

## Tourism Industry Depends on the Technological Integration: A Study of Product Integration Enhanced Performance with Banking and Insurance Products

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### Abstract

Travel finds its deep-rooted existence right from the time of the Veda and before in India. What was a major search route for trade and quest of knowing the unknown, has become a huge industry that helps people utilize the leisure more strategically and productively. Putting an effort to chalk out the history of the Tourism industry, the paper has actually delved into how Information and Communication Technology has helped in the integration of this service industry and also enabled better coordination of its function etc. With the help of an empirical analysis based on a questionnaire survey involving a sample size of 1024 respondents from across all the states in India, this paper has tried to look into how Technology factors can help in the increasing the efficiency, flexibility and value additions in Tourism.

**Keywords:** Travel and tourism; Strategic integration; Product-based integration; ICT in Tourism; e-Travel; e-Tourism; Tourism product performance; Tourism services; Hospitality and tourism

### Introduction

Travelling and tourism has always been a way of life. As long as our civilization has existed, people have travelled. They have moved from one place to another for leisure, recreational, trade, or family purposes. In the words of World Tourism Organization, tourism is the act of travelling that prompts people to visit or stay at the places that are outside than their usual surroundings for not more than 12 successive months [1].

In the context of the Indian economy, tourism has majorly developed through indirect sources. Since ancient times, India has been an agriculturally dominant region. Farmers who grew cash crops in abundance needed to create trade links to sell their crops. During the Vedic period, iron-ore, steel weaponry, and textiles took predominance in trade. Scholars from faraway lands like Greece have written about the wonders of India in their journals [2].

Another equally significant form of tourism is pilgrimage or religious tourism, which has been an Indian tradition since very ancient times [3]. Through history kings built institutions, rest houses and Dharamshalas for the travellers to take rest, planted trees on the routes to ensure the travellers would take cover against the harsh sunshine. Towns and villages were connected, and learning centres were built. This shows that tourism was a lifestyle practice even back then, and comfortable travelling facilities existed for everyone [4].

During the same time, many foreigners – mainly Greek and Persians also visited India, much of which is canvassed in our history through books. Greek scholars have narrated Indian journeys as full of extravagance that included well laid out chariots, horses, elephants, and camels as modes of transport [5]. Alexander the Great reached India in 13<sup>th</sup> century, he found good quality roads, covered with shades on both the sides. Marco Polo accounted that India was a rich country, and it was beyond the imagination of the western world. Centuries later Mark Twain echoed his sentiments when he gave India 5 stars of splendour, and wrote highly about the land so many men had desired to see and experience [6].

The Indian scripture Arthashastra also underlines the significance of a strong road and infrastructure network for travelling. There have been many excerpts that show that in addition to the military and commercial travel, civilian tourism was also a noted field [7]. Travel on the internal waterways, including the rivers was also covered under the protection of the state [2].

Till now, the Indian roads, rural paths, and milestones connect the farthest regions with the mainland and/or act as a guide to tell travellers about the distances they still need to cover. Now, there has been a significant development. Modern technology has changed the entire tourism scenario and has made it much simpler for people to visit anywhere in the world. The incomes, especially in the urban cities, have grown exponentially and have given rise to the globe tottering character of tourism [8].

The integration may happen with the help of technology that is strategic and product based integration. The key integration will happen in two ways.

- Strategic Integration- Tourism centre items integration with the Banking channels and the monetary systems to upgrade and smoothening of the budgetary settlement of the tourism stakeholders and the extensive items [9]. Managing the banking industry likewise gives tourism products a region for development, by providing the twin model to financing the tourism products to its end clients [10].
- Product/Item Based Integration- Tourism products/items integrate with Insurance products as value additions to their

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products and also a surety to perform the results of tourism stakeholders no matter how you look at it. Here the certification is not secured with all the tourism products and innovations and opportunities with insurance rate much higher in the products integration with Tourism and Insurance [11].

### Mobile applications in tourism industry

Mobile applications have turned into an irreplaceable medium to connect with the consumers for the tourism industry. These apps are a collection of answers for the travel and tourism industry and are useful in helping customers secure their transactions related to flight bookings, accommodation reservations, and related tasks [12]. With custom-made apps to help them meet the demands of their customers, they can now concentrate on improving the travel experience for them while developing their business, and aiding customers achieve their travel-related objectives [13]. Versatile Applications serves as a pocket guides that use GPS to give real time location related details, information data, and other perfectly sorted details like hotels, restaurants, landmarks, and so on. Much like in other businesses, the utilization of these versatile applications has encountered a fast development in the tourism segment [14].

Mobile applications are the new age means through which content and travel-related services can be offered directly. With such a pace of advancements in the technology, the websites offering static information are expected to lose value for the travellers who look forward to value addition in the form of:

- Opinions/reviews by the users.
- Concentrated localized information, accessible from anywhere around the globe

The travel industry is evidently influenced by latest trends in new age technology [15]. The companies working in this arena need to pace themselves with these rising trends to be able to lead and position themselves advantageously in the sector. At present, it is crucial that tourism organizations find better approaches to approach their customers. The business is getting to be more focused; the customers are progressively cognizant and better educated of the assorted qualities of offer that is accessible [16].

## Literature Review

### Applications in ICT and progress in tourism

Buhalis and Law [17] have shown that “technological progress and tourism have been going hand in hand for years”, all the mentioned applications in ICT have brought in changes in the total organization of companies and also within tourism industries [18-20].

