



The Role of Artificial Intelligence in Urban Tourism Cultural Communication: Building an Innovative Jakarta Smart Tourism Experience

Marlinda Irwanti, Gloria Angelita*, Rauda Ceasaria, Yunus Hasyim
Universitas Sahid, Jakarta

*E-mail korespondens: gloria_angelita@usahid.ac.id

Diterima: 18-11-2024 | Direvisi: 18-11-2024 | Disetujui: 24-11-2024 | Publikasi online: 28-11-2024

ABSTRACT

Technological progress is developing massively amidst the frenzied issues of trade wars, ideological wars and intellectual wars. Conditions like this require humans to continue to work with spectacular innovations to survive and face change. Technology is the result of modern human culture which needs to be supported by human abilities and potential in fulfilling their life needs, both materially and spiritually. Every human being has different levels of needs in primary and secondary aspects, all adapted to their respective lifestyles and cultural backgrounds. The primary aspects in the mission of human life are food, shelter and clothing. Secondary aspects balance and support primary needs, namely creativity, work and initiative to increase happiness in life. Technology is a creative force and work that is continuously updated and equipped for every human need in their life interactions, namely: work, family and the surrounding environment. Intention drives the spiritual aspects that humans need, even though they are invisible, such as: the desire to be happy, to relieve fatigue. Jakarta, as a busy urban city, densely populated, densely built, with high pollution, makes its people depressed and difficult to be happy. Traveling is a human effort to create happiness and provide new experiences. The existence of technology as a good communication tool makes it easier for people to get various tourist information that is right for them. In the current digital era, tourist arenas are created in modern programs even with AI technology. Artificial Intelligence is present in the tourism sector with innovative work that can be enjoyed by many people from various countries with different cultures and languages. This research aims to reveal the role of AI in urban tourism cultural communication, descriptive research types and data collection methods by conducting in-depth interviews and literature studies.

Kata kunci: 3-5 kata dalam bahasa Inggris dan sesuai urutan abjad

INTRODUCTION

Jakarta city is now 494 years old, a city that during the independence era was known as Batavia, which was a commercial city during the Dutch East Indies occupation. The city of Jakarta, even though it is very old, has a high attraction that makes everyone tempted to move to Jakarta, to try their luck in improving their lives. Central Bureau of Statistics (BPS) show for DKI Jakarta states that the population from 2020-2023 will average 10 million people. The productive age group included in the productive workforce until February 2024 reached 5.43 million people. The average scope of work involved is as employees of various companies, industries and government employees.

The face of Jakarta has changed over time, experiencing many developments, from the category of an urban city to a metropolitan city full of skyscrapers. The dynamics of people's lives in the city of Jakarta are very busy with the tendency towards a consumerist and glamorous lifestyle. The progress of the city of Jakarta is greatly influenced by immigrants, global investors and the exchange of information and technology.

The attractions of the city of Jakarta include the economy, commerce and even entertainment and tourism. As time goes by, Jakarta has grown into a modern, Smart City-based global city. The concept of changing a conventional city plan into a smart city plan that prioritizes technological aspects. Responding to the challenges of digital globalization which is increasingly advancing beyond geometric progression, the city of Jakarta is not remaining silent, the regional government is immediately preparing a transformation program, making Jakarta a Smart City (JSC). The program focuses on 7 (seven) indicators, as the embodiment of the smart city 4.0 ecosystem in Jakarta.

The seven smart city indicators include: Smart Environment, smart economy, smart people, smart mobility, smart governance, smart living, smart branding, smart tourism. These seven indicators are translated into superior products or services owned by JSC. The public can access information, services and find out about innovations developed by JSC and even those that will then use the latest technology, namely: Artificial Intelligence (artificial intelligence). With this latest program, it is hoped that regional economic growth will be higher and the needs of the people of Jakarta can be met optimally in a 24/7 formulation.

Since the Covid pandemic took place, traveling has become impossible, health protocols require each individual to limit the space for direct meetings and interactions. This condition immediately changed people's lifestyle and culture at that time, the presence of technology played a very important role in helping people complete their work and routine activities, such as: online meetings, online lectures, online shopping including online doctor consultations.

