

Development of Integrated Information Frame Work: A Study of Tourists places in Punjab

Nitasha Sharma

Senior Research Fellow
Department of Commerce and
Business Management
Guru Nanak Dev University
Amritsar, Punjab

Raman Sharma

Student, MBA IV Sem
Department of Commerce and
Business Management
Guru Nanak Dev University College
Jalandhar, Punjab

Abstract

The ancient historical cities and the cultural heritage sites have always been a source of attraction for tourists. The infrastructure facilities and opportunities available in Punjab have attracted tourists from all over the world. Punjab is dotted with magnificent tourists places. Apart from the various other travel destinations Punjab has a vast cultural treasure stemming from a historic past. The number of tourist places and sites in Punjab is so great that a single tour to discover the multifarious facets of its wonderful heritage is not enough. The present study focuses on exploring the integrated information framework for tourist places in Punjab and to find out the perception of tourists regarding this integrated information framework. For the present study, data has been collected from both primary and secondary sources. Primary data was collected on the basis of a structured questionnaire whereas secondary data has been collected on the basis of relevant review of literature. The results of the study depicted that Punjab is the one of the most historic states in India. As far as the information framework is concerned, people feel it easy to use this collective information related to tourists places thus underlining the importance of constructing an integrated information system in order to improve the performance of tourism sector in Punjab.

Keywords:

Tourism, Tourists Places, Punjab, Information

Introduction

Tourism Trends in Punjab

Punjab is one of the most beautiful states in India. Punjabi culture is renowned for its tolerance, progressive and logical approach to life. The warmth and hospitality of the people are the main attractions in this region. Punjab has many things to offer to an enthusiast who wants to explore it. Some of the main cities in Punjab are Amritsar, Jalandhar, Ludhiana and Patiala. Punjab, located in northwestern part of India, therefore it does not have much to offer as far as the natural tourism is concerned. However, the state has a lifelong history and culture that attracts tourists from around the world. The state offers a variety in

dance, music and cuisine. The monuments of Punjab lure tourists from all over the globe. Each and every tourist place in Punjab is an architectural feat in itself.

Tools for Integrated Information for tourists places

With the changes in technology, new forms of information and records are created. Therefore, the information that was earlier produced on paper is now being produced in electronic form (Asproth, 2007).

Integrated Information Systems is an approach that offers methods for analyzing processes and taking a holistic view of process design, management, work flow, and application processing. Integrated information provides a generic and well documented methodological framework to the tourists. Integrated information system is a data-intensive and human-computer interactional computer application system designed with the aim of providing information. At present, there are two modes of information systems used by tourism enterprises: the first one is based on the information web mainly used in network marketing and the second one links organization information system with the tourism demand (Usuf et al., 1998). Integrated information is used by tourism enterprises in different areas within the region (Malo, 2009).

Integrated information system emphasizes on data-mining and multidimensional data analysis. The following are the various components of integrated information framework:

Animation and Visualization - Application of 3D animations and visualization are integrated tools of information. All monumental buildings are presented in real time with the help of animations. The level of detail on 3D models is such that it enables the tourists to visit those tourists places easily (Malo, 2009).

- **Monuments Photo Gallery-** These are the pages which contain large numbers of media content usually images with little or no supporting text. The photo gallery on the tourists' places provides information to the tourists about the places of tourists' interest and the historical events which have taken place there. Galleries are useful index for the tourists.
- **Google Earth-** It helps to find any place, buildings, cities and palaces and provides information of nearby areas with the help of a map.
- **Tourists Information Centers** - Tourists can collect the necessary information about the tourists' places from tourists' information centers.
- **Toll Free Numbers** – It is also a tool of integrated information.
- **Geographic Information System (GIS)** - It is the

integration of multiple technologies, including tourism information systems and internet which has given an exciting new access to tourism information. Generally tourists are not aware about this system. GIS informs tourists about the location of touristic objects like hotels, restaurants, theatres, museums, skiing resorts etc. This helps the tourists to find the most relevant accommodation or to locate the position of a specific tourist place.

- **Destination Marketing System (DMS)** – DMS is vital to the development of both regional travel industry and international marketing. It is the internationally acknowledged advanced thinking of development of travel information. A destination marketing system is primarily a marketing tool for promoting tourism in a particular destination, which can be a nation, region, town, or other recognizable geographical entity (Hornby, 2006). Web site technology plays a pivotal role in destination marketing systems.

