

Contemporary Themes in the Hotel and Hospitality Sector

Assignment Two: Conference Presentation

The Future of Work: Artificial Intelligence and Human Collaboration in Hotel and Hospitality

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Introduction

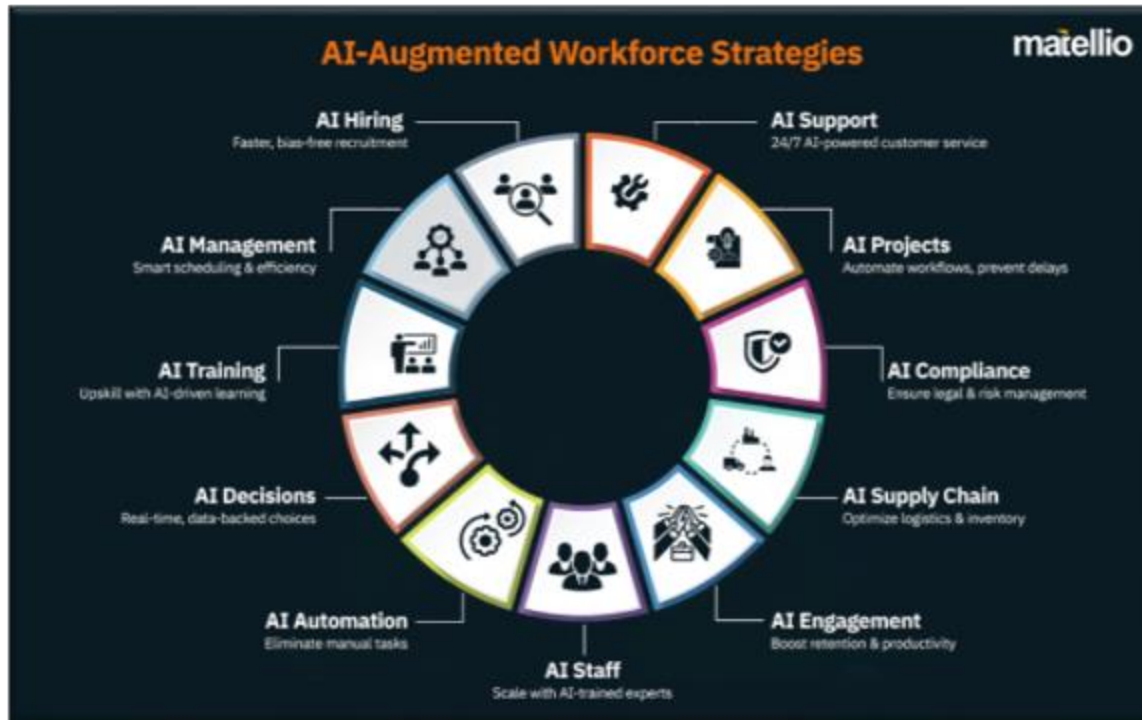
- The hotel and hospitality sector has evolved over the years with recent technological advancement and AI application.
- This has also reshaped business operations, enhanced operational effectiveness and created scopes for improving consumer experience (Nozawa *et al.*, 2022).
- Since hotel and hospitality businesses rely on satisfying customer needs and expectations, it probes them to improve their services for meeting evolving market demands (Limma, 2023).



Introduction contd.

- In this context, the research also brings attention to human-AI collaboration in this industry.
- Since hotel businesses are increasingly integrating AI within their operations, it creates scope for potential lack of human touch or interaction (Nozawa *et al.*, 2022).
- However, research suggests that human interaction is an integral part of this sector for serving guests, which establishes its importance.

Literature Review



- Application of AI has highlighted concerns like potential job displacement and loss of human touch.
- However, research also shows areas and instances, where human-AI collaboration can be facilitated in this sector concerning the theme (Petrescu and Krishen, 2023).
- For instance, AI-powered tools coupled with predictive analytics and automation can be used for talent management, scheduling and workforce planning (Al-Romeedy, 2025).