Change is a necessity, every individual must be able to adapt in responding to all forms of change, one of which is transformation. Kotler (2020) in his book *Chaostics the business of managing and marketing in the age of turbulence*, says: a change will occur when there is a stimulus, such as: crisis, competition, and need.

Jakarta's traffic crisis, with congestion, pollution and full motor vehicles, has become a routine agenda. Jakarta needs renewal so that it is immediately free from the clean air crisis, the healthy environmental crisis, the punctuality crisis, the trust crisis among many investors and the public, and even the crisis of changing lifestyles that make it difficult to interact with others.

The right environment that can be used as a space for people to meet each other, greet each other or unwind from busy work is: a tourism space. The need for humans to interact with each other cannot be avoided even if it is limited to virtual meetings. Human nature as a social creature is the foundation for change to occur, the need to grow, develop, innovate, create, travel encourages the regional government of the city of Jakarta to create environmentally friendly tourist areas that are in line with the JSC concept, namely: smart tourism.

A program that prioritizes humanity of health, every person who visits tourist areas with the concept of smart tourism, experiences an innovative travel experience and can help restore complete health: body, soul and mind. The Indonesian tourism industry is currently in the sights of the world, so Jakarta city tourism must be supported, apart from being a commercial city center, it can also become a vortex of cultural growth so that it becomes better known and many tourists want to visit the Jakarta city tourist area.

Smart tourism program, needs to be disseminated massively with reliable information technology, using the power of AI to narrate the history of the city of Jakarta, culinary tourism, religious tourism and the culture and behavior of the people who live there, along with the process of changing Jakarta Smart City. This model is an interesting thing to communicate to the wider community. Geertz (2000), states that culture is the regularity of the meaning of symbols, which are translated and interpreted to control behavior, extrasomatic sources of information (mass media), confirm individuals' knowledge and development and ways of behaving.

LITERATURE REVIEW

Cangara (2010), states that mass media is a means of conveying messages from the message source (regional government) to the public using communication tools, such as: written and electronic print media, television and radio media. Media comes from the word medium in Latin, namely: intermediary, so mass media is an intermediary tool for connecting sources with recipients of the source at large. State of the art, a statement that states that the research conducted is different from previous research. State of the art references are obtained from a collection of previous journal studies.

Research Title	Discussion, methods, research results
1. Strategy in developing artificial intelligence technology in the G 20 conference program. by Karman (2020)	Culture, artificial intelligence, information are mentioned. Artificial intelligence includes cultural aspects, values and goals of an institution, industry or program, a qualitative research approach with descriptive research methods.
2. Implementation of the use of artificial intelligence in the learning process of Communication Science Students. By Aninda, Nanda and Rea (2023)	Artificial intelligence, learning process, communication studies. It is said that the presence of AI helps students learn in educational aspects related to ease of communication in the era of digitalization. Qualitative research approach with descriptive research methods.
3. AI development is one of the fundamental technologies in the midst of the Covid pandemic (2021)	AI, informative tools, covid pandemic. It was stated that AI was a fundamental breakthrough to help society's need for information during

	the Covid pandemic. Qualitative research approach, with interpretative methods.
4. AI technology in the health sector. By Bella Fitriyana (2022)	Artificial Intelligence, Health, Technology It was stated that artificial intelligence is very helpful for progress in the health sector, especially in diagnosing diseases. Descriptive qualitative research using literature review data collection methods.
5. Application of Artificial Intelligence in the tourism industry (futuristic perspective). By B. Deepthi & Vikram Bansal (India-2023)	AI, tourism aspects in India, human resources. Qualitative research approach using interview and library data collection methods.

Reading several journal studies and previous research, there is a blank space that is very appropriate to study further in the context of the sophistication of AI technology which has entered the tourism aspect, especially in the tourist area of Jakarta City. The transformation of the city of Jakarta is a reliable breakthrough in creating a healthy, clean and dynamic living atmosphere for the people of Jakarta through the Jakarta Smart City program by prioritizing the power of information technology based on Artificial Intelligence.

