Enhancing Efficiency of Hospitality and Tourism Sector with Artificial Intelligence

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Abstract

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In recent years, hospitality and tourism industry witnessed for dramatic changes like other industries and utilizing developing in technologies for improve their efficiency. This paper explore the way hospitality and tourism industry develop their efficiency and transforming their business style with help of artificial intelligence. Hospitality and tourism industry highly customer centric industry and personalization and customization of service played vital role. For this purpose data collection and analysis are crucial. Competition also very high and customer retention is very important to gain competitive advantage over its competitor. Customers are well aware about the industry and opportunities available for them to get better services available inindustry. For this purpose industries particularly Hospitality and tourism industry highly data depended and decisions regarding pricing and promotional activities are data driven. AI technologies, such as chat bots, recommendation systems, predictive analytics, and robotic automation, are reshaping how businesses interact with travelers and deliver personalized services. From virtual assistants providing real-time travel information to AI-driven platforms enabling dynamic pricing and resource management, the potential for innovation is vast.

Keywords: Tourism, Dynamic Pricing, Data-Driven Decision-Making, Competitive advantage, Artificial Intelligence.

Introduction

In technology dependable industry, Updating and adapting new technology is very important to transforming their level up to competitor level. Like other technology adaptation of artificial intelligence also very important. Due to socio economic changes, there is upward changes in people's income and other status. It will lead to change their taste and preferences, Their standard of living, life style also changed. Now days they give more importance to recreation and other related activities. Traveling also become one of their regular activity. With help of social media and other sources they very familiar with facilities available for comfortable stay and benefits associated with this industry. With help of technological development this industry introduce variety services with innovative offers to satisfy customer and improve their competitive advantages. AI technology has introduced a extensiverange of applications enhance efficiency, guest experiences, and drive business growth.

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Artificial Intelligence

It is the combination of technology developed by human and efficiency to apply the technology to activities and process in business and other activity.

AI is expertise that makesystems imitate learning process which involved by people. intellectual capacity, solution for crisis, develop conclusion, ingenuity, independence. AI is tremendously efficient at performing particular activity. Also, by means of digital analytics tools to handle and observe the ability of human skills.

Instruments and process associated with AI can see and identifythings. Itidentify and respond to end user communication. They give comprehensive suggestions Peoples. Without human assist and interventions it act independently.

Improvement in process of Hospitality Industry

Hospitality firms apply AI in a variety of contexts that have in common two major threads: to strengthen productivity and get better customer services. In productive systems, AI-improved analysis of industry intelligence is supplementary hotel and lodging companies in buildingbetter decisions regarding basic activities like outlayadministration and pricing methods. In the front of house, AI is assisting to get bettervisitor experiences throughout employees augmentation and computerization that speeds up and customizes services. In adding up, large number of players in this industry utilizing technological developments toattain their maintainedtargets by minimizing waste.

Connectivity of Hospitality sector and Artificial Intelligence

This sector using artificial intelligence (AI) to redefine the customerunderstanding in the period of increasing expertise revolutions. AI experts crucially enhance efficiency, personalization, and customer satisfaction in different field connected activity. Considerate the process of the task in the this business is necessary for people discerning about leading in the ground to be prepared for a upcoming in which modernism and guest-centric methods will be appreciated decidedly.

This paper explore about technological development changing the environment of the industry's different functional areas including promotion, profit, functional efficiency and particularly client service. This will helpful to aware about the technological development enhance client positive opinion in future.

Customizing Customer Understanding

Hotels are well aware about the necessity of go beyond the usual level of customer satisfaction and provide great customer experience.

This industry people recognized that it is not enough to do traditional methods to compete their competitors. So they always try to find innovative methods which give more competitive advantage by the way of retaining existing customer, increase customer life time and value. In this scenario Artificial Intelligence played a vital role.

Artificial Intelligence assist to both customer and employees. In this field this technology offer personalized service which equal to specialized expectations from customer. Once the system get details from customer then it develop individual profile for each customers which help to design unique personalized service for every customer. This technologies are working as a virtual assistant and capable to provide support, answering the queries and develop unique services. With help of artificial intelligence employees and other supporting staffs are able to provide service which meet customer expectation.