Tourism covers all those activities that are dedicated to satisfy the needs of a tourist and borrows from different activities together. Products that are addressed to the tourists happen to be complex as well as heterogeneous; they make up for combined elements that are separated in space and time [21] moreover mostly packages of services and products that are interrelated like, the transport, leisure services, accommodation services, etc.

Ambec et al., [22] have highlighted in their study that the innovation activity's intensity in case of tourism gives proof of the fast evolution of these industries along with the substantial impact ICT has on evolution.

### Implications of ICT for tourism

There are wide scales of implications that ICTs have for tourism. E-tourism is actually the reflection of the digitization of all the value chains and processes within tourism, hospitality, catering and travel industries. E-tourism tactically revolutionizes the business process, the whole of value chain and the strategic relationship it has with the stakeholders. It is e-tourism that determines an organization's competitiveness by utilizing the intranets to reorganize internal processes, also extranets to develop transactions with those partners who are trusted and using the internet with its stakeholders [23].

In the last 10 years, e-commerce, which can also be described as commerce on internet, has managed to change the entire scenario in the tourism and hospitality industry. With the fast incoming as well as improvement of different software and having an extremely high speed telecommunications, huge number of people will be found using the internet as one purchase channel [24]. This study finds that a 54 percent rise in the people's number who use the internet to find travel information along with making of travel arrangements between 1998 and 2001 [25]. The main force that drives the information technology is the insistence of the customers on convenience, services that are hassle-free, easy to use, as well as accurate information [24-28]. Internet can satisfy these demands allowing potential customers learn all about the hotel facilities as well as compare prices even without communicating with the sales representatives of the hotel.

### E-Travel and its overall impact

Travel technology encompasses in itself dynamic packaging that provides new and useful options for those consumers who have the potential of choosing exactly what their requirement is and within a budget. There are kinds of web tours as well termed as auto-guide, guidebook, I-tours and pod guide. Today, tour operators, travel agencies and hotels are all intertwined within a network so that a traveller has instant options as well as confirmations [29].

Most of the chain of hotels as well as the leading hotels have brought up their personal reservation systems and work with travel agents as well as customers directly to accept bookings. The hotel chains use this technology in excellent manner. The orthodox hotel managers are in no more demand in the luxury hotels, however, the budget hotels still work with the old traditional method. The present day business is for the gentleman who is computer-savvy and in command over the latest in technology. Big hotels even appoint their personal in-house technology managers [30].

Internet being not an intrusive medium along with requiring the visitor's participation, the technology is appropriately suitable for marketing by the producers as well as information search by the consumers before the product is purchased [8,31].

Information and Communication Technologies (ICTs) are growing in multiple leaps by revolutionizing the businesses in tourism in the way they get operated, developed and managed. The orthodox view of different businesses having clear boundary [18].

### E-Tourism with newer opportunities

Buhalis and Law [17] expresses that tourism industry's success relies to a large extent on its ability of efficiently delivering accurate, relevant, and up-dated information to all its stakeholders. The developments in E-tourism have in offer now newer opportunities to mark tourism destinations. The potential is there of creating 'Virtual Co-operation', where the probable tourists can surf through websites having individual facilities in a destination as well as develop their

personal experience package by visiting a destination [32]. Services related to tourism have come up as one of the main product category that has to be distributed and promoted to the consumer markets with the use of internet [33,34].

Tourism happens to be amongst one of the prime economic activities in the global scale. It has grown at one very fast pace in the last 50 years or so. Since the time of Second World War, tourism has emerged as one of the vital most socio-economic activities, mainly in those countries where development was less, and had modern service-based industry economy [35].

Today's tourism is the result of the mixed effort of many constituents of it. Actually this industry is a combination of services and output of various services and industries [36].

Sahoo [37] stated that in this world where globalization is predominant, the most important role that internet plays for the information distribution has moved up beyond imagination within past few decades. Hence, as tourism is an industry with no fence or boundary for its growth and expansion has used this communication mode for the worldwide distribution of sales and information.

The industry of travel and tourism is moving in the online mode increasingly, and hence this industry needs reacting accordingly, more so in the developing states [5]. The evaluation of the services of mobile tourism is extended through the usual trend as the experts say. There are three main trends that are identified. One, the destination managers have to mingle and engage with the social- networking online community [38,39]. Two, the trend of the applications of mobile phones is important and mainly the travel information apps, travel distribution and travel communication are most likely to increase in significant way within the near future.

In the coming days, Tourism Company is going to face the challenges from the apps world, and therefore, developing an app-strategy would be really important for the destination managers and tourism companies [28].

There is the reference of third trend of monitoring through social media [40]. There are millions of browsers who share their knowledge. Destination managers need to utilize these stored information base, like the ratings of a hotel, transportation and restaurant, so that value could be added to their customer-base as well as the value chain of tourism can be reintegrated [40].

### **Effects of ICT developments in tourism industry**

The non-stop development in ICT in the last twenty or more years has made profound implications towards the tourism industry as a whole [18]. The growing importance in technology has not only influenced the way through which purchase processes and transactions [41] have been evolving, but the way promotion of the tourism goods and communication have developed on the net as well [23].

