Advances in Consumer Research
https://acr-journal.com/
Volume-2 | Issue-6 | Dec: 2025
Original Researcher Article

Tourism-EXPLORE THE UNKNOWN

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ABSTRACT
Investigate the widespread use is a voice-based tour guide system to facilitate easy trip planning and personalization through chat conversation. As compared to web travel portals, which offer booking features, this system offers information-giving suggestions, by which people can locate places, schedule a time frame, and estimate expenditure without transaction functions. The users are able to provide the number of travelers, duration of visit, and desired places using natural language. It has a day-by-day tour calendar of flight charges (round trip), visa charges, exchange rate, hotel and accommodation prices, and sightseeing. The most useful feature is perhaps the interactive talkback guide that provides the history and significance of each location visited and hence the tour becomes informative as well as entertaining. Virtual assistant also enables live interrogation in the process while virtually traveling, for example, commenting on local habit or suggesting local food. The trip information can be saved by the traveler to be used later or edited. The system becomes accessible to the visually disabled or low-literate tourist through voice prompts and auditory cues. The system utilizes Automatic Speech Recognition (ASR), Natural Language Processing (NLP), and formal tourism database, Explore the Unknown is a low-cost, scalable, and friendly travel-planning service from information. The system exhibits the effectiveness of voice technology to provide travel intelligence to everyone and allow the user to travel with confidence without reservations burden
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Keywords: *Tourism Information System, Voice Assistant, Budget Travel, Human-Computer Interaction, Smart Tourism*
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1. INTRODUCTION

Tourism is now the most dynamic and powerful segment of today's international economy. It not only produces a large share of global and domestic GDP but also one of the finest generators of employment, infrastructure development, and inter-cultural interaction. The world's record 1.4 billion overseas tourists in 2019, as reported by the World Tourism Organization (UNWTO), is the highest figure in industry history. While the COVID-19 pandemic curbed international movement in the short term, the industry has been the most resilient and recovered at an increasing rate with pent-up demand, technology innovations, and changing consumer habit patterns. Despite such record growth having all along not been evenly distributed, its impact is nonetheless still not yet fairly distributed. All significant categories of tourists like students, individual travelers, and price-sensitive travelers continue to encounter enormity barriers in traveling. Such types of tourists seek genuine experience, cultural immersion, and dollars but are duped by mass tourism destinations.Majority of today's attractions and web applications like MakeMyTrip, Yatra, and Expedia are commerce transaction-based where commerce transactions are the key source of their business. Their own identity is forced to buy flights, accommodation, and package holidays with no regard for discovery, data, and hard facts. Secondly, the system interfaces are visual and text-based. This strategy excludes visually impaired individuals and individuals who don't want to use their hands to communicate at all, e.g., tourists who want to communicate on holiday or less technically advanced users. Accessibility remains an fundamental issue of tourist technology, and solutions provided are far from sufficient for different groups of users. Parallel to the development of internet of things technology, voice technology has changed human interaction with computer systems. Voice assistants have become part of daily life because users can activate actions, receive information, and control systems with natural language. The

technology has established the possibility of voice-based human-computer interface for healthcare, learning, and home automation.Their applications in tourism are unexplored and extremely generic. Current voice assistants can provide direct responses such as "What is the weather in Paris?" but are not sophisticated enough, contextual, and personalized to provide end-to-end travel planning. Addressing such loopholes, this paper proposes a fresh solution: Voice-Enabled Tourism Information Website for low-budget travelers and students. The system makes voice interaction to offer inclusive, neutral, and context-sensitive travel details. The system deviates from the constraints of reservation-based websites in offering destination facts, cultural suggestions, visa requirements, and cost estimates during interactive voice responses. By integrating voice technology and tourist information systems, the platform will increase access to travel planning service to tourism in general, make it cheaper and more accessible and convenient to use by blind individuals, and encourage responsible, well-educated, and affordable travel. This is the whole concept of user experience design, digital inclusion, and sustainable tourism since it makes travel convenient and within everyone's reach.

