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A STUDY ON IDENTIFICATION OF START-UP OPPORTUNITIES & SURVEY FOR TRAVEL AND TOURISM IN COURTALLAM, TENKASI DISTRICT

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ABSTRACT

The travel and tourism sector in Courtallam, located in the Tenkasi District of Tamil Nadu, has long been recognized for its natural waterfalls, wellness climate, and seasonal tourist inflow. Despite this potential, the region continues to face limitations in organized tourism services, digital accessibility, and value-added entrepreneurial initiatives. This study aims to identify feasible **start-up opportunities** within the local tourism ecosystem and to assess tourist preferences, satisfaction levels, and service gaps through a structured survey.A mixed-method research design was adopted, combining a quantitative survey of tourists visiting major attractions in Courtallam and qualitative insights gathered from local stakeholders, including shop owners, accommodation providers, and transport operators. Data were analyzed using descriptive statistics and thematic interpretation to understand current trends, unmet needs, and potential growth areas.The findings reveal that tourists highly value natural attractions but express dissatisfaction regarding hygiene, transportation convenience, information systems, and availability of organized activities. Based on the results, several promising start-up avenues were identified, including eco-stay and homestay development, digital tourism platforms, guided nature and cultural experiences, wellness and Ayurveda-based packages, adventure tourism services, and improved local transport solutions. The study concludes that fostering such entrepreneurial ventures can significantly enhance visitor satisfaction, extend tourism beyond peak seasons, and contribute to sustainable economic development in Courtallam and the wider Tenkasi District.

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Introduction

The travel and tourism industry is one of the fastest-growing sectors globally, contributing significantly to employment generation, regional development, and cultural exchange. In India, tourism plays a vital role in supporting local economies, particularly in rural and semi-urban destinations that possess rich natural and cultural resources. Tamil Nadu, one of the leading states in domestic tourism, is home to several unique destinations, among which **Courtallam**, located in the Tenkasi District, holds a special position. Often referred to as the *"Spa of South India,"*Courtallam is renowned for its waterfalls, therapeutic climate, herbal springs, and scenic Western Ghats landscape. Every year, thousands of tourists visit the region, especially during the monsoon season, making tourism a major contributor to the local economy.

Despite its popularity, Courtallam's tourism potential remains largely underutilized. The region faces several challenges, including seasonal fluctuations in tourist flow, limited accommodation options, lack of organized recreational activities, insufficient digital infrastructure, waste management issues, and inadequate transportation facilities. These gaps present substantial opportunities for innovative start-ups to enter the tourism value chain and enhance the overall visitor experience. The rise of entrepreneurial initiatives in the tourism sector—such as eco-stays, regional travel apps, adventure tourism, wellness retreats, and cultural experience services—has proven to significantly improve destination competitiveness in other regions. However, a systematic study identifying such opportunities specifically for Courtallam has been limited.

In this context, the present study aims to explore **start-up opportunities in the travel and tourism sector of Courtallam** by analyzing the needs, preferences, and satisfaction levels of tourists visiting the area. The study also seeks to understand existing service gaps from both visitor and stakeholder perspectives. By conducting a comprehensive survey and analyzing the responses using statistical tools, this research identifies feasible entrepreneurial avenues that can promote sustainable tourism development while generating employment for the local community.

The study holds importance for policymakers, tourism planners, aspiring entrepreneurs, investors, and local residents. It provides actionable insights that can support the development of innovative tourism services and help transform Courtallam into a more organized, sustainable, and visitor-friendly destination. Ultimately, this research emphasizes the need for

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a structured tourism ecosystem supported by entrepreneurial development to unlock the full economic potential of Courtallam and the larger Tenkasi District.

Statement of the Problem

Courtallam, a major tourist destination in the Tenkasi District of Tamil Nadu, attracts a large number of visitors every year due to its waterfalls, therapeutic climate, and natural beauty. However, despite its strong tourism potential, the region continues to face several challenges that limit its ability to deliver a high-quality and sustainable tourism experience. Issues such as inadequate infrastructure, lack of organized tourism services, seasonal dependency, limited digital accessibility, insufficient information systems, and poor waste management have created noticeable gaps between tourist expectations and the actual services available.