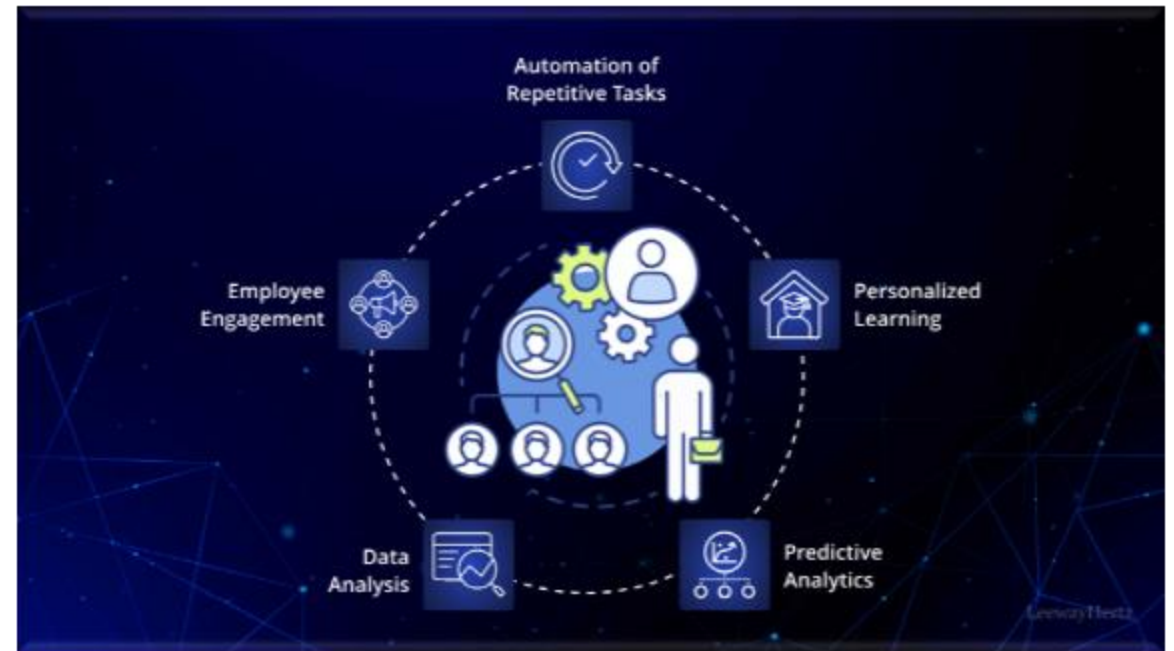
Literature Review contd.

- Utilising AI in HRM facilitates improving workforce planning and development.
- For instance, AI powered systems can be used for supporting employees through personalised learning and development programmes (Seal and Gupta, 2024).
- Similarly, this also allowed for developing training tools using AR and VR (Salama, 2024).
- It is useful for enabling their development and addressing skill gap issue (Minor et al., 2024).



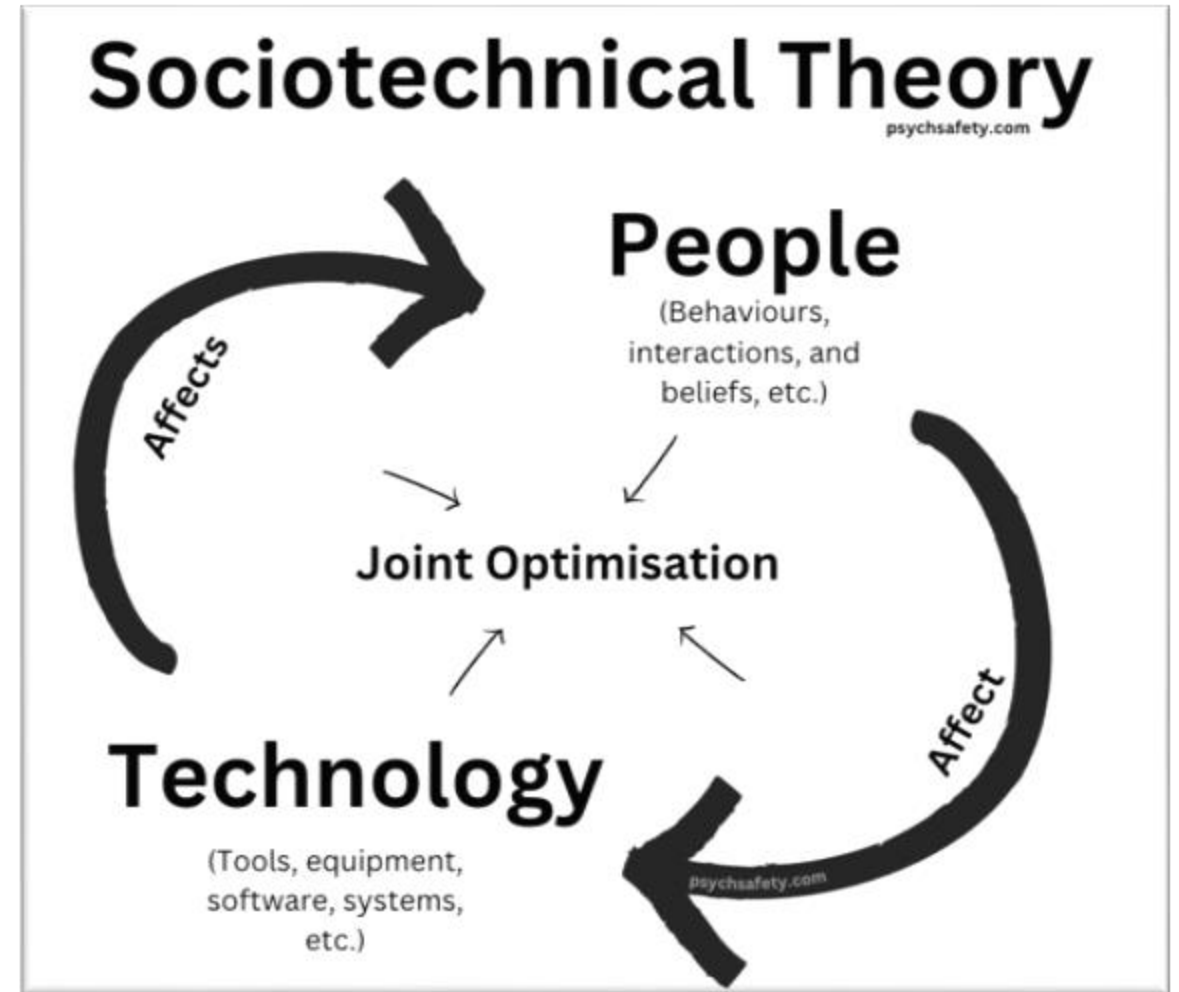
Literature Review contd.