In the recent times, with the evolution of Social Media [42] has enabled tourists to be sharing their information on the net in the sections of "read/write web" where its end user plays both the role of a provider and also as information consumer player [43]. Researchers as well as marketing managers are exploring newer ways of adopting social media in the arenas of promotion and marketing so that they could use this "electronic word-of-mouth system" to their advantage. Current studies revealed that the contribution of social media in spreading of information to the web about different destinations with the use of different strategies and channels [44], as the users of internet

find it their need to communicate their touristic experiences [15].

In the past 10 years, it was evidenced that tourism has susceptibility to economic analysis to a real great extent [45]. According to International Monetary Fund and World Tourism Organization tourism happens to remain one of the internationalized most sectors of global economy. Certain factors that affect the tourism section can be shown as the influence that international crises creates, enabling more importance to leisure, growth of health tourism, demography, increasing thoughts about the influence tourism brings on environment, the changing technology as well as continuous dominating of the small enterprises in the tourism sector [46].

### **Changes in tourism sector with E-Commerce**

The increasing number of young customers remains highly internet savvy also are more willing and who are ready to opt for e-commerce. This aspect may not be as conducive with the older customers, who remain wary of visiting the websites for shopping. Moreover the security and privacy of information is one important issue, which affect the willingness of the customer towards using technology [47]. The design and layout needs to be adapted according to the needs of the customers. The customization and interactivity of the websites could be increased by offering detailed information of the destinations as well as hotels, and by making it possible and convenient for customers that they select according to the budget and requirements they have [48].

Information technology has enabled the accessing of information for destination, travel, bookings, hotels, payments, attractions, along with the map qualities and is among those areas that emerged as vital information for the growth and improvement concern [49]. Travel agents working online, advertising agents in online sections and the reservation systems of inter-organizations are certain areas that have completely changed the look of tourism industry.

The rising awareness due to globalization and the availability of consumers that are technology enabled to process transactions as well as access information easily across different countries have managed to remove the cultural and linguistic boundaries (Table 1) [50].

### **Methodology**

This papers objective is to find out if mobile technology can be used in the better integration of services sector of Tourism. It is to also find out if the variables that have been derived from the initial research can mutually help in integrating each other and providing better services. The main aim of this research is in identifying the truth that is hidden about how technological applications can be utilized in enhancing the facilities in the services sector and how their services can be integrated together resulting in better performance, efficiency, technological advancements and so on. The motivation that was derived for research came from simple observations like how the three primary variables Tourism, Banking, and Insurance had their services integrated with one-another and how they were using the technological platforms and its regular advancements in providing value added services to their customers along with the basic services.

Methodology helps the researcher have a better discipline in thinking so that the field can be observed objectively. Having the research procedure knowledge will enable one to evaluate as well as use research results with confidence [1].

### **Research design**

Hicks states, any research design to be the arranging of the

S. No.	Author/ Year	Key Issues
	Mazilu (2008)	Globalisation has created new tourism opportunities to attract tourists in countries like China, Russia, India. Although there are many issues in the development of tourism but then also these countries are capable in offering high quality holidays.
2.	Raiyani & Joshi (2011)	Emergence of a wide array of new services like IT, ITES, new financial services (ATMs, Credit cards) and tourism services (eco-tourism, health tourism) are contributing in the growth of service sector.
3.	Tejada et al.,	During the last 10 years, it has been seen that tourism is susceptible to economic analysis to a much greater extent.
4.	Khare & Khare (2011)	Development of IT industry has changed tourism sector drastically. The interactivity and customization of the Web sites may be augmented by offering details of hotels and destinations and making it feasible for customers to select combinations according to their own requirements and budget.
5.	Mamaghani (2009)	IT has made access of information easier than before. In tourism industry accessibility of information regarding travel, destination, bookings, payments, hotels, attractions, and the quality of maps are some of the areas which emerged as important issues for growth and concern for improvement. Information and Communication Technologies (ICT) have affected the travel and tourism industry for at least 50 years especially in the areas of automation and networking of distribution channels.

**Table 1:** Author Comments on Tourism.

conditions for analysis and collection of data using methods that aims in combining relevance with research purpose and the economy in course of action. It is the basic framework for the collecting, measuring and analyzing of data. The uncontrollable problem that arises after a research problem has been defined is in preparing its research design [22]. The design actually constitutes the outline about what the researcher will be doing from the process of hypothesis creation, its operational implications and followed by finally analyzing the data.

There are some important concepts that work with a research design. These are:

**Independent and Dependent Variables:** A concept that will take on various quantitative values is known as variable. Qualitative attributes can also take the form of variables. The phenomena which quantitatively take values of different decimal points are known as continuous variables. However, all variables are not continuous; there are some that can also take in integers are statistically termed as discrete variables. There has been a lot of effort made to minimize extraneous variables from influencing the research design [11]. There has been maximum effort on keeping ‘control’ in the research design. The research has used the hypothesis to test if the independent variables can be integrated together to achieve positive components that validates the entire concept of the research.

After one has successfully defined the research problem, the difficult most portions is preparing research design for the given project. Decisions related to how much, what, when, where and by which kind of procedure regarding a research or any enquiry constitutes a research design. There are different kinds of research designs: exploratory, diagnostic and descriptive, hypothesis-testing [1].

### Exploratory research design

They are also called formulative research design and are mainly used in forming problems for specific investigation or the development of working hypothesis with an operational perspective. The main emphases for these studies are to discover insights and ideas. The design of the research appropriate in case of such studies has to be flexible enough for providing opportunity to consider different aspects in the problem under research [1].