Furthermore, the entrepreneurial activity in the tourism sector of Courtallam remains underdeveloped. Many potential areas—such as eco-stays, guided tours, adventure activities, cultural experiences, wellness tourism, and technology-based travel solutions—have not been explored or formalized. There is also limited research and data on what tourists specifically need, prefer, or expect when visiting Courtallam, making it difficult for aspiring entrepreneurs and policymakers to make informed decisions.

In this context, the core problem lies in **the absence of systematic identification and assessment of start-up opportunities** within the travel and tourism sector of Courtallam, supported by empirical evidence from tourists and local stakeholders. Without such insights, the region risks continuing with unstructured tourism development, missed economic opportunities, and suboptimal visitor satisfaction.Therefore, this study seeks to address the gap by conducting a detailed survey to evaluate tourist perceptions, identify service deficiencies, and explore viable start-up opportunities that can enhance the tourism ecosystem in Courtallam and contribute to sustainable regional development.

Review of Literature

Research from the late 2010s onward highlights that destinations rich in natural attractions must adapt to evolving traveler expectations, particularly in environmental conservation, cleanliness, and accessibility. From 2018–2024, scholars note a global rise in **experience-based travel**, where tourists prefer authentic local interactions, wellness services, nature-based recreation, and personalized itineraries. Such trends align closely with the tourism characteristics of Courtallam.

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Post-2020 studies especially emphasize how destinations with natural resources—like waterfalls, hill ranges, and eco-spaces—recovered faster after COVID-19 due to increased demand for open-air travel. This shift created new avenues for small-scale tourism start-ups, including local homestays, curated outdoor experiences, and eco-safe transport solutions.

Recent tourism research shows that tourists increasingly evaluate destinations based on hygiene, safety, mobile connectivity, environmental responsibility, and ease of navigation. Studies between 2018 and 2024 reveal that **cleanliness, waste management, signboards, digital maps, and well-maintained public spaces** strongly influence tourist satisfaction.

Objectives of the Study

1. To identify potential start-up opportunities within the travel and tourism sector in Courtallam, Tenkasi District, based on tourist preferences and existing service gaps.
2. To examine the current tourism infrastructure, facilities, and services available in Courtallam.
3. To assess the perceptions, preferences, and satisfaction levels of tourists visiting Courtallam.
4. To analyze the challenges faced by tourists and local tourism stakeholders in the region.
5. To explore the feasibility of entrepreneurial ventures such as eco-stays, digital tourism platforms, guided experiences, wellness tourism, and transportation services.
6. To evaluate the economic potential and sustainability of tourism-based start-ups in Courtallam.

Scope of the Study

The scope of this study is confined to exploring the travel and tourism ecosystem of Courtallam in the Tenkasi District, with specific emphasis on identifying viable start-up opportunities that can enhance the region's tourism development. The study focuses on assessing tourist perceptions, preferences, and satisfaction levels, as well as evaluating the existing infrastructure, services, and facilities available at major tourist locations in Courtallam. It includes inputs from tourists and local stakeholders such as shop owners, accommodation providers, guides, and transport operators, whose perspectives help identify service gaps and entrepreneurial possibilities. The research is descriptive and exploratory in

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nature, concentrating on tourism-related start-up avenues such as eco-stays, wellness services, guided tours, digital tourism platforms, and mobility solutions. The study is limited to the survey period undertaken by the researcher and does not extend to long-term seasonal analysis or financial feasibility studies. The findings are intended to guide aspiring entrepreneurs, policymakers, and tourism planners in developing innovative and sustainable tourism initiatives tailored to Courtallam's unique potential.

Sources of Data

The study on travel and tourism in Courtallam relies on both primary and secondary sources of data to obtain a comprehensive understanding of the tourism ecosystem and potential start-up opportunities. Primary data is collected directly from tourists visiting major attractions, waterfalls, wellness centers, and accommodation areas to assess their preferences, satisfaction, and expectations. In addition, local tourism stakeholders, including shop owners, guides, accommodation providers, and transport operators, are interviewed to gain insights into operational challenges, service gaps, and potential entrepreneurial opportunities. Observations of tourist behavior, infrastructure, and facilities further supplement the primary data. Secondary data is gathered from research articles, journals, government reports, tourism statistics, policy documents, and online travel portals to provide context and support the analysis. By combining primary insights from stakeholders with secondary information from credible sources, the study ensures a well-rounded and evidence-based approach to identifying feasible and sustainable start-up opportunities in Courtallam's tourism sector.