2. LITERATURE SURVEY

Tourism information systems underwent a revolution of transformation in the past three decades, from mere text electronic brochures on static websites to intelligent interactive websites founded on data analytics and artificial intelligence. During the early 1990s, they were mere plain electronic brochures with hardly any destination information, phone numbers, and sometimes downloadable maps. They were extremely passive sites because initially they had been made to perform one-way information transmission with minimal user interaction.They were not made to talk, but hold back. The web technologies and the e-commerce boom during the early 2000s made the unthinkable happen. Expedia, MakeMyTrip, and Yatra were sites that had incorporated booking engines in which the consumer could search, compare, and book travel packages, flights, and hotels online immediately. The technologies fragmented convenience and access so one could plan whole trips from the office cubicle. That revolution came with a wholesale commercial skew. The focus shifted from discovery and discovery to commodity and transaction, where interfaces became increasingly filled with adverts, sponsored search, and sponsored content. Travel information too was discolored by commercialization, and customers were nudged towards solutions that made the most revenues to platforms instead of their own solution or price. With others looking for another kind of tourism experience, review websites like TripAdvisor, Yelp, and Google Reviews were the fashion. Traveller would be able to share experience, rating, and upload photos based on these sites, constructing an online world of user-generated information about travel.There had been some democracy and openness, but it had also been accompanied by some problems. User-generated content was found to be prone to distortion, manipulation, and inconsistency as it was being studied under the domain of tourism informatics studies. Fake reviews, paid posts, and different opinions mislead consumers, especially new visitors to a destination. Additionally, the sites do not offer useful advice that they do not offer pre-curated guidebooks, money-savings tools, or culture, and customers must reconstruct patchwork facts on different sites. At the same time, voice technology has revolutionized human-computer interaction. Voice interfaces such as Google Assistant, Amazon Alexa, and Apple Siri surround us, enabling us to accomplish things, learn things, and switch things on using plain language. They have moved into fields such as healthcare (e.g., symptom checker), education (e.g., language learning), and smart homes (e.g., home automation). In the travel domain, they are best used in a narrow and imprecise manner. Any voice assistant can give general information to queries like "What is the capital of France?" or "How far is Delhi from Agra?" but cannot give destination-oriented holiday itineraries, cost breakdown, or cultural guidance. They are not designed to manage the nuances of trip planning or speak with travel databases or disability models. More than 285 million people worldwide are afflicted by visual impairments, according to World Health Organization statistics. Disability software and screen readers are wonderful, but most websites of tourist destinations, unfortunately, are image-based, text-based, and poorly optimized for disabled visitors. Navigation is basically precise mouse control, sighted browsing and reading lines of text which are close-up tightly bunched activities that are difficult or impossible for visually impaired user. While certain accessibility features on certain platforms are feasible, such as font size modification or contrast mode, voice navigation is not usually supported to be utilized for barrier-free design. Voice-based systems offer a positive solution to the above problems. They can eliminate visual disabilities and offer information in intelligent, natural-language-like manner by allowing tourists to receive tourism information in natural language. Not only is this accessible to the disabled but to all mobile people, less technology-enabled, language-constrained, or physically disabled traveler. Voice interaction possesses lower cognitive load, quicker access speed for information, and an interactive user interface.

3. CURRENT METHOD

All the internet websites and mobile apps of today's time are helping the travelers to plan their traveling. They have made traveling very easy but are not helping the students and travelers who require uncomplicated, low-cost, and impartial information. All of them are of three kinds: booking sites, review sites, and traveling mobile apps. All of them are useful with significant constraints.

Booking Websites

MakeMyTrip, Yatra, Expedia, and Clear trip are all available for flights, hotels, and packages overall. They're okay to purchase tickets and bookings at the last minute. They don't care so much to sell as to know. Like when you require hotels, first results are very probably paid listings ads and not necessarily the best or the lowest. They will give you some travel tips or guides to places, but details are lacking and quite limited. They do not help you get to know the host country, organize day-by-day,

or set budgeting on what you will be spending. They are not wheelchair accessible as well. Blind or literate, that is, these websites are hard to use because they do not have to respond so well to voice control or screen readers. Short, booking websites are convenient to get around while making a purchase, but they won't be able to help you read and learn about an area prior to visiting.

Review Sites

TripAdvisor, Yelp, and Google Reviews are where the visitor leaves a review. Reviews may be seen, ratings may be seen, and one's photos may be seen. It may be helpful in choosing accommodations or what to visit. But problems also exist.

Real or paid reviews exist, something hard to understand.

