material	3.66	.13
3.	Controlling the manufacturing process and quality control	3.62	.33
4.	Controlling the inventory and material	3.53	.13
5.	Developing an effective and efficient product-line policy for product additions	3.53	.76
6.	Using the capacity utilization	3.10	.12

The above table shows that the maximum contribution of e-marketing has been in increasing the production competencies of the hospitality firms followed by research and development competencies, marketing competencies, and minimal in information systems competencies.

Result of hypotheses

Since the selected firms were at different stages of using the e-marketing tools, it was tough for the researcher to simplify the results with regard to the functional competencies and profitability because of the usage of the e-marketing techniques. Although results are quite indicative and indicates that those companies that apply e-marketing achieved better functional competencies and business profitability. That is consistent with previous research (Brodie et al. 2007) and represents additional confirmation on the connection of e-marketing usage with functional competencies and business profitability

Hypothesis 1

For measurement of result for hypothesis 1, seven business profitability measures considered were operating cost, sales volume, return on equity, profit margin, efficiency, customer satisfaction and relationship development as already discussed in study. Propositions, “e- marketing usage positively influences tourism firms’ profitability factors were analysed using seven stated measures of profitability mentioned above. Thus the obvious hypotheses are - e-marketing usage positively influence a tourism firm’s return on equity, profit margin, sales volume, customer satisfaction, efficiency, operating costs and relationship development. The regression impacts of e-marketing intensity are presented in table 6 below along with regression extracts and results of hypotheses respectively. It must be mentioned here that results are without the impact of moderator variables.

TABLE 5: Influence of e-marketing usage on profitability of tourism firms

	Standardised Coefficient		Significance
	Dependent variable:		

E-marketing usage	Return on Equity		0.059	0.002*		
	Operating Cost		-0.214	0.358		
	Sales volume		0.644	0.000*		
	Profit margin		0.221	0.000*		
	Customer satisfaction		0.454	0.000*		
	Relationship Management		0.645	0.000*		
	Operational efficiency		0.645	0.000*		
	R	R ²	Adjusted R ²	F Change	Sig f	Durbin Watson
Return on Equity	0.645	0.416	0.312	13.175	0.000	2.154
Operating cost	0.677	0.458	0.262	13.351	0.000	2.431
Sales volume	0.741	0.549	0.295	12.654	0.000	1.659
Profit margin	0.600	0.36	0.329	11.342	0.001	2.320
Customer satisfaction	0.755	0.32	0.211	11.122	0.001	2.413
Relationship management	0.637	0.405	0.311	11.145	0.001	2.441
Operational efficiency	0.711	0.512	0.295	14.654	0.000	2.459

In table 5 above, the Durbin-Watson values among the two vital values 2.5 and 1.5, displays that there is no serial correlation difficulties among residuals. The f-change values and sig f shown implies that the relationships has significant statistical meaning. The empirical results on table 5 support the hypothesis that e-marketing usage positively influences tourism firm's profitability as the null proposition is rejected. Similarly, the f change value indicates that the relationship is statistically significant but that e-marketing operating cost and usage were not meaningfully correlated. Garces *et al.*, (2003), too in context of internet usage had concluded that the use of the e-marketing do not decrease operating costs. Finally, the e-marketing usage and the business profitability (in all seven dimensions) were significantly correlated under the significant level $p < 0.01$ concluding that e-marketing usage positively influences profitability in tourism business firms.

Hypothesis 2

For identification of functional competencies of tourism firms, four measures were discovered as marketing competencies, research and development competencies, information system competencies and production competencies which were already presented with the help of descriptive table in the

study. The study attempted to check whether functional competencies of the firms are significantly impacted by usage of e-marketing in their business.