- Considering the importance of addressing the workforce retention issue faced by this sector as mentioned by Kumar et al. (2024), human-AI collaboration becomes even more important.
- Organisations often have to spend significantly for retaining workers, but still face high turnover.
- In this scenario, using AI-powered systems and analytics can be employed for automating the repetitive tasks for giving employees time for performing other tasks (Yilmazdogan, 2024).



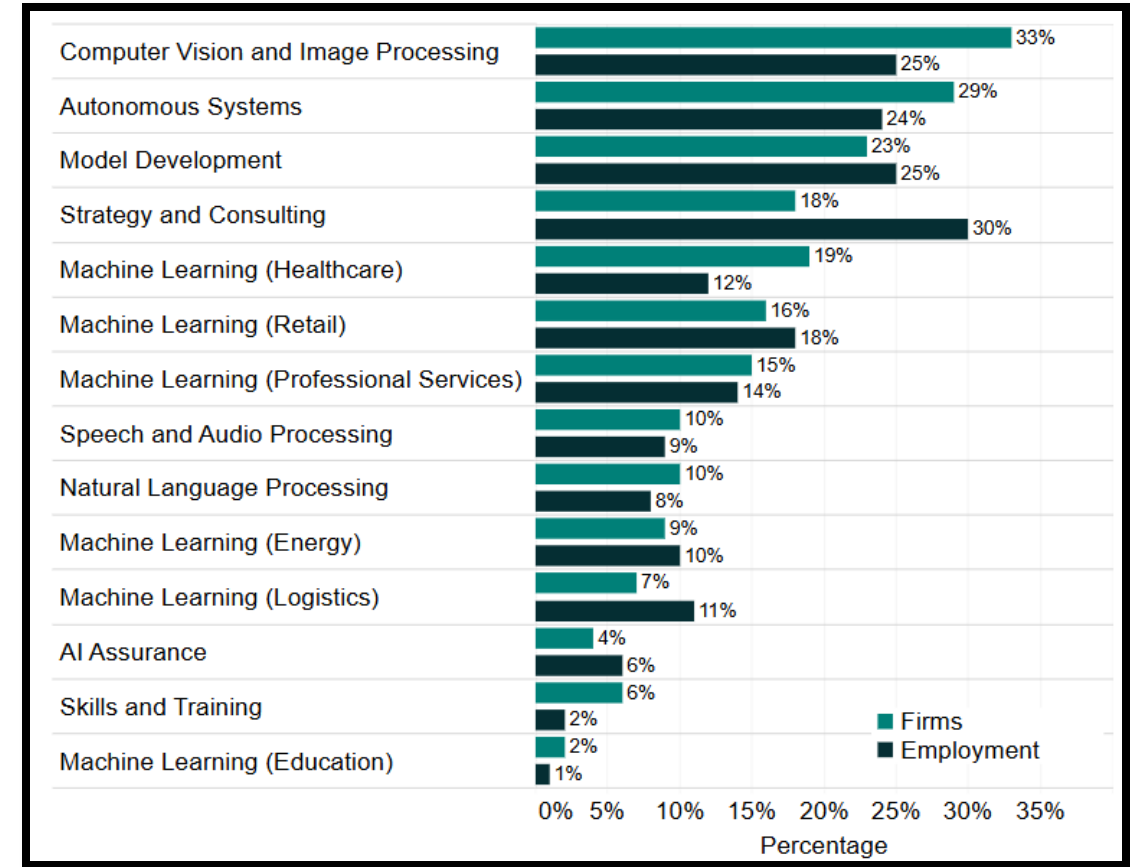
Literature Review contd.