METHODOLOGY

The methodology for a systematic literature review (SLR) involves: 1) defining a research question. The review starts with a clear, specific research question; 2) creating a protocol: A detailed plan is created that outlines the methods and approach to be used in the review; 3) conducting a search: A systematic search of relevant literature is conducted; 4) defining inclusion and exclusion criteria: criteria for what to include and exclude from the review are defined. These criteria can include conceptual factors, such as geographical or temporal restrictions, or quality criteria, such as journal impact factor; 5) assessing the quality of selected studies: each study that is selected is assessed for quality; 6) synthesizing findings: Findings are synthesized using qualitative or quantitative methods; 7) reporting the review: The review is reported in a detailed and transparent manner, often following guidelines that are structured, in-depth, and rigorous.

ANALYSIS AND DISCUSSION

After reading a number of research papers and earlier research, there is a gap that is highly suitable for more investigation given the advanced AI technology that has permeated the tourism industry, particularly in Jakarta City's tourist district. Through the Jakarta Smart City program, which prioritizes the power of information technology based on artificial intelligence, the city of Jakarta has undergone a dependable breakthrough in developing a clean, dynamic, and healthy living environment for its residents. The

SLR conducted on the topic of artificial intelligence in urban tourism produced two themes namely culture and urban tourism.

Culture. The word culture itself is a language that comes from two languages, namely Sanskrit and English. According to Sanskrit, the word culture means buddhayah, which means the plural form of the word buddhi, which means mind or reason. Meanwhile, according to English, culture is known as the word culture, which comes from the Latin word colere, which means processing or doing. Culture is a collection of all human activities and their surroundings which then become a statute and are passed down to children and grandchildren as the next generation. The provisions in question are customs, which contain language styles, ways of speaking (dialects), regional arts, regional musical instruments, beliefs that have been held and ways of surviving (farming crops, making irrigation).

Language is one of the works of culture, which until now has become a permanent need for humans in interacting, namely communicating both in the form of verbal and non-verbal narratives from a message conveyed by the communicator to the communicant. Wiryanto (2004) explains that Shannon and Weaver's communication model is communicationis a process of human interaction that influences each other both intentionally and unintentionally and is not limited to verbal forms of communication but also non-verbal such as facial expressions, painting, art and technology. Liliweri (2013) states that an important element of culture is language, namely a system of modifying codes and symbols, both verbal and non-verbal, for the purposes of human communication.

In the book *Culture and civilization as cause to effects* (JWM Bakker), it is written that culture is the animating and creating the spirit, civilization is the instrument, the body, even the garment of culture. Culture is part of human civilization which will continue to experience changes following human inspiration and ideas and current developments at that time and later, culture is also an essential value as a form of manifestation of the meaning of one's identity and the life around it.

Civilization is also a collection of (intellectual) and practical and tactical thoughts to control nature to make it more concretely useful, such as knowledge and technology. The results of this civilization require a means of disseminating it both personally and impersonally to the environment, society, namely communication.

Cultural Communication is a complete series of processes that exist and will continue to exist within humans and are inherent because they are formed from the environment that humans are in and at the time, which then materializes in the form of a transactional interaction. Cultural communication in the era of digitalization plays an important role in the introduction of digital technology/digital literacy. The progress and development of human life procedures has reached the era of level 5.0, starting with the era before Christ (BC), the era after Christ, the era of industrial technology, the era of electrical technology, and currently the era of digitalization-based computer technology which gave birth to an expert system, namely AI (Riza, 2018) The latest technology is able to have a strong influence in the process of cultural change or renewal in important aspects (Figure 1)

Urban Tourism. Urban tourist areas are easier to find in cities, such as: Jakarta, Surabaya, Bandung, Medan. Urban tourism is currently very popular with local people and immigrants for short visits to relieve fatigue and go on culinary tours with relatives and

family. Klingner (2006), urban tourism is simply a collection of tourist resources or activities that are located in a city and offer them to visitors from other places. This definition can then be summarized as, urban tourism is a general form of tourism that utilizes urban elements (not agriculture) and everything related to aspects of city life (service centers and economic activities) as tourist attractions. Urban tourism is one of the economic development markets for urban areas, because it is supported by amenities, transportation access and facilities that are easy to obtain because they are in urban areas with advanced facilities. Selby,(2004), said tourist areas urbanalso accompanied by marketing, management and city planning in the economic, social, cultural and political fields.

