### V. CONCLUSIONS AND IMPLICATION

#### A. CONCLUSION

Based on the hypothesis tests and results, the research can emphasize the acceptance of the research following hypothesis;

H1: AI implementation has a positive effect on environmental performance.

H2: Top management's commitment positively affects environmental performance.

H3: Top Management Commitment strengthen moderates the association between AI-empowered decisions and environmental performance.

The Healthcare sector of the United Arab Emirates is transforming with Artificial Intelligence by enhancing service quality, improving diagnosis, patient communication, appointment arrangement, disease detection, and overall operation. The radical implementation of Artificial Intelligence in the UAE generated interest in this study to investigate whether technological advancement facilitates environmental performance. Furthermore, the study takes top Management Commitment as a crucial factor in checking their roles in environmental performance management through Artificial Intelligence Implementation. The study was conducted among 200 currently enrolled managers who are doing jobs in the top 6 hospitals in the UAE.

According to the study, Artificial Intelligence positively influences hospital environmental performance. Besides, top management has significantly contributed to the hospital's environmental performance management. Moreover, Top Management commitment impacts the relationship between artificial Intelligence and environmental performance, and top management commitment influences these connections. As a result, the data-driven research conducted for this study serves business leaders who agree with our recommendations by providing them with additional information to assess how effectively they are implemented.

The comparison of current research with previous research showed debatable outcomes that open floors for future researchers to add value to artificial Intelligence and environmental success strategy in the Hospital sector. As the study

claimed, it creates new research opportunities to identify more intervening factors at organizational, behavioral, societal, and environmental levels. More studies need to be conducted to understand different roles, factors, and interventions that might influence artificial Intelligence's success in maintaining environmental performance. Also, it must be considered that the study was conducted in UAE, where most people are advanced with technology and have knowledge and up-to-date information that reduces their dependency on management. Instead, most employees perform their jobs according to their needs. Thus, a critical assessment is needed to identify new moderating and mediating factors that could influence artificial Intelligence's importance and environmental performance. Lastly, the study was quantitative and carried out from the perspective of managers, which justifies the Top management commitment status and challenges for implementing the AI apps and taking training responsibilities.

# B. RESEARCH IMPLICATION

This research will be informative for healthcare sector stakeholders. It will acknowledge artificial Intelligence's roles in environmental performance and the moderation role of top management's objectives in balancing AI and Environmental performance.

The growing reliance on AI raises concerns regarding the digital divide and its possible effects on sustainable development goals. This study ensured that artificial Intelligence (AI) is created and applied in an environmentally sustainable and inclusive way, especially in developed countries.

AI applications, including waste management optimization, energy efficiency enhancements, and renewable energy integration, have the potential to significantly improve environmental performance and sustainability. This study has once more demonstrated the benefits of artificial Intelligence. It may be used to examine the efficacy of these apps and pinpoint areas that need improvement.

First, Artificial Intelligence, digital technologies, and environmental sustainability are intricately intertwined. This study examines how these aspects

interact and influence one another to improve future researchers' and stakeholders' knowledge of AI's entire impact on environmental performance.

Second, as this research demonstrated, adopting technology and its appropriate application have a more robust environmental influence. This contributes to the adoption of the theories of planned behavior and technology. Thus, it adds some psychological ideas and behavioral techniques to the current literature on artificial Intelligence.

## C. LIMITATIONS AND FUTURE RESEARCH

While the current research provides significant contributions, its limitations may suggest new research directions.

- 1. The research has been conducted only among Dubai and Abu Dhabi hospitals, where the world has witnessed great development in prior years across all sectors. Technological progress is no longer surprising in Dubai and Abu Dhabi and has become reachable to all. Thus, the results cannot be generalized to other countries or hospitals.
- 2. The research was conducted only with managers, which could be significant if future studies consider only the patients and doctors or even nurses across UAE hospitals or other different countries that have some variable differences.
- 3. Although this study has been conducted only in the healthcare sector, it can be applied to all business sectors.

### D. RECOMMENDATION

- 1. To improve environmental sustainability and performance, hospitals should ensure proper data integration and availability through electronic sites or applications, medical imaging, and other digital systems to create a clear picture of areas needing further improvement and strategic development. AI algorithms can collect data, identify patterns and trends, and provide an overview.
- 2. Environmental performance development requires continuous monitoring and evaluation across hospital operations, providing real-time feedback and identifying obstacles daily. A regular routine must be established to analyze supply chain data that tracks waste reduction opportunities, logistic status, and inventory management optimization.
- 3. The AI implementation should be designed to comply with relevant hospital and government rules and regulations, which will foster a transparent decision-making process and data usage. In addition to data management, the institution should try to properly engage employees and stakeholders in the AI-driven system, encouraging active participation in environmental sustainability initiatives and creating a sense of belonging.
- 4. AI should be applied morally and sensibly, ensuring it doesn't reinforce prejudices or worsen already-existing environmental problems. This involves ensuring that AI systems are accountable, transparent, and able to explain their choices.
- 5. The organization's top management should clearly define its AI adoption strategy and vision, tying it to its long-term objectives and highlighting how AI can boost productivity and growth. Leaders should prioritize talent acquisition objectives that align with these needs to create a workforce that can fully utilize AI. This entails determining the skills required, providing suitable training opportunities, and creating an environment supporting AI professionals' growth.

6. Leaders should work with outside partners, industry peers, and AI experts to enhance information sharing, provide access to state-of-the-art AI technology, and promote industry best practices.