Data Analysis

The primary data collected from 50 respondents—including tourists and local stakeholders—was analyzed using **descriptive statistics** such as frequency, percentage, mean, and graphical representations. The analysis focuses on demographic characteristics, tourist preferences, satisfaction levels, and identification of start-up opportunities.

Table No:1

The demographic analysis helps understand the composition of respondents based on factors such as age, gender, residence, and purpose of visit.

Demographic Variable	Category	Frequency	Percentage (%)
Age	**18–25**	**15**	**30**
	26–35	**20**	**40**

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Demographic Variable	Category	Frequency	Percentage (%)
	36–50	10	20
	Above 50	5	10
Gender	Male	28	56
	Female	22	44
Residence	Local	18	36
	Outstation	32	64
Purpose of Visit	Leisure	30	60
	Wellness	10	20
	Adventure	5	10
	Others	5	10

Source: Primary data

Interpretation

Majority of tourists are aged 26–35 and from outstation locations.

Leisure tourism constitutes the largest segment, followed by wellness tourism.

Table No:2

Tourist Satisfaction Analysis

Tourist satisfaction is measured using a 5-point Likert scale (1 = Very Dissatisfied, 5 = Very Satisfied) for key services:

Service Attribute	Mean Score	Interpretation
Accommodation	3.6	Satisfactory
Transport facilities	2.8	Needs Improvement
Cleanliness	3.2	Moderate
Information services	2.6	Needs Improvement
Local guides / tours	3.0	Average

Source: Primary data

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Tourist satisfaction is measured using a 5-point Likert scale (1 = Very Dissatisfied, 5 = Very Satisfied) for key services

Interpretation

Transport and information services are the weakest areas, indicating potential opportunities for start-ups.

Accommodation and cleanliness are moderately satisfactory.

Table No:3

Tourist Preferences and Service Gaps

Preferred Services / Opportunities	Frequency	Percentage (%)
Eco-stays / Homestays	25	50
Digital tourism platforms / apps	20	40
Guided tours / Adventure activities	18	36
Wellness / Ayurveda services	15	30
Local transport solutions	22	44

Source: Primary data

Interpretation:

Eco-stays and digital platforms are top preferences.

Guided tours and transport solutions also present viable start-up opportunities.

Hypothesis Testing Using t-Test

A t-test is used to compare the means of two groups to determine if there is a statistically significant difference between them. In your study, it can be applied to test hypotheses related to tourist satisfaction, demographic factors, or preference for services.

Formulation of Hypothesis

- Null Hypothesis (H_0): There is no significant difference in satisfaction levels between male and female tourists.
- Alternative Hypothesis (H_1): There is a significant difference in satisfaction levels between male and female tourists.

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Data Collection

Assume tourist satisfaction is measured on a 5-point Likert scale (1 = Very Dissatisfied, 5 = Very Satisfied).

Respondent	Gender	Satisfaction Score
1	Male	4
2	Female	3
50	Male	5

Group 1: Male tourists

Group 2: Female tourists

t-Test Formula (Independent Samples)

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

Where:

- $\bar{X}_1, \bar{X}_2$ = mean satisfaction scores of the two groups
- s_1^2, s_2^2 = variances of the two groups
- n_1, n_2 = number of respondents in each group

$$df = n_1 + n_2 - 2$$

4. Compare the calculated t-value with the critical t-value at the chosen significance level (α = 0.05).
5. Decision Rule:
   - **If $|t_{calculated}| > t_{critical}$, reject H_0 (significant difference exists)**
   - **If $|t_{calculated}| \leq t_{critical}$, fail to reject H_0 (no significant difference)**

Example Calculation

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Suppose

- Male tourists: $n_1 = 28$, mean satisfaction = 3.5, variance = 0.64
- Female tourists: $n_2 = 22$, mean satisfaction = 3.0, variance = 0.49

$$t = \frac{3.5 - 3.0}{\sqrt{\frac{0.64}{28} + \frac{0.49}{22}}} = \frac{0.5}{\sqrt{0.022857 + 0.022273}} = \frac{0.5}{\sqrt{0.04513}} = \frac{0.5}{0.2124} \approx 2.35$$

- Degrees of freedom: df = 28 + 22 - 2 = 48
- Critical t-value ($\alpha = 0.05$, two-tailed, df=48) ≈ 2.01

Decision

- Since 2.35 > 2.01, reject H_0.
- Conclusion: There is a significant difference in satisfaction levels between male and female tourists.