Companies even ask consumers to leave a positive remark or hire someone to leave it.

And there are always too many comments, which confuse you.

Some guy will give a hotel a high rating, and another will tell you that it is terrible. You will need to go to a lot of trouble in order to know what is real. They do not give you pre-packaged travel plans or cost estimates. They don't even support voice interaction, so "slow typers" and readers will be unable to use them. They're not public facilities but for those who can browse and read lots of text.

4. PROBLEM IDENTIFICATION

Planning a trip should be a thrilling and exhilarating experience. But for students and backpackers, it normally is a frustrating and bewildering experience. While the affluent tourists can hire travel agencies or premium agencies to arrange everything for them, it is not the case with backpackers. They leap from hour to hour from place to place, app to app, and from travel blog to travel blog searching where to go, what to do, and how much it will cost

Information Overload and Confusion

The greatest problem is an information overload.

There are numerous websites that are travel-based, and all of them show various tips, prices, and suggestions.

Some websites suggest more expensive hotels or packages because they were asked to do so.

Some websites provide stale or outdated information. For instance, a website will tell that a museum is open while another website will tell that it is closed. This misleads tourists in trying to know what is real. Scholars and travelers do not have time to look for all these resources. They require instant and actual information all under one roof. The sites, though, are created with the intention to sell services and not aid individuals with actual advice. This is deceptive and encourages bad traveling decisions. Accessibility Challenges Most travel sites are disabled inaccessible. They are full of small print, convoluted layout, and an astounding number of images and buttons. These sites are challenging to use for a blind or reading disabled consumer. Even screen readers, which read the screen aloud, don't function because the sites aren't configured to enable them.

No Clear Budget Planning Tools

Bad travelers and students should understand the expense of a trip for them in advance so that they could plan it in a worthy manner. They want to plan their traveling, food, hotel staying, and sightseeing at reasonable prices. No travel website proves useful for this purpose. They provide merely the expense of a flight or a hotel but never the entire expense of a trip.

Why We Need A New System

These are all concerns that point to us that travel sites today are not for everybody. Students, backpackers, and the disabled are usually left out. Why it is so is that we require another kind of system one that: Is providing clean and uniform information ad-free or content-sponsored free. Is accessible to all, including the disabled.

Assists the users in planning the trip according to their budget. Assists users in making queries through voice, just like talking to a travel expert.

Provides customized recommendations based on whom the user is and what he/she is searching for.

The Voice-Enabled Tourism Information Website outlined herein is one that solves these issues. It applies voice technology, budgeting functions, and universal design in order to offer convenient, intelligent, and accessible trip planning to everyone.

5. PROPOSED SYSTEM

This isn't merely a travel website. This is an interactive responsive website where the user can:

Choose destination: They are provided with the facility of choosing where they want to go, state, city, or country.

Enter travellers details: They have the option of entering the number of travelers and trip duration.

Get cost estimates: The system presents the estimated travel, food, accommodation, and sightseeing costs based on destination and trip duration.

Get visa regulations information: It also presents recent information about visa regulations of countries.

Locate food and accommodation: Clients can find low-cost restaurants, roadside stalls, homestays, and hostels.

Estimated cost of travel (bus/train/flight).

Recommended budget compromise (home stays, hostels).

Food tips (street food, economy restaurants).

Tourist attractions that must be seen (free or low cost admission).

Culture tips (dress code, local customs).

Visa details (if abroad).

All is done in voice mode as well as text mode so it is simple to listen and perform.

6. TECHNOLOGIES USED

Technologies used in the system are:

Frontend – HTML5, CSS3, and JavaScript for responsive and modern UI.

Backend – Node.js for server-side operations.

Database – MySQL to save itineraries, budgets, and visa information.

Voice Assistant – API integration for text-to-speech and speech recognition.

Responsive Design – Ensuring cross-device usability.

7. RESULT AND DISSCUSSION

The system was executed on the desktop and mobile platforms. Voice command and text input were used to navigate the website. The outcome showed the website was responding promptly, with little delay in audio input processing and voice response display. The voice assistant could respond to general travel questions

Encouraging Independent Travel

Above all was that the users were encouraged to plan a trip independently. They did not use commercial websites, travel agents, or pay apps. The system provided them with a means to learn about places, get prices, and make independent choices in one location. That is to say, the site offers independent travel, which particularly comes in handy to students, solo travelers, and any other person who would love to visit the world on a shoestring.