- The Socio-Technical Systems Theory becomes relevant here because its core idea is that both technical and social aspects in organisations are interconnected.
- By building connections between both, performance of organisational systems can be recognised (Chowdhury *et al.*, 2022).
- So, it explains the necessity of integrating AI for modifying operations and workforce management instead of replacing human employees.



Method

- PESTEL Analysis has been conducted for understanding human-AI collaboration in hotel sector for addressing the theme.
- For instance, the UK government has developed the AI Sector Deal for sustainable AI adoption and development in all sectors (GOV.UK, 2019).
- It probes hospitality organisations to utilise sustainable AI adoption for transformation leading economic contribution (Montasari, 2023).
- However, with increasing AI adoption, job displacement concerns have also increased.



Method contd.

The economic factor points towards the substantial expense of £272 million faced by hospitality sector because of employee turnover per year (Orr, 2025).



This is caused by high stress and burnout experienced by hospitality employees and consequently it affects service quality.



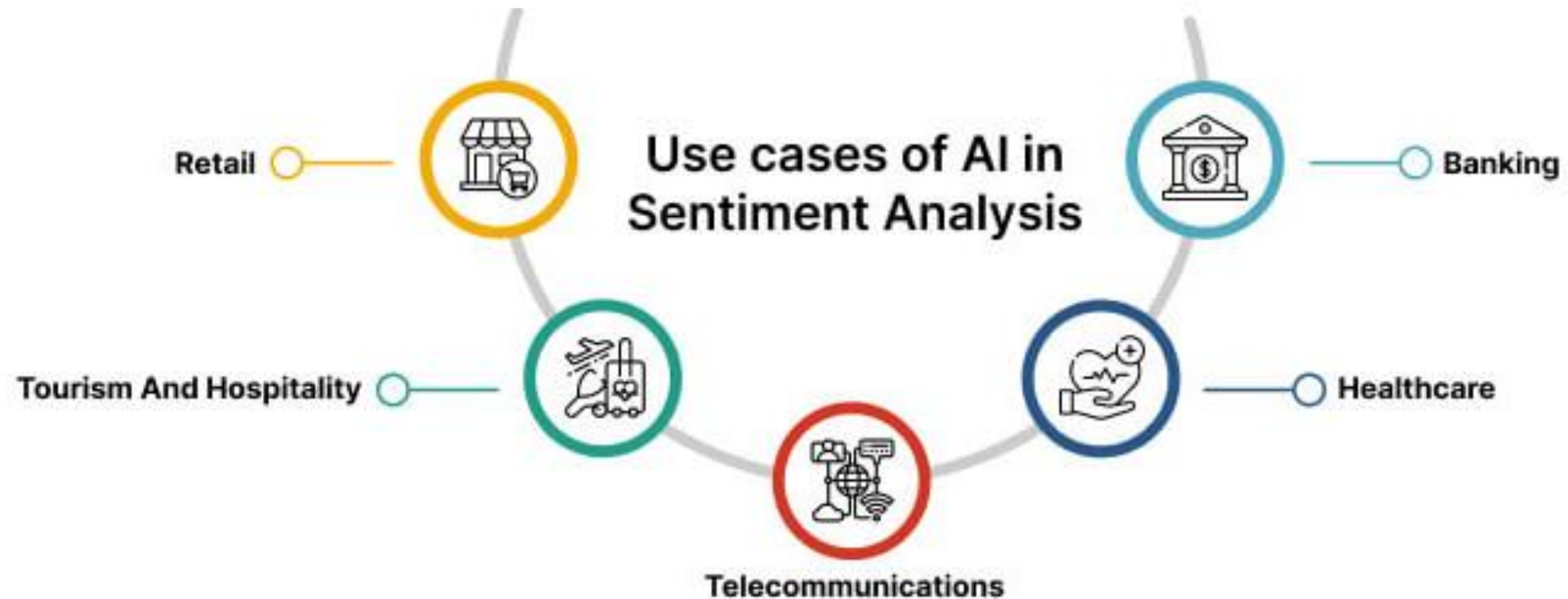
So, integrating AI has been useful for effectively managing workforce, scheduling employees and allocating tasks among frontline staff.