### Research propositions

The proposed framework gives some of the intermediate variables related to product and strategic Integration of Banking, Insurance and Tourism which is the basic need of the hour for development of economy due to the technical advancement and rapid changes. The relationship among these sectors and the important variables are reflected in the framework.

### Hypothesis-testing research design

Usually studied as an experimental study, this research method does hypotheses test of the casual relation among the variables. These studies essentially need procedures which would not just decrease ambiguity along with increasing the reliability, of course would also allow finding inferences in the matter of the casualty.

Research design could be exploratory or descriptive and diagnostic. The research design is exploratory in nature. This is due to the following reasons:-

- Its primary objective is to provide insights into and develop an understanding of the problem.
- This study requires defining the problem precisely along with gaining the additional insights before developing the approach in terms of hypotheses formulations.

**Null Hypothesis:** One macro or micro variable is linearly dependent on other macro or micro variables.

**Alternate Hypothesis:** One macro or micro variable is linearly independent on other macro or micro variables (Figure 1).

### Tourism Industry in India- An Inclusive Journey for Integrating Different Tourism Services With Different Other Services with the Same Industrial Sector Like Hospitality and Tourism

One particular organization cannot be the symbol of the total tourism industry as it is formed by combining different types of businesses. Just the hotel businesses, or infrastructure, or only the businesses in aviation cannot represent this particular industry in isolation, but combining them together does so. Various diverse businesses in combination make this industry (aviation, infrastructure, hotels, transportation, etc.) and balanced developments of these different houses with strong coordination between all participants happens to be the prerequisite to enhance competitiveness within this industry as well as creating a ‘fine blend’ of these ‘polar elements’ happens to be a tough challenge in its own right [51].

As it is very well known to all of us that basically for any travel planning, there is the need of having one travel itinerary that mentions different places for sightseeing (Tourism), accommodation (Hospitality- Hotel) and air tickets (Aviation). Hence, the integration of these three services is really vital to get the customer satisfied with the best of services and at best prices.

Although directly selling to customers seem a sound economic



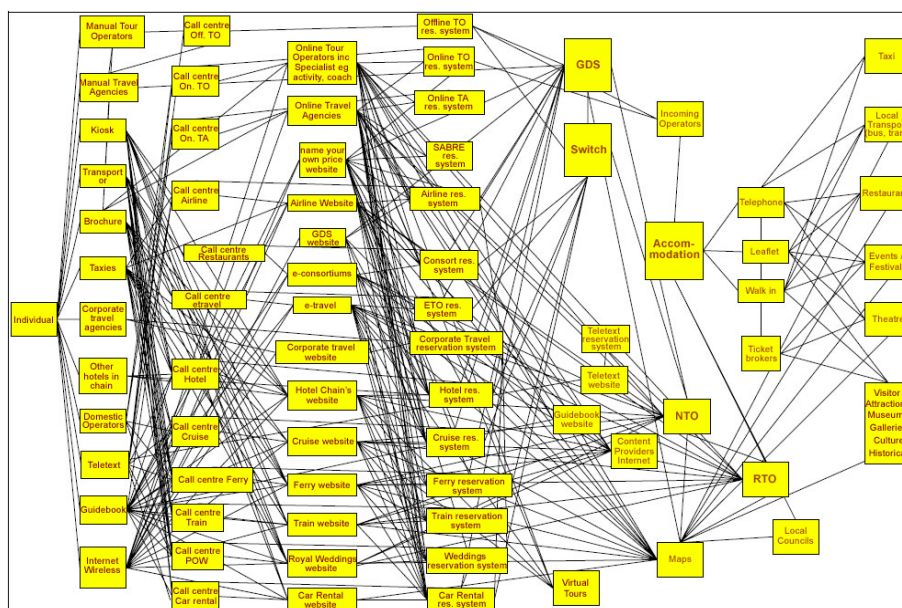


Figure 1: Interconnectivity in Tourism.

strategy for the aviation industry (airlines), one must be wondering what ultimate impact would be on airlines that has created very high adversarial conditions with the travel agencies as consumers are always wanting more choice and never less, and most would continue preferring to purchase airline tickets through intermediate sources [52].

### Tourism Industry and its Interrelated Components

This figure tries to illustrate that Air transport, Hotels, Basic Infrastructure, Surface transport and the facilitation systems are at all times of those related sectors that form the industry of Travel and Tourism in India. If we are explaining the journey of growth in Travel and Tourism sector in India, then there would always be simultaneous growth in all the sub-sectors mentioned above (Figure 2) [53].

The tourism industry mainly is people and service oriented; made of organizations and businesses that belong to different other sectors and industries. It is the interplaying amongst these persons/organizations and businesses that serve “travel experience” to the tourists. The tourism industry has hospitality (dining and accommodation related), travel (services in transportation using different modes), along with different other businesses that offer products and services to the tourists [54].

### Growth Strategy of the Industry of Indian Tourism- Adopting Technological Advances

With the technology evolving faster each day, it leaves most travellers from round the world being highly tech-savvy than people were earlier. The internet managed to bring about revolution in the tourism industry to such an extent that no other field has been able to [55]. Globalization has enabled in creating newer opportunities in tourism to attract different tourists in places like Russia, India, and China. Although many issues are there within development in tourism, however, even then these countries have been capable of providing holidays of superior quality.

