
Role of Artificial Intelligence (AI) for Students Internship in Hotel Industry : A Review

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Abstract

Modern technology in hotel industry is irrefutable. Technological application influence students of hotel management while being in internship. Environment of hotel business is rapidly changing due to technology, Artificial Intelligence (AI) which holds the key competitive advantage. The reason of this study is to find possible changes in industry and provide resourceful perspectives for students during their internship program, with the extent of how far the technological advances help them to learning and in their career goal. Hospitality industry has tangible and intangible service characteristics and is unable to be dehumanized although Artificial Intelligence (AI) and manpower work on parallel form. Students as an Interns learn technical aspect in the industry in wide range which they adopt less in academical education. The perspective of students in engaging them with AI technical development and advancement can be seen in such type of study. A study of resources such as peer-reviewed articles, books, book sections, and reports was conducted for this study. Study results in AI-powered digital assistants are increasingly utilized in the hotel industry in all the departments to simultaneously reduce costs, expand operational capabilities with ease, and improve customer service. Moreover, Artificial Intelligence can assist students of hotel management to meet the requirement of the industry through use of Artificial Intelligence .

Keywords: *Technology, Internship ,Career, Hotel Industry.*

Introduction

Reservation and registration for accommodation, information about various services offered by the hotel, customised preferences of the guest is now a days possible with few taps on laptop or on a smartphone, such types of tablets ,systems and tools are used in different forms in the hotel. This is possible due to technological advancement in hospitality sector and students undergoing internship program faces technical aspect in various departments in the hotels like front office, housekeeping, room division, marketing, equipment handling, customer handling etc. Guest entering room with keyless option, controlling electronic appliance with remote or just by voice recognition or clapping, availing security accessibility, robot service, trendy digital mirror, smart alarm clock can be easily found in reputed hotels now a days. Interns have to observe the operational process and learn technical handling. (Shin et al., 2013) Introduction to the real world of technology with its usage and implementation for the students can only be possible with internship program . Students can experience the difference between technology in institute and in industry which ultimately make them adjust with the difference. (Khan, 2019) Industrial revolution in technology and education system somehow have a gap in collaborating with knowing needs of today's customer expectation. (Kumar et al., 2021) With the implementation and applying advanced technology and ICT, the hotel industry has experienced massive shifts, as the whole guest's experiences is now automated and transformed.

Objective of the Study

The goal of this study is to illuminate the transformative changes and benefits that artificial intelligence (AI) is to deliver within the hotel industry. Specifically, the study seeks to give practical insights into the real-world application of AI technology, focusing on its use for the students in hotel operations and improving overall processes in managing hotels business.

Research Method

This research employs a structured and comprehensive review method to examine the existing body of knowledge on Artificial intelligence and its role for student's internship which will help them in career enhancement. The study involved collecting peer-reviewed articles, book chapters, reports, and other relevant documents from major academic search engines and specialized databases. This approach provides a detailed and integrated understanding of the current trends, challenges, for the students towards AI.

Artificial Intelligence in the Hotel Industry

(Manigandan & Raghuram, 2022) Artificial intelligence (AI) is a beginning to take root in the hospitality/hotel industry, yet its impact is already widespread. The rise of AI is fundamentally transforming both the customer experience and employee's operations across the entire hotel right from the front desk to back-of-house tasks. (Ruel & Njoku, 2020) Artificial Intelligence (AI) is inserting intelligence into the hotel industry by creating AI-enhanced systems for hotel operations and management. This technology effectively transforms the traditional hospitality business into an intelligent hotel industry. (Pillai & Sivathanu, 2020) AI is being utilized to introduce innovative, personalized and smart services which support and extend what human employees can do, thereby enhancing both intelligence and physical capabilities of human being. (Citak et al., 2021) Hotel industry gets motivated to apply select AI solutions based on the desire of potential customers to use those technologies. (Davenport et al., 2019) AI is expected to profoundly influence future marketing strategies for hotel industry by reshaping key areas such as hotel operating business, sales strategies and customer services.