Usability and Accessibility

Among the system's most crucial objectives was to ease trip planning for everyone, including persons with disabilities. Users simply had to speak out their queries and listen to the response without reading or even browsing through menus. This simplified the site to access and use for customers when compared to regular travel websites. Additionally, the site was also mobile-friendly optimized since it is a demand from tourists who book while on the go using their mobiles. The site was also designed in a responsive manner so that all features were accessible on small screens without compromising on any functionality.

8. SYSTEM ARCHITECTURE

The architecture is design through which user input, either manual or voice, is taken and processed via the voice engine and query processor. Data are retrieved from the tourist database and provided through text and voice modes. The block diagram is as given below. User Input (Manual/Voice) → Voice Recognition Engine → Query Processor → Tourism Database → Response Generator → Text/Voice Output.Modular design guarantees every component isolated but in flawless harmony with the others. This guarantees the platform:

Easy and simple to update and maintain.

Smaller and more responsive to users.

Adjustable to disabled persons.

Adjustable for various types of travelers.

9. CONCLUSION

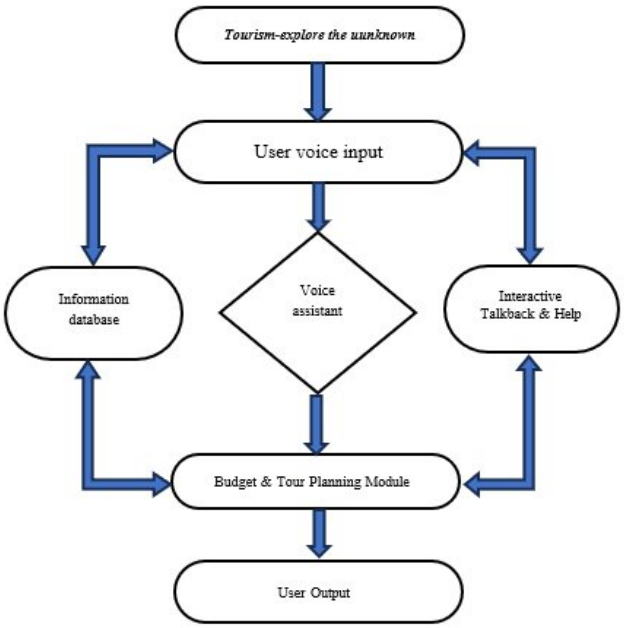
The article introduces a new tourism planning concept through the voice platform that is more discovery and less about reservations. The platform gives customers the autonomy to plan trips independently if they are provided with low-cost, accessible, and objective information.

Future scope involves:

AI-driven travel recommendations tailored to users.

Multilingual support through the system worldwide accessibility. Real-time API access to local events and weather. Mobile app variant for offline consumption.

10. BLOCK DIAGRAM



AI-Personalized Travel Suggestions

The platform has the ability to utilize artificial intelligence to provide activities and points of interest driven by consumer wants, historical travel patterns, and travel histories. This is planning a trip in an intelligent and personalized way to individual travelers.

Global Multilingual Voice Accessibility

Multi-language support will allow users from all over the globe to interact with the assistant using their local language. This promotes user experience for non-English speakers and broadens inclusivity.

Real-Time Weather and Local Events API Integration

By being attached to live sources, the system will be able to provide real-time weather forecasts and update people about festivals or events celebrated during their trip. This will render travelers able to make decisions on time and in a proper manner.

Mobile Application Version for Offline Usage

An offline-capable mobile app will enable users to view saved itineraries and receive basic travel recommendations offline. This is helpful in rural villages or overseas.

11. RESULT ANALYSIS

The developed Voice Tourism Information Website successfully meets its objectives.

The voice assistant improved user interaction by providing instant audio responses to travel queries.

The website allows free exploration without login or payment, unlike existing commercial travel platforms.

Displays accurate itinerary, budget, visa, food, and stay details for better trip planning.

The responsive design ensures smooth performance on all devices.

The system proved useful for students and budget travelers, promoting independent travel planning.