TABLE 6: Influence of e-marketing usage on functional competencies of tourism firms

	Standardised Coefficient			Significance		
	Dependent variable:					
	Marketing competencies			.334	.001*	
	Research and development competencies			.383	.012*	
	Information system competencies			.458	.017*	
	Production competencies			.480	.000*	
	R	R ²	Adjusted R ²	F Change	Sig f	Durbin Watson
Marketing competencies	.334	.112	.103	14.309	.001*	1.536
Research and development competencies	.347	.121	.112	13.457	.000*	1.242
Information system competencies	.480	.231	.223	12.403	.000*	1.229
Production competencies	.480	.231	.223	12.501	.000*	1.232

The regression table presented the influence of e-marketing usage on functional competencies among selected tourism firms in India under table 6 with the help of extract of regression analysis and without the influence of mediator variable. The value of Durbin-Watson indicates absence of serial correlation difficulties among residuals. The f-change values and sig f shown implies that the relationships has significant statistical meaning. The empirical results on table 6 support the hypothesis that e-marketing usage positively influences tourism firm's marketing competencies, research and development competencies, information system competencies and production competencies and reject the null hypothesis. On the same ground, the value of sig f in terms of all the competencies discovered a significant and positive relationship among business functional competencies and e-marketing usage (as the p value in all cases is $p < 0.01$).

Hypothesis 3

For investigation of correlation among increased functional competencies and profitability of tourism business firms, correlation coefficient was applied. The application this technique brings very interesting output and presented in table 7.

TABLE 7: Correlation between enhanced functional competencies with profitability

	Return on equity	Operating cost	Sales volume	Profit margin	Efficiency	Customer Satisfaction	Relationship Development
Marketing competencies	0.54*	0.12	0.67*	0.69*	0.45	0.55*	0.87*
Research and development competencies	0.33	0.14	0.41	0.28	0.56*	0.56*	0.14
Information system competencies	0.55*	0.35	0.44	0.55*	0.55*	.26	0.29
Production competencies	0.68*	0.55	0.78*	0.66*	0.25	0.84*	0.54*

* Shows significant relationships at 5% level of significance.

The table 7 shows the relationship between the profitability measures in hospitality industry and the functional competencies that are impacted by e-marketing tools. Surprisingly e-marketing tools appear to have no relationship with reduction in operating costs. From the shaded cells one can easily make out as to how competencies that result in because of e-marketing tools affect profitability measures.

Conclusion

E-marketing has a growing impact on tourism industry of developing countries like India. With innovative practices, people these days search about destination and accommodation on internet. So, it is necessary for tourism firms to adopt e-marketing practices to get closer to their customers and also to maintain utility websites. The outcome of the present study indicated an extensive usage of e-marketing in tourism firms selected for the study. It seems that e-marketing practices are most often applied in tourism firms to enhance their e-mage and e-relationship in today's competitive business environment.

The study also found improvement in functional competencies of the firms due to e-marketing usage in tourism firms. Outcomes shows that the maximum contribution of e-marketing has been in increasing

the production competencies of the tourism firms followed by research and development competencies, marketing competencies, and minimal in information systems competencies. Following a hint that impact of e-marketing in tourism firms is significant because it has the chance of improving the profitability of the firms, it gets firmly established that using e-marketing tools provides a lot of benefits. The result of the study through data interpretation support in this study promulgate that the application of e-marketing practices appreciably impact the financial effectiveness of the tourism firms. This conclusion is supplements the conclusions drawn different studies (Wei et al., 2001; Wu et al.,2003; Zhu et al.,2004; Salwani et al., 2009). The usage of e-marketing influence the business profitability as supported by empirical outcomes of the study. From the result a significant upsurge in return of equity, large impact on operating costs, on sales volume, on business average sales, business's profit margin, on customer satisfaction and business relationships. However, the empirical evidence indicates significant relationship but that e-marketing operating cost and usage were not meaningfully correlated. Garces *et al.*, (2003), too in context of internet usage had concluded that in tourism sector the use of the e-marketing do not decrease operating costs. But decisively, the findings of the study were inconclusive to prove that e-marketing bring improvement in overall profitability and profitability of the firms.

The outcomes also show the positive and significant relationship between the profitability measures in tourism industry and the functional competencies that are impacted by e-marketing tools. But, surprisingly e-marketing tools appear to have no relationship with reduction in operating costs. This indicates that e-marketing adoption has an important positive relationship with the tourism firm's profitability. Therefore, it can be said that e-marketing adoption impacts operational productivity substantially than customer satisfaction.

The study provided implication to tourism practitioners to formulate comprehensive e-marketing plans along with development of rich e-content with high quality to focus on the needs of customer. Though the study has been conducted in a careful manner, but, the study faced certain limitation related to incorrect interpretation of items of questionnaire, reluctances in disclosing the data related to firm and many others. Further, the present research leads to some good outcomes that might be to observe the impact of social sites marketing on the profitability of firms.

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