Theoretical Background

There are many studies that have discussed the importance of integrated information for tourists.

Jolma et al., 2005 discussed the issues related to environment and found that architectural design phases were not given enough consideration. They suggested that the methodological tools for analyzing tourism related problems are not yet fully mature and are in their development stage. Pouyioutas et al., 2006 examined a methodology for identifying historical information related to tourist places. Traditional methods of identifying new historical information included studying of books, journals and other relevant printed and digital documents as well as visits to archaeological buildings and the detailed examination of ruins, drawings, sculptures and other ancient remains. Seabra et al., 2007 conducted a survey of 350 tourists and found that using non-media information sources for planning tourist trips influenced expectation fulfillment. The use of non-media information sources also had a direct impact on the future use of mass media information sources for future tourist trip planning. Hajialikhani, 2008 investigated a new methodology that could be adopted for managing cultural heritage sites. The results showed that for transmitting the spirit of the place, there should be a sound flexible management plan. Aallak, 2010 investigated the nature of marketing information systems within enterprises and focused on the usefulness of the internet for external information gathering. The findings indicated that tourism enterprises made use of informal marketing information systems in order to gather data. Kurniawan et al., 2011 studied the e-cultural heritage and natural history

framework by using the Zachman Architecture Framework. It has used various data, applications, technologies, etc. to integrate e-cultural heritage and natural heritage. Results showed that there was a need to develop mechanism to pull and push cultural heritage and natural heritage in order to obtain information from various sources automatically. Kalamma et al., 2011 presented a conceptual approach which integrates geographic information, multimedia information, cultural heritage information and collaborative aspects in a single information model. This conceptual approach was used to design and implement a web-based information system on top of a single commercial database covering all mentioned aspects. Adeniran and Akinlabi, 2012 focused on the perception of Osogbo residents on the cultural significance and conservation prospects of historic buildings.

Data Base and Research Methodology

Need of the study

Integrated information frame work is proposed through this study in terms of basic information with regard to culture, religion and heritage aspects of tourist places. This study will provide the government of Punjab a platform to carry out research in the area of culture and heritage. Comprehensive information will allow the policy makers to draw sufficient action plan to develop and allow the further development of tourism and culture of tourist places.

Objectives: - These are the specific objectives of the study.

1. To focus on integrated information framework for the tourists places under Tourism Sector in Punjab.
2. To study the perceptions of tourists for integrated information of tourists places in Punjab.

Scope

Due to natural surroundings, unique monuments, architecture and favorable climate, Punjab could make rapid strides in tourism sector and it is rightly called as 'tourists' paradise'. This research paper highlights the integrated information for some the tourist places of Punjab.

Data has been collected both from primary as well as secondary sources. Primary data was collected with the help of a structured questionnaire developed on the basis of relevant review of literature. The questionnaire comprised of two parts. The first part was related to the demographic profile of the respondents. The second part of the questionnaire was designed to collect information related to the tourist places. The questionnaire consisted of statements related to integrated information of tourist places. 100 respondents (tourists) were selected randomly from the city of Amritsar and Jalandhar for the purpose of data collection. The data was classified and analyzed with the help of statistical tools like Percentage, Pie chart, Histogram and Weighted Average Score. In addition to this, secondary data have been collected from various journals, news paper reports and research articles. The obtained data was subjected to multivariate statistical analysis of means (\bar{x}) and chi squares (χ^2).

Data analysis and Interpretation

Sample characteristics

As far as the demographic profile of the respondents is concerned, the sample comprised of variety of respondents belonging to different economic and professional background. Table No. 1 shows the demographic profile of the respondents.

The male respondents were more than female respondents in the sample. Furthermore youngest respondents formed the majority (around 30%) in the age group of 20-30. As far as education level is concerned, 46% of the respondents are graduates followed by matriculates (26%). As far as respondents' occupation is concerned, majority respondents belong to service category (32%), followed by students (26%). As per income categorization, 42% respondents were having total monthly income below Rs. 20000, 36% between Rs.20000-30000 followed by 12% who belong to income category of Rs. 30000-40000. However just 10% were falling in above Rs.40000 income group.