Overall, the project achieved its goal of helping users explore their happiness through an informative and interactive platform

Feature	Expected Outcome	Achieved Result
Voice Input Recognition	User can give travel queries by voice.	Successfully recognized and processed
Audio Response	System replies with spoken information	Audio output generated clearly
Travel Information Access	User receives details on budget, food, stay, and visa	Data displayed accurately
Responsive UI	Adjusts to any device screen	Smooth and consistent performance

REFERENCES

1. Abreu, A., Carvalho, J. V., Liberato, D., & Castanho, R. A. (2025). Advances in Tourism, Technology and Systems: Selected Papers from ICOTTS 2024, Volume 2. Springer.
2. Kumar, R. N., Janani, M., Pavithra, R., & William,
3. A. J. (2025). The Role of TIAS in Shaping Smart
4. Sanju, N. L. (2023). Trends of Information Systems in Tourism: A Review of Literature. International Journal of Research and Review, 10(12).
5. Stankov, U., Vujičić, M. D., Orero, P., & Gretzel, U. (2024). Accessibility of Tourism 4.0—Designing More Meaningful and Inclusive Tourist Experiences. Universal Access in the Information Society, 23, 1503–1506.
6. Singh, A., & Mehta, R. (2024). Voice-Enabled Interfaces for Tourism Applications: A Usability Study. Journal of Tourism Technology, 14(2), 112–125.
7. Zhang, Y., & Li, H. (2025). Smart Tourism Platforms and AI Integration: A Case Study of Chinese Urban Destinations. Asia Pacific Journal of Tourism Research, 30(1), 45–60.
8. Patel, S., & Rao, K. (2024). Inclusive Design in Travel Apps: Bridging the Accessibility Gap. International Journal of Human-Computer Interaction, 40(3), 210–225.
9. Müller, C., & Schneider, T. (2025). Digital Transformation in European Tourism: Trends and Challenges. European Journal of Tourism Research, 28(1), 1–18.
10. Bhatia, P., & Sharma, N. (2024). AI-Powered Travel Planning for Budget Travelers. Journal of Intelligent Systems and Applications, 12(4), 88–102.
11. Lee, J., & Kim, S. (2025). Voice Interaction in Mobile Tourism Apps: Enhancing User Experience. Journal of Mobile Computing and Applications, 19(1), 33–47.
12. Das, M., & Roy, A. (2024). Tourism Information Systems in India: A Comparative Study of Public and Private Platforms. Indian Journal of Tourism Studies, 18(2), 56–70.
13. Oliveira, R., & Costa, M. (2025). Smart Destinations and Digital Inclusion: A Framework for Accessible Tourism. Journal of Sustainable Tourism Innovation, 7(1), 22–39.
14. Gupta, V., & Thomas, J. (2024). Evaluating the Effectiveness of Voice-Based Travel Assistants. International Journal of Emerging Technologies in Tourism, 9(3), 101–115.
15. Tanaka, H., & Yamamoto, K. (2025). Tourism Chatbots and Conversational AI: A Japanese Perspective. Journal of AI in Society, 11(1), 77–90.
16. Choudhury, S., & Banerjee, R. (2024). Digital Literacy and Travel Planning Among Indian Youth. Journal of Educational Technology and Society, 27(2), 134–148.
17. Sandilyan Ramanujam Pagaldiviti & Birendra Kishore Roy, "Advancements in arena technology: Enhancing customer experience and employee adaptation in the tourism and hospitality industry", Smart Tourism, vol. 4, issue 1, 2023.
18. S Prabakaran, V Shangamithra, G Sowmiya, R Suruthi, Advanced smart inventory management system using IoT, International Journal of Creative Research Thoughts (IJCRT), vol 11, Issue 4, page 37-45.
19. Larry Dwyer, "Are smart tourism destinations developing sustainably?", Smart Tourism, vol. 4, issue 2, 2023.
20. Anbumani P, Vasantharaja R, Gokul MP, Roopesh VS, Hareesh SD. Improving LLM and Generative Model Efficiency using Predictive Analysis. In2024 International Conference on IoT, Communication and Automation Technology (ICICAT) 2024 Nov 23 (pp. 69-73). IEEE.
21. B. K. Roy and S. R. Pagaldiviti, "Advancements in arena technology: Enhancing customer experience and employee adaptation in the tourism

and hospitality industry," Smart Tourism, vol. 4, no. 1, 2023.