Customer Service Enhancement

(Pelet et al., 2019) The developed artificial intelligence will provide sensory interactions for guests in the phases before and after their service period in the hotel. (Koo et al., 2020) AI algorithms transform the hotel industry by magnifying guest experiences and by connecting data from various systems AI can easily predict a guest's requirement before they ask. (Al-Shami et al., 2021) The four main factors that influence the success are AI flexibility, strategic harmony, market presence, and satisfied customers in hotel. (Mingotto et al., 2020) integrating the humanoid robot Pepper with supervised machine learning algorithms service delivery, ultimately aiming to enhance the customer experience staying in hotels. (Nyheim & Connolly, 2011) Guests are demanding more and aspect tailor stitched service experience and however industry need to learn this demand and connect them with the technology.

Artificial Intelligence Awareness and Students internship towards career/ job enhancement

(Bowen & Morosan, 2018; Brougham & Haar, 2017) Advanced technologies, like artificial intelligence, are defining the Fourth Industrial Revolution by enabling the automation of production processes and driven down production cost tremendously. (Guo, 2021) Full integration of artificial intelligence (AI) technology can tremendously advance the reform of hotel management education. This adoption of AI technology will not only elevate students' overall quality and competitiveness but also actively support the rapid evolution of the intelligent hospitality industry. (Khairy et al., 2023) for the employees to be involve in their respective jobs, they need to feel self-reliant and have trust in the management and on their system. (Polat et al., 2010) Students must get an opportunity in their internship program which allow them to contribute to 50% production and rest 50% on review and observations. (Lam & Law, 2018) Their study

includes that today's age is of experimenting the experience as per the demand of the potential guest hotel must be one step ahead in providing services as per the competition in the market. Innovation and technology must be supported with the proper working environment. (Limna, 2023) Artificial Intelligence has a complex, dual impact on the hotel workforce: it negatively affects job quantity in areas ripe for automation, but positively impacts job quality and creation in specialized, service-focused roles. (Khaliq et al., 2021) The rising role of artificial intelligence and robotics suggests that as much as one-in-four (25%) hospitality jobs will be automated and eliminated by 2030.

Findings

By studying and reviewing various research papers it is found that vocational interns need to improve and feel to develop themselves in technological practices in competencies, mainly in the technology application in holding production outcomes. Interns need to find out their strength and weakness in dealing with technology and ultimately work to improve it. Colleges and institutes are also responsible to update its curriculum with the technological requirement of the hotel industry. Technical lessons should be a vital part of studies to change the perspective of hotel management students while entering industry. The study shows concerning application of technical aspect in services provided in hotel is little complex but convenient for the guest and shows the impact on customer, staff and interns.

Conclusion

Students in the internship program need to be ready to adapt the challenges and change their perspective about hotel industry and find the correct mix of human and digital /technological interaction to give personalized experiences to the guest without disturbing their personal space. Institution and Management must make students learn new added value, investing their time in learning technology, innovation and carefully analyse it. Hotels have to develop appropriate planning to have a proper balance between management, staff, trainees and technological resolution to satisfy upgraded customers satisfaction. Interns adapting and enhancing technical importance can lead them to hold their future in hotel industry.

References

- Al-Shami, S. a. H., Mamun, A. A., Ahmed, E. M., & Rashid, N. (2021). Artificial intelligent towards hotels' competitive advantage. An exploratory study from the UAE. *Foresight*, 24(5), 625–636. <https://doi.org/10.1108/fs-01-2021-0014>
- Bowen, J., & Morosan, C. (2018). Beware hospitality industry: the robots are coming. *Worldwide Hospitality and Tourism Themes*, 10(6), 726–733. <https://doi.org/10.1108/whatt-07-2018-0045>
- Brougham, D., & Haar, J. (2017). Smart Technology, Artificial Intelligence, Robotics, and Algorithms (STARA): Employees' perceptions of our future workplace. *Journal of Management & Organization*, 24(2), 239–257. <https://doi.org/10.1017/jmo.2016.55>
- Citak, J., Owoc, M. L., & Weichbroth, P. (2021). A note on the applications of artificial intelligence in the hospitality industry: preliminary results of a survey. *Procedia Computer Science*, 192, 4552–4559. <https://doi.org/10.1016/j.procs.2021.09.233>
- Davenport, T., Guha, A., Grewal, D., & Bressgott, T. (2019). How artificial intelligence will change the future of marketing. *Journal of the Academy of Marketing Science*, 48(1), 24–42. <https://doi.org/10.1007/s11747-019-00696-0>
- Guo, Q. (2021). Research on the Application of Artificial Intelligence Technology in Teaching Introduction to hotel management in the context of Smart Hotel. *2021 7th Annual International Conference on Network and Information Systems for Computers (ICNISC)*, 155–157. <https://doi.org/10.1109/icnisc54316.2021.00037>
- Khairy, H. A., Baquero, A., & Al-Romeedy, B. S. (2023). The effect of transactional leadership on organizational agility in tourism and hospitality businesses: The mediating roles of organizational trust and ambidexterity. *Sustainability*, 15(19), 14337. <https://doi.org/10.3390/su151914337>