Table 1: Demographic Profile of Respondents		
Demographic Variables		No. of Respondents
Gender	Male	54
	Female	46
	Total	100
Age	Below 20	12
	20-30	30
	30-40	26
	40-50	16
	50-60	12
	Above 60	4
	Total	100

Marital Status	Married	38
	Single	58
	Divorcee	4
	Total	100
Education Level	Matriculation	26
	Graduation	46
	Post graduation	12
	Any other	16
	Total	100
Occupation	Student	26
	Businessmen	18
	Servicemen	32
	Professional	10
	Housewife	14
	Total	100
Monthly Income(Rs.)	Below 20000	42
	20000-30000	36
	30000-40000	12
	Above 40000	10
	Total	100

Source: Compiled from Survey

Data Analysis

Few questions were asked from the respondents related to

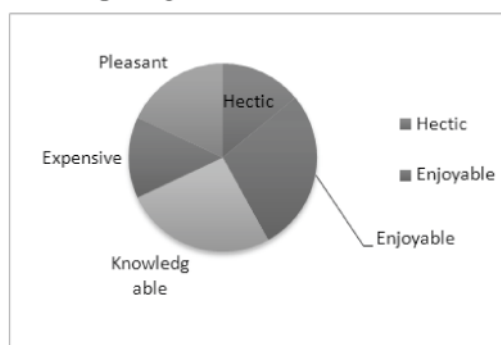
their visit to tourist places. Analysis and interpretation of the responses are as follows:

Table: 2 Experience of Visit to Tourists Place

Particulars	No of Respondents
Hectic	14
Enjoyable	26
Knowledgeable	28
Expensive	14
Pleasant	18
Total	100

Source: Compiled from Survey

Fig.: 1 Experience of Visit to Tourists Place



Source: Compiled from Survey

Analysis of table no. 2 and figure no. 1 depicted that majority of the respondents (26%) think that a tour to

tourists places is knowledgeable, 28% respondents feel it is enjoyable followed by 18%, who feel it as quite pleasant.

Table: 3 Hindrances

Particulars	No. of Respondents
Language Barriers	18
Diversity	22
Safety and Security	16
Poor Infrastructure	14
Pollution	12
Sanitary condition	10
Lack of guidance	8
Total	100

Source: Compiled from Survey

Fig.: 4 Main Hindrances

Source: Compiled from Survey

From the table no. 3 and figure no. 2 it can be depicted that the major barrier according to respondents in the way of tour

to tourists places is diversity (22%) followed by language barriers (18%) and safety and security (16%).

Table: 4 Preferred Tool of Integrated Information

Ranks \ Attributes	I	II	III	IV	V	VI
Visualization effect	16	20	18	16	18	22
Google Earth	22	24	24	28	26	28
Videos	24	20	26	24	30	22
Photo Gallery	24	22	20	18	14	20
DMS	6	8	6	6	6	4
GIS	8	6	6	8	6	4

Source: Compiled from Survey

Note: Total no. of respondents=100, 1=Most Preferred, 6=Least Preferred

From the Table no.4, it is depicted that the most preferred tool of integrated information is Videos and Photo Gallery followed by Google Earth. Another important tool for integrated information is GIS and Visualization effects.

Result of Perceptions of tourists regarding integrated information framework

In order to find out the perception of tourists regarding integrated information framework, weighted score has been calculated on the responses given by respondents. The results of weighted average score have been reproduced in

Table No.5. It was found that the respondents strongly agree with the statement that visits to tourists places help in promoting the culture of a country with the weighted average score of 4.4 followed by the statement tour to tourists places deteriorate natural resources with weighted average score of 4.3. Moreover the statement travelling to tourists places help to increase the income of hotels and other industries is also strongly agreed by the respondents with weighted average score of 4.2. The analysis of the table no. 5 also reveals that the most of the respondents feel that integrated information is easily available at tourist places

and visits by the tourists to tourists places help to increase the urbanization of that region with weighted average score of 4.1 each. Further, visits to tourists places promote development in tourism industry (4.0), government made effort to preserve these ancient buildings (3.9), tour to tourists places increase the general knowledge of the tourists

(3.6) and tourists facilities are easily available at tourists places (3.5) statements are also agreed by the tourists. Tourists strongly feel disagreement to the statements of Language problem and heavy expenditure incurred by the government. Apart from it integrated information also play crucial role for the tourists.