Method contd.

- Incorporating AI has allowed for more effective workforce planning and management.
- Organisations can use it for developing effective staff scheduling, which can increase effectiveness within workforce planning.
- This way, it also ensures sufficient staff availability for attending guests at all time without increasing workloads (Vimaladevi *et al.*, 2024).

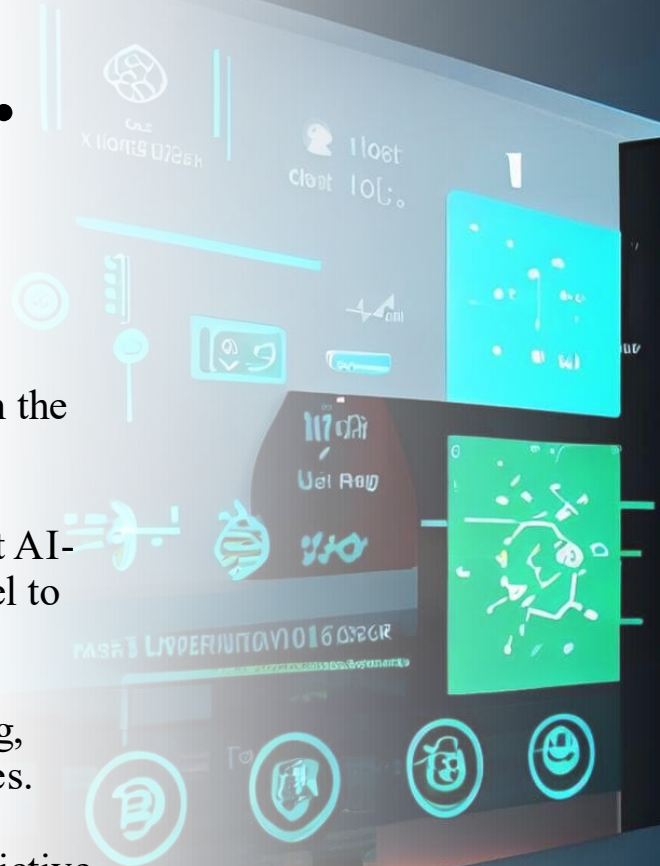
Method contd.

- Lastly, the technological factors suggest the broader scopes of application presented by AI involving operations, customer service, workforce planning, marketing and hotel management.
- Conducting sentiment analysis on review and feedback from guests can offer valuable insights about staff satisfaction (Morini-Marrero *et al.*, 2025).
- These insights can be helpful for identifying and addressing gaps in staff performance and guest interaction approaches.



Method contd.

- AI can be utilised for driving environmental sustainability within the hotel and hospitality sector.
- Bakshi and Singh (2024) noted that AI-powered smart systems enable hotel to minimise GHG (greenhouse gas) emission by optimising energy consumption through smart lighting, cooling, heating and similar features.
- In this case, AI equipped with predictive analytics can allow for developing intelligent and energy efficient room management systems (Ajayi *et al.*, 2024).



Conclusion

- This presentation hereby concludes the findings on future of work in the hotel industry and human-AI collaboration based on aforementioned themes.
- Integrating AI allows hotel organisations to improve their workforce management, employee satisfaction and service quality.
- AI can automate repetitive tasks, which reduces the workload on human employees to perform other complex tasks.
- Guest seeking human interactions also makes it critical to create balance with human-AI collaboration.

Recommendations

- Based on the findings, balanced approach and AI integration is primarily recommended to the businesses.
- AI should be incorporated in a manner that can improve the current job roles for the employees rather than replacing them.
- Additionally, talent management, workforce planning and management and task allocation can also be improved using AI in HR systems (Yilmazdogan, 2024).





AI & Employee Training:

Ensuring Safe Use of Artificial Intelligence at Work

Recommendations contd.

- Organisations are also recommended to utilise AI for employee training that can address the current digital skill gaps faced by the industry.
- The training programmes can encompass soft skills and AI for workforce development.
- By analysing and identifying individualised skill gaps, training opportunities can also be made more personalised (Zahidi *et al.*, 2024).

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Thank
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