The emerging of a variety of new services like the ITES, IT, financial services that are new (Credit cards, ATMs) as well as tourism services

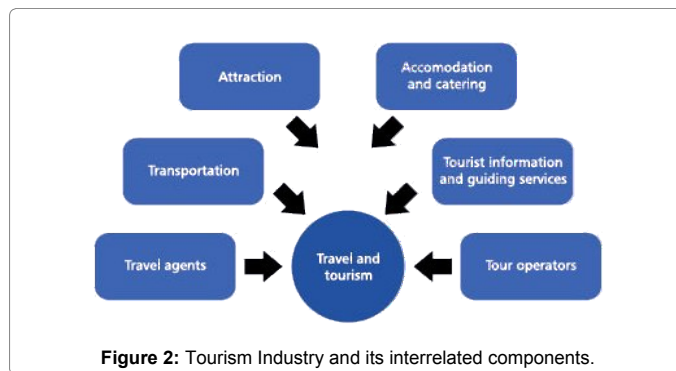


Figure 2: Tourism Industry and its interrelated components.

(health tourism, eco-tourism) have been contributing towards the growth in service sector [56].

Over last 10 years, it is found that tourism has been susceptible to economic analysis to a large extent. According to World Tourism Organization and International Monetary Fund, tourism happens to be amongst the major internationalized sectors in world economy. Some factors that affect this sector are defined as being influenced by the international crisis, leisure getting increasingly important health tourism growth, demography, growing concern of how tourism influences environment, domination continuing of the small businesses and technology in the tourism sector [57].

There have been drastic changes in tourism sector because of the IT industry development. The satisfaction on online services all depends on the confidence and poise of the user. The growing customer base is of youngsters who are highly internet savvy and more willing to e-commerce [58,59]. The same might not be seen with older customers, who mostly are afraid of visiting the online shopping sites. Information security and privacy is one important issue affecting the willingness of the customer towards using technology. The design and layout of the website needs to be adapted according to the needs of the customer. The customization and interactivity of websites may be increased by offering destinations and hotels’ details so that customers are easily

able to make selections of combinations on the basis of their budget and requirements [48].

Laudon and Laudon [50] say, the business of travel and tourism has been forced to be more focused on customer needs so that customers can be attracted and maintained. Their focus on consumer is by the use of information technology so that real time data can be provided to the customer along with additional convenience to customer reservations, purchasing and planning. The success of travel and tourism business depends largely on how properly the available technology is being used and developed [49].

### **Rise in social media has boosted tourism**

The growing role of internet in social networking shows that there has been a shift from search and consume to creating, connecting as well as exchanging. Those who were passive web surfers and consumers in the past are now involved in generation of content, collaboration and commenting. Traveller photos, reviews, trip sharing and planning, and also blogging, have become great influence towards connecting how travellers from all ages are interacting and connecting to the services, products and suppliers.

#### Technological Change and its Impact

- Have radically altered ways of how service firms are doing business with the customers (more convenience, new services), behind scenes (value chains that are new, re-engineering)
- Create databases that are relational about customer behaviour and needs, mining of databanks for insights
- Leveraging employee capabilities and enhancing mobility
- Centralizing customer service- more responsive and faster
- Developing national or global system of delivery
- Creating new business models that are internet based

### **Information technology application**

IT can provide benefits to all services, but the process of mental stimulus services and information processing have gained the most

- Information based services are remotely delivered anytime and anywhere
- New features of services using emails, web sites, internet (reservations, information)
- Better opportunities for self service
- New services

### **Tourism Industry- Prime Industry of Employment Generation- Study of Main Global Strategies**

As tourism is a service industry, it has major impact on those areas that comes with surplus labor, as it is extremely important in this section to have efficient and skilled human resources. It produces a great effort on the local employment and population. The relationship between the advantages of increasing employment and tourism growth is a positive one. This also helps to minimize the extremities that poverty brings in.

Tourism has managed to come up as one of the main sectors in economy worldwide and is one of the global trade's major workforces. It has become a major factor in making significant and revolutionary impact on the global economic scenario. This industry works as one

powerful agent of social and economic change simultaneously. It has been stimulating investment and employment, modifying economic structure as well as making positive contribution in balance of payments.

The importance of tourism, as one instrument for generating employment and economic development, precisely in the backward and remote areas, has received a good recognition from the whole world. It happens to be the largest amongst service industry worldwide towards foreign exchange and gross revenue earnings.

The potential of tourism sector in terms of stimulating several other economic segments with the help of its forward and backward association as well as cross-sectional synergies with segments such as horticulture, agriculture, handicrafts, poultry, construction and transport is worth mentioning. Tourism expenditure supports a series of other transactions that make it necessary to supply products & services from the aforesaid segments/sectors. Consumption demand that originate from the tourist spending helps to generate more employment opportunities while encouraging a multiplying impact on the country's economy. Consequently, it not only results in increased employment but also leads to generation of additional income due to such linkages. Hence, development in the tourism industry helps in generating mass employment and alleviates poverty, particularly in under-developed and developing countries.

Development in the tourism industry has contributed in a significant manner to the national economy and helped in generating mass employment in many activities related to tourism. Indirect employment multiplier in the tourism sector is reasonably high which is estimated around 2.36 implying that direct employment of a single individual provides job opportunity to 1.36 individuals in other economic sectors due to tourism associations. Such associations in other sectors mainly relate to horticulture, poultry, agriculture, construction, handicrafts etc. Moreover, such direct/indirect employment as a result of tourism association requires the supply of more goods and services than the actual demand that prevails in the market.