Offering Better Services

Technology based methods are able to change the level of client service compared to previous method. Traditional methods take some time to understand and respond customers taste and

preferences. But technology like AI based methods are respond very quickly and understand customer behavior and react to the same. It will help to the employees and management to make changes and solve the client issues.

Role in Promotion and Profit

In this industry, Technology based innovations like AI played important role in conducting promotional activities and improve revenue to hospitality related firms. With help of technology they are able to analyse about the current scenario regarding consumer preferences, overall trends in industry, level of competition and competitors movement and based on result of this analysis they are develop strategy for promotional activity and determine price. Experts in thisfield may adaptpromotion messages, identify profitable market niches, and adopting pricing strategies which generate revenue.

AI Enhancing Security and Safety of The Hotels, its Guests and Employees

Technologies like Artificial Intelligence played a vital role and improve the safety and security measures in hospitality industry. They are able identify people those are make issues to security in advance. With the assistance of new innovative development like face recognition, credentials verification and fast check in and check out procedures, digital payment facilities are improve the level of business in this industry.

The Challenges

Adaptation Issues

Adopting AI with current scenario is very difficult. Because the firms which use using traditional methods faces some difficulties to interface with new technology.

Expenditure

New technologies like Artificial intelligence required some high cost software and hardware. So hotels with minimum investment are unable to invest in new technologies..

Training and working for staff

Transformation of current system to new system always need training to the employees in all department. All employees are not able to learn new technologies and they are hesitate to change. And it take some times to implement.

Customer Privacy Issues

For providing personalized service, it is necessary to collect information about clients. As a system based data storage method, employees those have right to access the system are able to access guest data. It will make some privacy issues to the guests.

Suggestions to Cvercoming Issues Related to Implementation

At the time of implement the new technology with the current system, any industry face some issues. So the peoples who are responsible for implementing new technology are involved to make strategic thinking to overcome challenges in implementation.

Easy Incorporation

- System compatibility: Understand about current system compatibility and select the new system which match the existing system.
- Phased Process: Initially start with the department which is small in terms of size and activities. The it will expand to other departments.
- Association with experts. Associate with experts who are specialized with implementation process.

Administration Expenditure

• **ROI Analysis:** Analyse about amount of resource invested and benefits gains from the investment in short term as well as long term.

- Assistance for Finance: Explore the opportunities available for upgrading our system with help of Government and non government sources for funding and technology partnerships..
- Selection of Modules: Based on your budget select models which are related to your process instead of add all module in the software.

Training for Personnel

- **Permanent Training Programs:** Design training programme which helps to emplayess stay updated with technological advancement.
- **Employee Empowerment by Participation:** Encourage all employees to participate implementation process which leads to create responsibility to every employees.
- **Recruit Staff with Technical Knowledge:** At the time recruitment, give priority to the people who have some expertise in technology

Assure Customerconfidentiality

- Policies Regarding Privacy: Develop policies which give importance to the privacy of the customer data. This policies are comfortable to both employees and customer.
- **Continues Audits:** Audit with particular interval helps to new system compatible with existing system for better performance.
- Get Permission from Customer: Informed to customer regarding which kind of data collected from customer and what purpose we collect date and give assurance that this data cannot use any other purpose.

Matching Technology and Human Touch

- **Develop Human Centric:** Develop a new system which helps to improve human productivity not replacing humans.
- **Staff as Trainers:** Well trained staff helps to guest to use the technology which is available for clients benefits. This makes customer involvement in the process.
- **Collect Feedback:** Collect feed back in regular interval from clients as well as employees. It helps develop a strategy which minimize problems and create higher satisfaction.

Conclusion

In every industry, eliminating traditional methods and implementing new methods which provide competitive advantage is inevitable. Like this hospitality industry also change their working pattern to sustain their existence. Over a period of time hospitality industry is the witness for various changes. Artificial Intelligence is one kind of that changes. Artificial intelligence provide various benefits to hotel industry like personalization of service, safety measures, privacy in data, development in employee and stay employees as updated one.

Hence, AI will be a huge part of the Hospitality Industry soon however Human Touch will always be the real powerhouse of this industry.

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