

PAYING GUEST AGGREGATION PLATFORM WITH ARTIFICIAL INTELLIGENCE

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ABSTRACT

Paying guest websites have emerged as a popular alternative to traditional hotels and rental accommodations. These websites provide a platform for homeowners to rent out their spare rooms or properties to travellers or people in search of temporary accommodation. The purpose of this research paper is to explore the impact of paying guest websites on the accommodation industry and to investigate the consumer behaviour and business strategies associated with this emerging trend. The research will employ both qualitative and quantitative methods to collect data from a sample of paying guest website users and property owners

Keywords - *Paying guest websites, accommodation industry, consumer behaviour, business strategies, sharing economy, regulatory environment*

1. INTRODUCTION

The accommodation industry has undergone significant changes in recent years, with the emergence of paying guest websites as a popular alternative to traditional hotels and rental accommodations. These websites provide a platform for homeowners to rent out their spare rooms or properties to travellers or people in search of temporary accommodation. Paying guest websites have become a popular choice among travellers due to their affordability, convenience, and flexibility. This trend has raised concerns among traditional hotel and rental accommodation operators, who perceive paying guest websites as a threat to their businesses. The purpose of this research paper is to explore the impact of paying guest websites on the accommodation industry and to investigate the consumer behaviour and business strategies associated with this trend. The research will employ both qualitative and quantitative methods to collect data from a sample of paying guest website users and property owners. The study will analyse the business strategies employed by paying guest websites and their impact on the accommodation industry. In addition, the research will investigate the regulatory environment governing the operation of paying guest websites and the challenges facing the industry.

A paying guest website serves as a platform where homeowners and tenants looking for paying guest accommodations can connect with each other. These websites typically provide a comprehensive listing of available paying guest accommodations in different locations, along with their details such as rent, amenities, and other facilities.

The findings of the study will provide valuable insights into the impact of paying guest websites on the accommodation industry and the consumer behaviour and business strategies associated with this trend. The research will contribute to the existing literature on the sharing economy and provide recommendations for property owners, paying guest websites, and policymakers.

2. LITERATURE REVIEW

The concept of paying guest accommodations, also known as PGs, has gained significant popularity in recent years due to the increasing demand for affordable and comfortable living spaces for students and working professionals. The rise of technology and the internet has also led to the emergence of several paying guest websites that aim to connect prospective tenants with PG owners and facilitate seamless bookings and payments. In this literature review, we will discuss some of the existing research related to paying guest websites.

One of the primary areas of research related to paying guest websites is pricing. Several studies have examined the factors that influence the pricing of PG accommodations and the use of AI-based models to determine the optimal pricing for a given property. For instance, Saha and Chakraborty (2019) developed an intelligent pricing model using artificial neural networks to predict the rental rates for PG accommodations based on factors such as location, amenities, and demand. Similarly, Jain and Shukla (2018) developed an AI-based chatbot for customer service in paying guest accommodations that also provides personalized pricing recommendations to users.

Another area of research related to paying guest websites is occupancy prediction. Several studies have examined the use of machine learning algorithms to predict room occupancy rates in PG accommodations. For example, Karan and Behera (2019) compared several supervised learning algorithms to predict room filling in PG accommodations, and found that the support vector regression algorithm performed the best. Similarly, Gupta and Singh (2020) developed a predictive maintenance framework for PG accommodations using IoT and machine learning techniques to predict occupancy rates and optimize resource utilization.

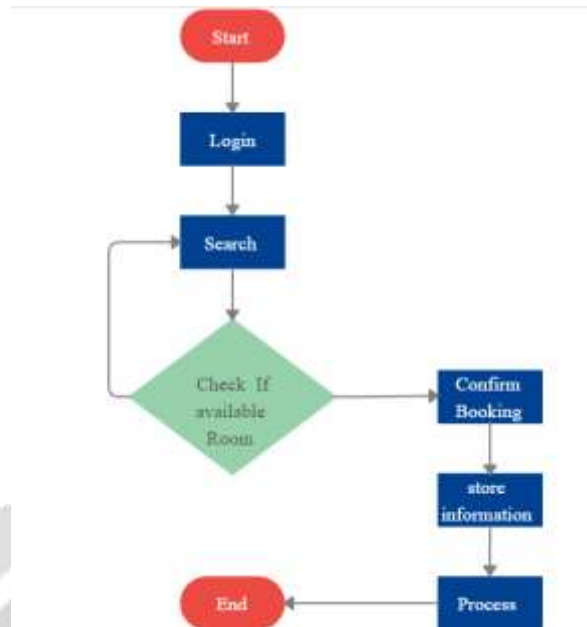
In addition to pricing and occupancy prediction, some studies have focused on other AI-based features of paying guest websites. For example, Singh and Jaiswal (2017) developed a big data analytics platform for PG accommodation management that leverages machine learning algorithms to analyse user data and provide personalized recommendations to users. Moreover, some studies have examined the use of AI-based chat bots for customer service and support in PG accommodations (Jain and Shukla, 2018).

Overall, the existing research related to paying guest websites highlights the potential of AI-based models and techniques to improve the efficiency, convenience, and affordability of PG accommodations. However, there is still much scope for further research in this area, particularly in the development of more sophisticated and accurate AI-based models for pricing and occupancy prediction, as well as the integration of other innovative technologies such as block chain and augmented reality.

3. METHODOLOGY

- Search by preferred location, currency, distance etc
 - We provide all hostels, PG, Rental Room etc.
 - Students can hire a teacher close to their studies.
 - Daily, weekly, and monthly visit justice.
 - Provides quality Tiffin daily, weekly, and monthly service.
1. Admin Module
 - 1.1 Dashboard: In this section, the administrator can see all the details briefly like country total, city total, total owner and PG theme.
 - 1.2 Region / City: In this section, the administrator can manage status (add / update).
 - 1.3 Record Owner: In this section, the administrator can view and edit the registered owner
 2. PG Owner Module
 - 2.1 Dashboard: In this section, the owner can view all the details briefly like PG listed list, complete booking, new booking, total guaranteed booking and total cancelled booking.
 - 2.2 List Your PG: In this section, the owner can list their page.
 - 2.3 Received Request Booking: At this stage the administrator may view the new booking and is entitled to a guaranteed booking.
 3. User module Registered users can do the following work.
 - 3.1 Book a page.
 - 3.2 Update his profile.
 - 3.3 Change the password.
 - 3.4 The registered user can regain his or her password. In this module there are two types of guest user and registered user.
 - Visitor User: In this visitor user can only see general information about us, PG details, search PG and contact details.

The flowchart given below shows the workflow of our proposed system



4. CONCLUSION

In conclusion, the integration of AI features such as room filling prediction, traffic prediction, distance, and price in a paying guest website can greatly improve the overall user experience and satisfaction. By utilizing advanced algorithms and machine learning techniques, these features can provide accurate and timely information to potential guests, allowing them to make informed decisions about their stay.

The room filling prediction feature can help guests to plan their stay more effectively by providing an estimate of the availability of rooms during a particular time period. This can be particularly useful during peak seasons when availability may be limited.

The traffic prediction feature can assist guests in planning their travel to and from the accommodation. By using real-time traffic data, guests can make informed decisions about the best route to take and the expected travel time, avoiding delays and potential frustration.

5. REFERENCES

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