As per the reports of the World Trade Organisation (WTO), international tourists exceeding 900 million arrived in India in the year 2008, which provided tourism receipts to the tune of US \$944 billion. Forecast done by the World Travel and Tourism Council (WTTC) in 2009 revealed that total employment generated due to Travel and Tourism was expected to increase from 219,710,000 jobs in the year 2009. This was 8.4 percent of the total employment or 1 individual getting a job due to tourism out of every 11.8 jobs by the year 2019. It was anticipated that the Gross Domestic Product (GDP) in 2009 would increase from 9.4 percent (US\$5474 billion) to 9.5 percent (US\$10, 478 billion) by the year 2019. The real growth in GDP in context of the Tourism sector was estimated at 3.5 percent in the year 2009, which indicates an increase from 1.0 percent as compared to 1.0 percent in 2008. However, the average is estimated at 4.0 percent per year in the next 10 years through earning in export from worldwide tourists and tourism goods to produce 10.9 percent of overall exports (US\$1, 980 billion) in 2009, increasing (in ostensible rate) to US\$4, 132 billion (9.8 percent of overall) in the year 2019.

In the Indian scenario, the states that have been best performing are found to be Rajasthan, Uttaranchal, West Bengal, Uttar Pradesh, Haryana and Orissa. Despite the fact that India's share in the global tourism accounts to less than 0.4 percent, the contribution of the tourism sector is 5.8 percent of the overall employment generation.

Employment generated from the Travel & Tourism sector to

employment is anticipated to increase from 30,105,000 jobs in 2009; which is 6.4 percent of overall employment leading to 1 job in each of 15.6 jobs to 40,037,000 jobs, which is 7.2 percent of total employment or 1 job in each of 13.8 jobs by the year 2019. Travel & Tourism sector's real GDP growth was anticipated at 0.2 percent in the year 2009 and averaging 7.7 percent each year in the coming 10 years.

### A concept of Services Sector Integration of Tourism with Insurance and Banking

It has been identified that the Tourism sector has immense potential to generate employment and is essential for the economic growth. It is also crucial to focus on the need for innovating advanced technology and systematizing the processes that would help to integrate the Insurance and Banking sector with Tourism sector that comprise of Travel, aviation and hospitality. However, in reality, the effective integration of these sectors has not been very fruitful.

In terms of such integration, the most recent developments and current changes have taken place in the field of technology with regards to hardware, networking, and applications. This authorized technology intrusion for the tourism industry to penetrate into other industries as well as other products and services segments. This has been possible due to developments in technology and many banks have also backed their services tied up with insurance and travel, with advanced technology.

It is worth mentioning that it is possible due to developments in technology and intrusion relating to networking and customer-integrated database management (Table 2).

### Applications of Mobile Tourism- A Mode of Changing this Industry's Dimensions and Enable the Main Value Additions from Banking and Insurance Industry

The advent of internet based internet applications and Smartphones and brought a real transformation in the human life. The advent of such technology has brought a revolution in the tourism and travel industry and helped to provide tourism related solutions. In the high-tech modern age, the need to view paper maps and indulge into lengthy conversation to find out a transit system for a foreign tour is hardly there.

The tour and travel industry is supported by technological advancement and its applications, particularly in terms of distribution. More and more consumers are having access to internet technology and mainly plugged into the World Wide Web (www). Tourists are able to choose their destinations and make their own tour related decisions as per their own feasibility. The presence of extensive information over internet, price comparisons, availability of best offers and deals helps them to tailor their own packages and journey. Tourists also have the power to control prices by bidding for products and services on sites such as Priceline. The advent of mobile technology has made it possible for tourism consumers to research, book as well as review the products & service offerings during transit.

The increasing users of mobile phones with related smart

applications in the emerging economies such as India provide greater scope for online gathering of information and booking. However, it is anticipated that mobile technology will bring positive breakthrough in the tourism sector in the years to come.

### Anticipated Prospects in the Mobile Market Related To Tour and Travel

Online Travelling is gradually becoming Mobile Oriented – increased use of smart phones as travel tools has helped travellers to make their tour bookings through mobile services, as reported by major online travel companies. The revenue related to advertisements partly flows to the travel apps as they are able to ask for and gather data relating to location from the service users.

Travel Brands and Advertisers Find Mobile Travellers as Attractive Audiences for Business – Mobile travellers as per their demographics, habits and preferences serve as attractive consumers for major brands and advertisers. Such travellers not only share their experiences but also spread word of mouth recommendations for travel brands that serve as advertisements.

The use of mobile and its apps is not only cost effective but also time saving due to the following reasons –

- Mobile apps help to make online bookings anywhere, anytime
- It helps to check the emails, respond to and forward emails, delete or archive emails
- It helps to check the customers' occupancy through the use of online booking mechanism apps, in case if the online booking system consists of a mobile friendly design or iPhone app
- It helps the customers to get access to their calendar by synchronising the laptop, desktop and the mobile phone
- Mobile phone helps to take photos and upload them on social media channels such as Facebook, Twitter, Flickr and similar sites.
- It also helps to create videos and upload them on similar sites as above as well as Blogs, You Tubes.
- Mobile apps also support online banking, including payment of hotel charges, bills etc.
- The use of what apps help in live chat with the customer service personnel of the hotel and/or tourist service provider.