Table 5 Results of Statements Related to Tourists Places

Statements	Weighted Average Score
Tour to tourists places help in promoting cultural value of the region	4.4
Visits to tourists places increase sustainable tourism development of the region	4.0
Visits to tourists places help to increase the revenue of particular region	4.1
Frequent tour to tourists places motivate the government to preserve the ancient buildings	3.9
Tourists facilities such as tourist guide s, area maps and tourists information centers are easily available at tourists places	3.5
Tour to tourists places helps to increase the general knowledge of the tourists	3.6
Integrated information is easily available at tourists places	4.1
Prices at tourists places are more in comparison to other places	3.4
Tourist guides solve the problem of language barriers	2.2
Government efforts are appreciable to protect ancient buildings	2.7
Visits of tourists help to maintain and increase the urbanization of the place	4.1
Visits of tourists to tourists places help to increase the employment	3.3
Travelling to tourists places helps to increase the income of hotels and many other industries	4.2
Government has to incur heavy expenditure for the maintenance of the ancient buildings	2.4
Travelling to tourists places deteriorate natural resources	4.3

Source: Computed through excel

Table no. 6 shows the importance of variables related to integrated information regarding the tour to tourist places. An analysis of the variables in the of table no. 6 related to visit to tourists places indicate that the integrated

information (4.40) and historical background (4.24) have been found to be the most driving variable during the visit to tourists places followed by architectural beauty (4.10) and architectural design (3.75) on the order.

Table 6: Results of Integrated Information Related to Tourists Places

Variables	Weighted Average Score
Diversity	2.10
Historical background	4.24
Transportation facility	2.50
Architectural works	4.10
Sculpture and Painting	3.30
Archaeological structure	3.25
Inscriptions	2.36
Architecture design	3.75
Integrated information of related monuments	4.40
Residential facility	2.50
Heritage aspects	3.50
Cultural Aspects	3.72
Geographical Aspects	2.34
Natural Aspects	3.00
Location	2.25

Source: Computed through excel

Cultural aspects and heritage aspects are the moderate influencing variable during the visits to the tourists' places with weighted average score of 3.72 and 3.50 respectively. The least influencing variables related to tour to tourists places have been found to be the diversity (2.10), Inscriptions (2.36), geographical aspects (2.34), location (2.25) and residential and transportation facility with weighted average score of 2.50 each.

Implications of the Study

The results of the study depicted that the most important variable that encourages the tourists to visit tourist places is integrated information. People find it easy to use collective information related to monuments. Another significant variable is historical background of tourist places that encourages the tourists to visit certain places.

This study represents a step towards better understanding of attitude of respondents who are interested in integrated information related to tourist places. The results showed that most of the respondents were satisfied with transportation facility, residential facility, archaeological structure etc of ancient buildings at tourist places. The study also indicated tour to tourists places increase income of hotel industry, increase sustainable development, promotion of cultural values and deteriorate natural sources are significant factors of visit related to tourists places. Moreover, this study will act as a tool for the tourism promotion. The history of the tourist places will guide the tourists for the betterment of the present culture and protect the culture and values exist in the society for the next generations. Comprehensive information provided in this study allows the tourism policy makers to draw a sufficient action plans to develop and allow the further development of tourism and culture of tourists places. It reminds the government about their primary duty to protect national heritage which are treated as country wealth. This study categorizes and classifies the various monuments and tourists places of Amritsar as per the structure and constructions made during dynasty.

Conclusion- Heritage sites act as historical landmarks having a lot of significance for cultural identity. Ancient buildings are the evidence of the olden times and settlement changes took place with the passage of time. Punjab is rich in religious and historical heritage. The famous old buildings are the speaking stones of Punjab's authentic architectural and historical details. Some of the incomparable architectural work form an integral part of Punjab's historical heritage. Monuments of Punjab are considered as the real treasure and are preserved with great importance. The old buildings do not only tell the fairy tales carved out of stones, bricks, and mortar but also narrate the tales of valor and courage of its rulers. The contribution of the heritage sites has been widely accepted and acknowledged. On the map of India, Punjab is identified as the land for tourists. For

the visitors, it serves as a perfect introduction to the cultural wealth, religious faith and fairy tales. The glorious past of Punjab has ensured that the present and subsequent generations have plenty of historical and cultural heritages to be proud of. The fascinating historical, religious and heritage sites in the state stand quietly today to retell their story of joy, sorrow, courage and sacrifice before the tourists. Each of the stories related to heritage sites is enchanting and singular in nature.

Scope for Future Research of the Study

The present study was confined to state of Punjab only. Comparison of two or more states can be conducted for future research. A larger sample can be taken for further study.

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