

# INDUSTRY WEEKLY DIGEST

YOUR WEEKLY DIGEST OF CONTEMPORARY INDUSTRY TRENDS



## AI CAN ENABLE PROGRESS OF THE TOURISM & HOSPITALITY INDUSTRY TOWARDS SUSTAINABLE DEVELOPMENT GOALS

by harnessing the power  
of big data and (near)  
human intelligence

There is a lot of discussion about the potential of Artificial Intelligence (AI) to revolutionise the tourism and hospitality industry. This discussion is largely concerned with how AI can enhance operational efficiency and improve customer service, ultimately improving profitability of tourism and hospitality enterprises.

In this digest, [Dr Viachaslau Filimonau](#), Reader in Hospitality Innovation in the [School of Hospitality and Tourism Management](#), argues that we should not overlook another prominent avenue for potential AI application in tourism and hospitality operations i.e., making these more sustainable.

Have a great weekend!



## HOW ARTIFICIAL INTELLIGENCE CAN MAKE TOURISM AND HOSPITALITY MORE SUSTAINABLE

**Dr Viachaslau Filimonau**

It is well recognised that AI can add significant value to the management of T&H enterprises by streamlining the complexity of their operations, enhancing customer service, improving revenue flows, and aiding in human resources management. As a result, industry professionals and academics alike have shown considerable interest in studying how the potential of AI could be harnessed to make the T&H industry more profitable. For example, a bibliometric study of academic research on the application of AI in T&H has revealed 1035 manuscripts available on this topic to date, with the bulk (i.e., over 60%) published since 2019.

Interesting is however that the above-referenced bibliometric study has identified no single piece of academic research conducted on the potential of AI to improve sustainability of T&H operations. The lack of research interest in this aspect of AI application is alarming given that the T&H industry consumes large amounts of energy and water, but also generates substantial volumes of solid waste. It is argued that more academic and market research is necessitated to better understand how the potential of AI could be harnessed to make T&H operations more sustainable. The good news is that there is a rapidly growing number of examples showcasing how AI can serve the purpose of sustainability in the T&H domain.

For instance, there are hotels using AI to predict energy consumption patterns of guests and subsequently reducing energy costs by at least 15%. There are also hospitality organisations utilizing AI to detect water leaks and hotspots in building's water consumption to reduce water use. Lastly, there are instances of AI being used in the T&H industry to monitor and manage food waste. While there is mounting industry evidence on how AI can help steer T&H operations towards environmental sustainability, academic research on this subject remains underdeveloped.

In summary, I argue that more attention should be paid to the potential of AI to enhance the sustainability of T&H enterprises. Consequently, more market, but, especially, academic, research is required to aid the industry in understanding the opportunities and challenges of AI when harnessing it for sustainability purposes. Ideally, this research should be co-created by academics and industry practitioners to ensure the studies designed and conducted on the intersection of AI and sustainability are grounded on immediate and emerging business needs.

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