### Descriptive Analysis and Model Validation

Based on the quantitative data survey conducted for a sample size of 1024 respondents from all the states in India, the following result was obtained.

#### Gender-wise response to tourism

No women disagree towards the basic mobile integration in the tourism sector, while 1 man disagrees to the option, 15 women remain

Growth Details of Tourism/Banking/Insurance in India					
Industries	Details	2010	2011	2012	2013
Tourism	Contribution of Tourism to GDP	\$31 billions	\$31 billions	\$36 billions	\$37 billions
	Foreign Tourists arriving in India	5.8 Millions	6.3 Millions	6.6 Millions	6.8 Millions
	FEE from Tourism in India	\$14.2 billions	\$16.6 billions	\$17.7 billions	\$18.1 billions

Table 2: Growth Details of Tourism Product.

neutral to the option of integrating basic mobile in tourism and 17 men having neutral opinion, 148 women agree to the service aspect and 259 male come together with same opinion, there are 227 women who strongly vouch for the basic integration of mobile applications in tourism and 357 men also opining along similar lines (Figure 3 and Table 3).

### Tourism product performance

Since Product feature is the core area of function in tourism, we have three factors that influence Tourism, they are Service Efficiency, Value Addition, and Flexibility. In the following bar graph, we observe that service efficiency indicates high as compared with Value addition and flexibility i.e., Service Efficiency has more influence on Tourism (Figure 4 and Table 4).

### Tourism product performance

The Micro variables of Tourism Product performance are Service Efficiency, Value Addition and Flexibility. From the correlation coefficient values we interpret there is positive correlation that exists between these factors. The correlation between Service Efficiency and Value addition is 71 percent, and the correlation between Service efficiency and Flexibility is 65 percent and similarly correlation between Value Addition and Flexibility is 62 percent (Table 5).

### Tourism product performance

**Tourism service efficiency as dependent variable:** The Predictors of Tourism Service Efficiency are Tourism Value Addition and Tourism Flexibility. The R square value 0.572 indicates that these predictors

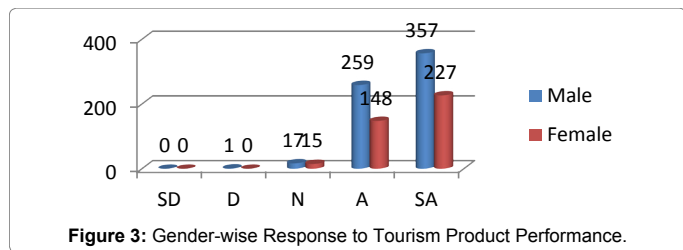


Figure 3: Gender-wise Response to Tourism Product Performance.

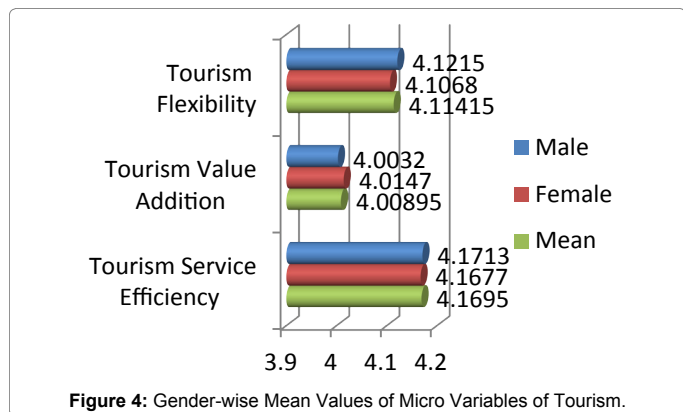


Figure 4: Gender-wise Mean Values of Micro Variables of Tourism.

Response	Count
SD	0
D	1
N	32
A	407
SA	584

Table 3: Gender-wise Response to Tourism Product Performance.

explain Tourism Service Efficiency by 70 percent. The beta values of Tourism value addition and Tourism flexibility were 0.492 and 0.345 (Figure 5 and Tables 6, 7).

Similar SEM models were obtained for other performance factors of Tourism Product.

## Deliverance Model for EXPEDIA

### Introduction

The study has its objective of providing a descriptive and detailed study of the organization called Expedia, the global leader in online travel category based on Deliverance Model through the integration platform of online products for the products in service sector (mainly Insurance, Banking and Tourism) related to value additions, flexibility and efficiency of products to customers. The latest advancements in technology in the mobile and web platforms can facilitate various different operations- product ordering, product selection, product tracking [56], fulfillment, transaction payments and reporting of modules are to be integrated with the help of an easy-to-use tool (Figure 6 and Table 8).

### Conclusion

The secondary finds that the impact of globalization creates new opportunities in Tourism, which can be highly visible through the high quality holidays, some of the developing countries from South East Asian countries are providing currently. Moreover, the different segments of Tourism are getting immense boost-up because of the introduction of different technological applications. Creation of tourism related websites and showcasing the various advanced facilities that this industry has in offer for its customers, has generated a huge clientele for this industry, making it one of the highest revenue generating sectors. Generation of IT skills educated employment, along with more opportunities of indigenous craft

Tourism	Male	Female	Mean
Tourism Service Efficiency	4.1713	4.1677	4.1695
Tourism Value Addition	4.0032	4.0147	4.00895
Tourism Flexibility	4.1215	4.1068	4.11415

Table 4: Gender-wise Mean Values of Micro Variables of Tourism.

