Sharing Professional Viewpoint: The Role of AI Technology in Changing Tourism Lifestyle

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1. Introduction

The world is moving toward the digital trend. The Internet of things has been changing rapidly and bringing about innovations and edge technologies that involve our lives and lifestyles from waking up until going to bed. When technology is connected to human lifestyles, tourism operators in Thailand have felt the need to adjust their business operations and marketing along the bright path of 5G high-speed internet and applications to changes in the way clients travel. When tourists' behavior changes to become part of the cyber world, these travel enthusiasts can use communication technology to find information and plan their trips in advance. The Internet has become a vital tool for modern travelers. The Internet has also brought new business opportunities for entrepreneurs to adapt themselves quickly and take advantage of new technologies to satisfy tourists' transformed lifestyles.

2. Artificial Intelligence (AI)

Artificial Intelligence (AI) is generally known as a set of programs or code commands fabricated to work quickly with large memory. The development of AI comes from Narrow AI to General AI systems, like Siri used by Apple, Alexa by Amazon, and Self-Driving or Parking by Tesla.

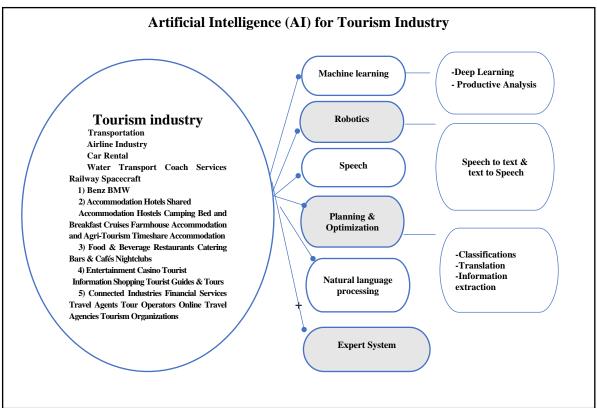


Figure 1: Artificial Intelligence (AI) for Tourism Industry

As shown in Figure 1, artificial intelligence is widely used in the tourism and hospitality industry. Artificial intelligence has machine learning and the most easily developed machine intelligence.

3. Technology Changing Tourism Lifestyle

Machine Learning is the ability to learn and analyze computer data. To forecast results, the sub-techniques are used: Supervised, Unsupervised, Semi-supervised and Reinforcement. There are different learning algorithms in information required to be learned and the purpose of its use in the hotel business, for example machine learning helps companies find needed information. Many new innovations, such as chat robots, image recognition, predictive analysis in the system itself, reveal the replacement of the power of human management. Tourists have many different preferences that business operators know and can respond to them. Machine learning is now helpful for statistical analysis.

Robotics can help service guests in the hotel's lobby area, as at Marriott Hotels. When guests arrive, they will provide information about the hotel. The robot Mario speaks 19 languages and can also serve meals, sing and dance with the hotel guests (*Thai Magazine Hotel & Travel Magazine*, December 2019-January 2020).

Speech in AI refers to the use of voice commands in travel. AI has the ability to recognize words in human language structures and data analysis of sounds. It is necessary in the tourism and hospitality industry, such as hotels and airlines in trip bookings by customers through Expedia website. Customers can use Chat to do basic inquiries, such as refunds and cancellations by voice command for a prompt response. Responding to customers' needs must be at a high speed. While tens of thousands of others are booking at the same time and may have questions, common or repeated answers entered on the system can help via Voice Assistance.

Automated Planning, Scheduling & Optimization allow machines to make decisions and automate actions to effectively achieve goals, such as managing orders or customers' reservations. Automation starts from procurement, manufacturing, moving, transportation, storage to distribution and sales with flexibility.

Natural Language Processing is done via the NLP application to today's tourism and hospitality industry--contributing to various innovations. Both directly and indirectly, the processing is to bridge the gap in human-computer communication. This can support both reading and listening by using other technologies, such as Visual Recognition for reading text and using Voice Recognition for listening. Chatbot can interact with hotels for accommodation or meal reservations or activities. It is close to answering human questions and customers can optimize Search Engine NLP for quick hotel reservations. In addition, the use of full sentence translation technology is now being developed to respond to one language being translated into another. Currently, the system automatically translates whole sentences on the website; therefore, there is no need for travelers to worry when going abroad.

Expert System in the tourism industry can introduce tourist attractions in places of visit and provide information services to tourists with the use of GPS to identify the position or coordinate via the system in translating languages. In supporting foreign tourists, the system can provide services needed by tourists (Samala et al., 2020). The expert system

certainly enhances tourism experiential services, though currently not being able to surpass human services. It serves as an effective complementary dimension of the future tourism.

With the emergence of travel artificial intelligence, it is convenient to make travel arrangements. AI offers travel services that are automated, customized and effectively executed. AI also allows travelers to learn about their behaviors, interests, preferences and personalized experience. Gone are the days of consulting a travel agent, meeting him physically and indulging in an endless chain of phone calls to inquire about travel arrangements. Practical implications for tourism marketing are strategies to enhance the tourists' overall experience with the application of AI and Robotics. New emerging technologies like Chatbots, Virtual Reality, and Language Translators can be effectively utilized in the travel, tourism and hospitality industry regarding selecting tourist routes (Kazak et al., 2020). The potential of artificial intelligence (AI) technologies in the tourism industry apparently exceeds the capabilities of traditional search engines. Some travel services have already begun to use elements of artificial intelligence to analyze large volumes of data and learn from their own and other people's experience in fulfilling customers' needs, routings and reservations. Currently, the main goal for travel tends to "learn" using personalized customer experience. Personalized services most suitable for a particular client show a strong competitive advantage of a business operator. Indeed, it is AI that helps choose needed services and makes processing of large data possible in creating personalized products much faster than traditional search technologies.

4. Final Point

The author showed in this brief writing the role of AI technology in changing travel lifestyle. AI can help assess consumers' behavior and access their purchase history. Such information is vitally important for tourism/ hospitality business operators to use accurate data to sell relevant service products to target customers. Undoubtedly, AI has a strong hold on the tourism and hospitality industry due to its capabilities to reduce time and costs while increasing income. It is therefore a must for service business operators and personnel to understand the current trend and apply AI concepts and principles in full support of their operations and networks concerned.

5. The Author

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6. References

Kazak, A.N. et al. (2020). IOP Conf. Ser.: Earth Environ. Sci. 421 042020.

Samala, N., Katkam, B.S., Bellamkonda, R.S. & Rodriguez, R.V. (2020). Impact of AI and robotics in the tourism sector: A critical insight. *Journal of Tourism Futures*, Vol. ahead-of-print, No. ahead-of-print. https://doi.org/10.1108/JTF-07-2019-0065.

Thai Magazine Hotel & Travel Magazine. December 2019-January 2020.