- Khaliq, A., Waqas, A., Nisar, Q. A., Haider, S., & Asghar, Z. (2021). Application of AI and robotics in hospitality sector: A resource gain and resource loss perspective. *Technology in Society*, 68, 101807. <https://doi.org/10.1016/j.techsoc.2021.101807>
- Khan, M. A. (2019). A systematic assessment of gaps between academic research and industry participation in hospitality management discipline. *International Journal of Hospitality Management*, 82, 82–90. <https://doi.org/10.1016/j.ijhm.2019.03.030>
- Koo, B., Curtis, C., & Ryan, B. (2020). Examining the impact of artificial intelligence on hotel employees through job insecurity perspectives. *International Journal of Hospitality Management*, 95, 102763. <https://doi.org/10.1016/j.ijhm.2020.102763>
- Kumar, S., Kumar, V., & Attri, K. (2021). IMPACT OF ARTIFICIAL INTELLIGENCE AND SERVICE ROBOTS IN TOURISM AND HOSPITALITY SECTOR: CURRENT USE & FUTURE TRENDS. *Administrative Development a Journal of HIPA Shimla*, 8(SI-1), 59–83. <https://doi.org/10.53338/adhipa2021.v08.si01.04>
- Lam, C., & Law, R. (2018). Readiness of upscale and luxury-branded hotels for digital transformation. *International Journal of Hospitality Management*, 79, 60–69. <https://doi.org/10.1016/j.ijhm.2018.12.015>
- Limna, P. (2023). Artificial intelligence (AI) in the hospitality industry: a review article. *International Journal of Computing Sciences Research*, 7, 1306–1317. <https://doi.org/10.25147/ijcsr.2017.001.1.103>
- Mingotto, E., Montaguti, F., & Tamma, M. (2020). Challenges in re-designing operations and jobs to embody AI and robotics in services. Findings from a case in the hospitality industry. *Electronic Markets*, 31(3), 493–510. <https://doi.org/10.1007/s12525-020-00439-y>
- Pelet, J., Lick, E., & Taieb, B. (2019). Internet of Things and artificial intelligence in the hotel industry: Which opportunities and threats for sensory marketing? In *Springer proceedings in business and economics* (pp. 154–164). https://doi.org/10.1007/978-3-030-18911-2_20
- Pillai, R., & Sivathanu, B. (2020). Adoption of AI-based chatbots for hospitality and tourism. *International Journal of Contemporary Hospitality Management*, 32(10), 3199–3226. <https://doi.org/10.1108/ijchm-04-2020-0259>
- Polat, Z., Uzmanoğlu, S., İşgören, N. Ç., Çınar, A., Tektaş, N., Oral, B., Büyükpehlivan, G., Ulusman, L., & Öznaz, D. (2010). Internship education analysis of vocational school students. *Procedia - Social and Behavioral Sciences*, 2(2), 3452–3456. <https://doi.org/10.1016/j.sbspro.2010.03.533>
- R. Manigandan, & Dr. Naga Venkata Raghuram. (2022). Artificial Intelligence (AI) In Hotel Industry and Future Development: an Extensive In-Depth Literature Review and Bibliometric Analysis. *International Journal of Intelligent Systems and Applications in Engineering*, 10(4), 664–676. Retrieved from <https://ijisae.org/index.php/IJISAE/article/view/2338>
- Ruel, H., & Njoku, E. (2020). AI redefining the hospitality industry. *Journal of Tourism Futures*, 7(1), 53–66. <https://doi.org/10.1108/jtf-03-2020-0032>
- Shin, Y., Lee, K., Ahn, J., & Jung, J. (2013). Development of Internship & Capstone Design Integrated Program for University-industry Collaboration. *Procedia - Social and Behavioral Sciences*, 102, 386–391. <https://doi.org/10.1016/j.sbspro.2013.10.753>