

Optimized AI-assistant Reservation and Services Application for Hotels

RESEARCH MOTIVATION

Many travelers face difficulties booking both hotels and transportation separately, leading to inconvenience, added costs, and wasted time. This aims to solve this by integrating hotel reservations and transportation services into one easy-to-use platform using an AI that can help you to the struggle situations. This study seeks to enhance customer experience, simplify travel planning, and improve efficiency in the hospitality industry.

INTRODUCTION

Booking accommodations and transportation separately can be stressful and time-consuming. Most hotel reservation systems focus only on room bookings, requiring guests to arrange transportation on their own and staff may be busy in other works. This app offers an all-in-one platform that combines hotel bookings with vehicle transfers, tours, food orders, and spa services, ensuring a seamless and hassle-free travel experience with the assistance of AI-driven recommendations, users can receive personalized travel plans, making their experience more convenient and enjoyable.. By integrating essential services, the app enhances customer satisfaction and streamlines hospitality services.

LITERATURE REVIEW

Hotel booking systems offer online reservations but often lack transportation integration, causing inconvenience for travelers. The communication between hotel and transport services enhances traveler satisfaction by simplifying logistics. User-friendly digital platforms improve booking efficiency and customer experience. Smart technologies like AI-powered chatbots, real-time GPS tracking, and automation further enhance hospitality services. Integrating hotel and transport services into a single platform reduces stress and improves travel convenience.

COMMON/EXISTING SOLUTIONS

- Online Travel Agencies (OTAs) – Platforms like Booking.com and Expedia offer bundled services but rely on third-party providers.
- Hotel-Owned Apps – Direct booking available, but transportation options are limited.
- Ride-Hailing Apps – Services like Uber and Lyft provide transportation but lack hotel integration.
- All-in-One Travel Apps – Apps like Trip.com offer multi-service booking but lack direct hotel coordination.
- Hotel Concierge Services – Manual transport coordination can lead to inefficiencies and delays.

LITERATURE REVIEW - COMPARISON MATRIX

<i>Author</i>	<i>Year</i>	Approach	<i>Results</i>	<i>Key Contribution</i>	<i>Cons</i>
Sunny Sun, Rob Law, & Sunghyup Sean Hyun	2024	Studied mobile OTAs.	OTAs help booking but lack trust	Showed OTAs' role in hotel reservations.	Hotels lose booking control.
Eniser Atabay, Hanım Kader Şanlıöz-Özgen, & Selcen Seda Turksoy	2024	Assessed five-star hotel apps.	User trust and features matter.	Created a hotel booking model.	Limited to five-star hotels.
Saeed Vayghan, Seyhmus Baluglo, & Dennis Baluglo	2022	Compared age groups in hotel app use.	Young prefer fun, older value function.	Explained user behavior by age.	No app improvement insights.
Xiaopeng Luo, Cheng He, Yu Jeffrey Hu, & Xitong Li	2024	Studied mobile data cost effects.	High cost lowers bookings.	Linked pricing to app use.	Focused on pricing, not design.

RESEARCH GAPS

- Some hotel staff are often occupied assisting other guests, making it difficult to seek immediate help or recommendations.
- Lack of automations in hotel services, so guests need to book airport transfers, spa, and food manually.
- No real-time tracking of expenses for guest, so they can't see how much they spend while staying.
- Hotel billing system is not fully integrate, making payments and accounting more confusing.

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