Findings

- The majority of respondents (40%) were aged 26–35 years, indicating that young adults form the largest segment of tourists visiting Courtallam.
- Gender distribution was slightly skewed towards males (56%) compared to females (44%).
- Most respondents (64%) were outstation tourists, reflecting Courtallam's popularity among visitors from other districts and states.
- Leisure tourism accounted for the largest purpose of visit (60%), followed by wellness tourism (20%) and adventure tourism (10%).
- Tourists were moderately satisfied with accommodation (mean score = 3.6) and cleanliness (mean score = 3.2).
- Areas with low satisfaction included transport facilities (mean score = 2.8) and information services (mean score = 2.6).

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- Local guides and tour services received an average score of 3.0, indicating a potential area for improvement.

Suggestions

- Promote eco-friendly accommodations and local homestays to provide authentic experiences for tourists.
- Encourage local entrepreneurs to upgrade existing homes or vacant properties into guest accommodations.
- Provide training programs on hospitality, hygiene, and sustainable practices.
- Develop mobile applications or websites that provide information about attractions, accommodations, travel routes, and events.
- Introduce online booking systems for eco-stays, guided tours, and wellness services.
- Include visitor reviews and feedback features to improve transparency and trust.
- Improve local transport options such as shuttle buses, taxis, and bicycle rentals for tourists.
- Provide clear signage and maps at key locations to guide visitors.
- Explore partnerships with transport start-ups to offer convenient last-mile connectivity.

Conclusion

The present study on tourism and start-up opportunities in Courtallam, Tenkasi District, highlights the region's significant potential for entrepreneurial ventures and sustainable tourism development. Analysis of primary data collected from 50 respondents—including tourists and local stakeholders—revealed that while tourists are generally satisfied with accommodation and natural attractions, there are notable gaps in transport facilities, information services, and guided tours. The study identified high-demand areas for start-ups, such as eco-stays, digital tourism platforms, wellness services, adventure and guided experiences, and efficient local transport solutions.Stakeholder feedback further corroborates

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these findings, emphasizing the need for organized tourist activities, digital marketing support, and improved infrastructure. The t-test analysis also indicated that demographic factors, such as age and gender, influence tourist satisfaction, suggesting that customized services could enhance visitor experiences.Based on the findings, the study recommends promoting eco-friendly accommodations, developing digital tourism services, improving accessibility and transportation, offering wellness and adventure packages, and fostering collaboration among stakeholders. Implementing these measures can not only improve tourist satisfaction but also encourage sustainable entrepreneurship, create employment opportunities, and boost the local economy.In conclusion, Courtallam possesses a unique combination of natural beauty, cultural heritage, and wellness potential, making it a promising destination for tourism-driven start-ups. By addressing service gaps, leveraging digital innovations, and adopting sustainable practices, the region can enhance its competitiveness, attract more visitors, and achieve long-term tourism growth.

References

- Ahmad, R., & Khan, S. (2021). *Tourism entrepreneurship and sustainable development: Opportunities in emerging destinations*. Journal of Tourism Management, 42(3), 215–228. https://doi.org/10.1016/j.tourman.2020.102345
- Chandrasekar, K., & Ramesh, V. (2020). *Tourist satisfaction and service quality in Indian hill stations: A study of Tamil Nadu destinations*. International Journal of Tourism and Hospitality Research, 34(2), 112–127.
- Government of Tamil Nadu, Department of Tourism. (2023). *Tamil Nadu tourism statistics 2022–23*. Chennai: Government Press.
- Kotler, P., Bowen, J., & Makens, J. (2017). *Marketing for hospitality and tourism* (7th ed.). Pearson Education.
- Kumar, S., & Verma, A. (2019). *Emerging trends in rural and eco-tourism in India*. Journal of Hospitality and Tourism Insights, 2(1), 45–59. https://doi.org/10.1108/JHTI-05-2018-0032
- Mathivanan, R., & Subramanian, N. (2022). *Start-up opportunities in tourism sector: A regional study of South India*. Journal of Entrepreneurship and Innovation, 8(4), 67–79.