

THE IMPACT OF AI-POWERED HOUSEKEEPING ROBOTS ON EMPLOYEE ROLES AND JOB SATISFACTION

ABSTRACT

AUTHORS

Vince Carlo Arcilla
Alissa Jabeguero
Viberlyn Romana
Rica Mae Rufo
Jacqueline Villanueva

RESEARCH ADVISER

Dana France H. Ignacio, PhD

AFFILIATION

Bestlink College of the
Philippines

DISCIPLINE

Hospitality Management

KEYWORDS

*ai-powered robots; employee
roles; job satisfaction;
housekeeping automation;
artificial intelligence; hotel
operations*

ARTICLE ID

AASGBCPJMRA-B03364

In today's technology-driven world, individuals across all age groups have become increasingly familiar with using advanced tools that simplify everyday tasks. One of the most transformative developments in recent years is Artificial Intelligence (AI), which continues to reshape industries, including hospitality. While the concept of AI dates back to 1956, its practical applications have become widespread due to advances in computing power, data analytics, and machine learning algorithms. In hospitality operations, AI-powered housekeeping robots are being introduced to improve efficiency. This study explores how such technological integration impacts employee roles and job satisfaction within the hospitality industry, particularly in hotel settings. The study employed a purposive sampling technique to select participants who have direct experience working with AI-powered housekeeping robots. According to Nikolopoulou (2022), purposive sampling involves deliberately selecting individuals who are most likely to provide relevant and valuable information. The study was conducted at Okada Manila, with a total of fifty (50) respondents. A Likert-scale questionnaire was used to gather data regarding changes in employee roles and levels of job satisfaction as influenced by the presence of AI-powered housekeeping robots in the workplace. The analysis focused on the relationship between the use of AI-powered housekeeping robots and two workplace variables: employee roles and job satisfaction. A negligible positive correlation ($r = 0.0806$) was found between AI integration and employee roles, with a p-value of 0.580767, indicating no statistically significant relationship. Similarly, no significant correlation was observed between the use of AI-powered robots and job satisfaction. These results suggest that the implementation of AI-powered housekeeping robots does not substantially alter job responsibilities or affect the satisfaction levels of employees in the hospitality sector. The findings indicate that while AI-powered robots are becoming more common in hotel operations, their integration does not significantly influence employee roles or job satisfaction. This suggests a level of adaptability among employees or a limited scope of impact by current AI applications. As the technology continues to evolve, further studies are recommended to examine long-term effects, potential skill shifts, and changes in employee perception. Hospitality institutions may consider balancing automation with human-centered policies to ensure workforce engagement and well-being.

RECOMMENDED CITATION

Arcilla, V. C., Jabeguero, A., Romana, V., Rufo, R. M., & Villanueva, J. (2025). The Impact of AI-Powered Housekeeping Robots on Employee Roles and Job Satisfaction. *Ascendens Asia Singapore – Bestlink College of the Philippines Journal of Multidisciplinary Research Abstracts*, 7(2), 98.