Jenish Patel Prabhat Vaish YWCC 307-103 December 09, 2023

This research examines the interplay between AI and its adoption by the hotel industry particularly, Marriott International Inc., leading to shifts in multiple operational aspects.

The use of AI has been welcomed by Marriott to ensure it remains relevant in terms of guest experience. It is worth mentioning that, for instance, collaboration with Legrand and Samsung has made it possible to launch IoT hotel rooms, allowing individual experience of the stay with the help of AI-based personalization. Face recognition adjusts settings of a room and helps in saving energy.

There is also the use of AI that anticipates equipment breakdown to prevent unproductivity due to maintenance. Sensors for customized settings and visitor's security in smart-room management. These are the automatic housekeeping that improve guest experience and data analyzed by artificial intelligence (AI)-driven marketing for pricing and inventory management purposes.

It also extends to food and beverage, improving the quality of food and forecasting demand. Energy optimization is done through advanced energy management to achieve lower operating and maintenance costs. All is used in revenue management to study occupancy, pricing and history for efficiency.

This study shows how AI can increase efficiency and provide cheaper business models. Time and emerging intelligence in AI processing and its relevance.

With the advent of AI systems, the definition of "guest" encompasses geotagging for personable service. This paper involves studying various AI applications that include the "right vibe" algorithm as a control for music and the scent strategy in understanding customers.

This includes a background on Marriott International, an overview of its business model and strategies surrounding how it deals with data breaches. These include a focus on asset- light operations, co-branded credit cards, and innovations such as contactless and vending machines.

The biggest challenges for Marriott relate to privacy problems as well as ethical aspects of using AI. Privacy paradox is emphasized stressing the necessity to take measures of

ensuring safe systems adhering to customers' privacy. Responsible AI usage requires transparent data practices and addressing ethical implications.

Cost and time saving in hotel operation can be achieved by using Robotic Process Automation (RPA). Problems and remedies of introducing RPA.

In conclusion, the study explores the emerging field of AI in the hospitality sector featuring Marriott as an active player, while discussing privacy issues and ethics as obstacles and prospects for adopting AI.