	Tourism Service efficiency	Tourism Value Addition	Tourism Flexibility
Tourism Service efficiency	-	.706**	.650**
Tourism Value Addition		-	.621**
Tourism Flexibility			-

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

Table 5: Correlation Coefficient between Micro Variables of Tourism Product Performance.

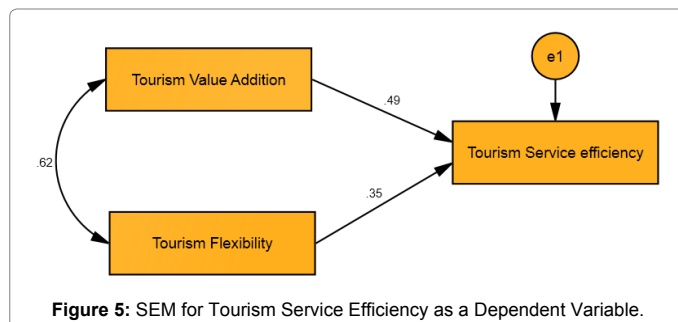


Figure 5: SEM for Tourism Service Efficiency as a Dependent Variable.



Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.706 <sup>a</sup>	.498	.498	.36091	.498	1015.503	1	1022	.000
2	.756 <sup>b</sup>	.572	.571	.33364	.073	174.863	1	1021	.000

a. Predictors: (Constant), Value Addition  
 a. Predictors: (Constant), Value Addition, Flexibility

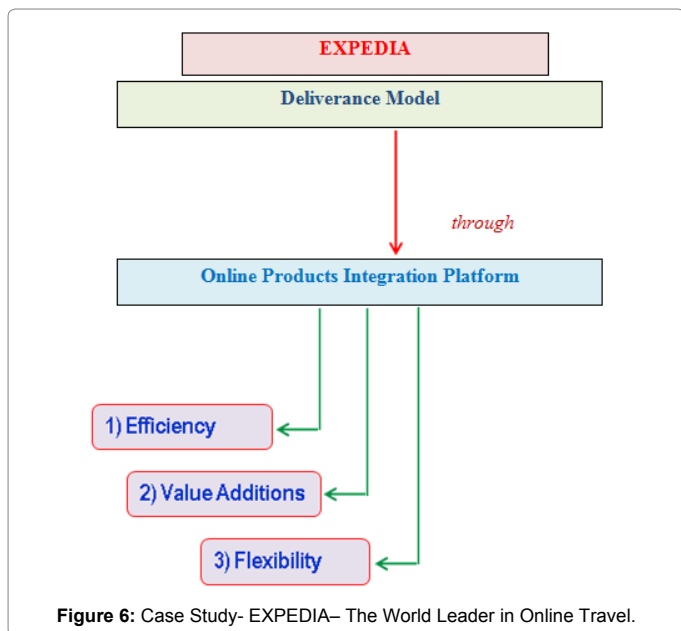
Table 6: Model Value for Tourism Product Performance.

Dependent variable	Independent Variables	R Square	Hypothesis Accepted	Hypothesis Rejected
Tourism Service Efficiency	Tourism Value Addition, Tourism Flexibility	0.572	TEV, TEF	-
Tourism Value Addition	Tourism Service Efficiency, Tourism Flexibility	0.544	TVE, TVF	-
Tourism Flexibility	Tourism Service Efficiency, Tourism Value Addition	0.475	TFE, TFV	-

Table 7: Hypothesis Testing Result for Micro Variables of Tourism Product Performance.

	Questions	Findings
EXPEDIA- Tourism Industry using Deliverance Model	Q1- Value additions can play key role in customer's mind while selecting products using Mobile Application. Q2- The technology advancements are adding values to the tourism products. Q3- Insurance to non travellers and facility of insurance service integration can add a value to the Expedia's overall growth. Q4- Integration of different sectors can add more values to tourism products while purchasing in the form of "Services Under One Roof". Q5- A dedicated technology enabled banking platform (in collaboration with Expedia and any nationalize bank) can play a key role towards facilitating payment transactions etc., to other bank account in stopping the transaction failures, reducing frequent downtime and enabling the security and privacy to customers.	Travel insurance provided by Expedia is not limited to its customers only, enabling them in booking travel insurance as well. By starting travel insurance offers by other small agents, Expedia may have great benefit of entering the insurance platform.  Banking gets used only for payments of services on Expedia websites. With a huge amount of transaction and long clientele, a complete banking solution is needed to keep it secure and at par with its expanding business.

Table 8: Questions asked to Expedia and Findings from their Feedback.



and trade industry to grow has also been enhanced due to the development in information and communication technology (ICT) in this sector. Using empirical data and with statistical analysis through AMOS, it has been found that the various developments in the field of Tourism certainly places a positive impact on the

other services sectors, especially Banking. It has also been found by the case study with a popular Travel and Tourism based company- Expedia, that if the Travel and Tourism sector tries to include more options of banking conveniences along with travel insurance benefits, their customer acquisition rate would increase multi-fold. Moreover, using the factor analysis on Tourism, the intrinsic factors that have been generated are Tourism, Efficiency, Tourism Flexibility and Tourism Value Addition.

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