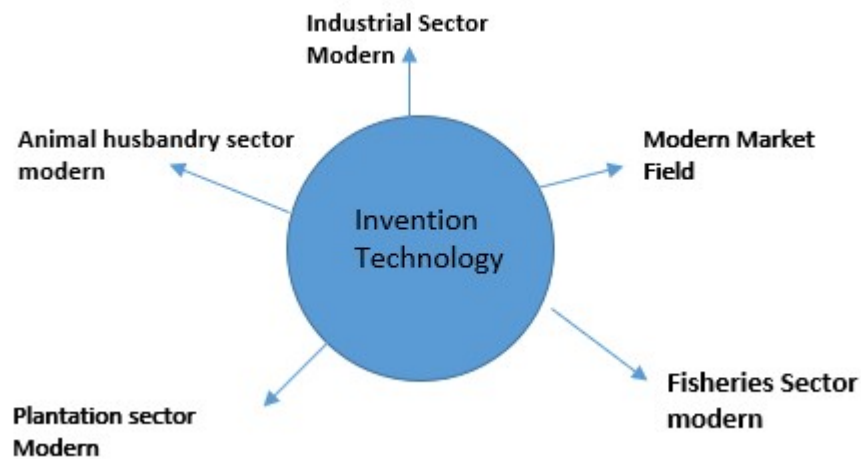


Figure 1. Technology influence system model, Riza (2018)



Figure 2. Jakarta Regional Government Tourism Planning, 2021

Urban tourist attractions that can be visited, such as the city of Jakarta, the city of Surabaya or other semi-metropolitan cities in Indonesia, include: museum areas, city beach areas, mangrove forest areas, city hall squares, arts buildings, regional SME areas, library

areas thematic areas or settlements that feature unique architecture and characteristics of the surrounding area which are designated as cultural heritage. There are many more potential city tourist attractions that can be developed, such as recreational parks and so on, following the current creativity and innovative power of the local city government and providing added value to the regional economy.

Jakarta Smart City, which has 8 cutting-edge missions, one of which is Smart Tourism, is a message product in the form of a transformation program that was born from a collection of ideas and human work to create a new civilization and cultural change in the era of digitalization by prioritizing artificial intelligence-based technology (system expert) which has many benefits in strategic aspects, one of which is the urban tourism aspect (Figure 3)

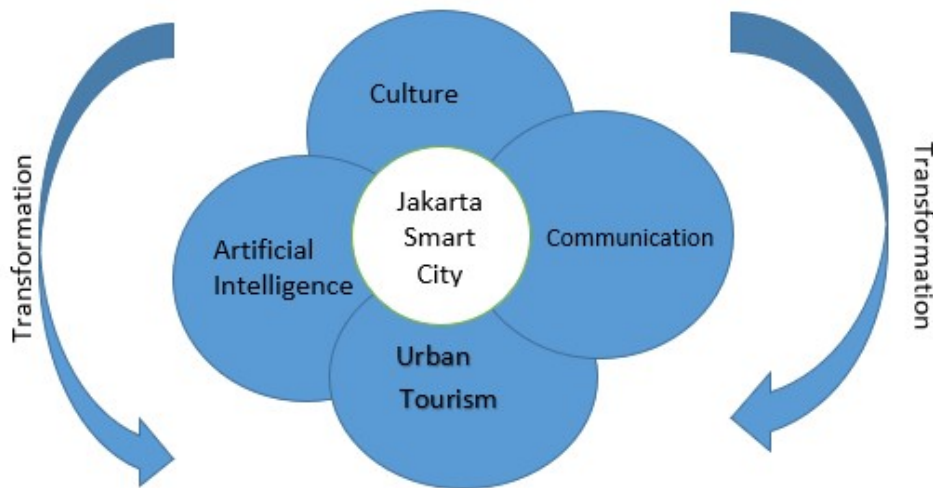


Figure 3: Urban Tourism Aspect

Jakarta as a special area, which is the center of commerce and very high circulation of money, needs to create areas that can be categorized as urban tourism areas, such as: old buildings, cathedral churches, Istiqal mosques, National Museum of Indonesia (Elephant Museums), Fatahilah museums, all of which have historical stories and religion about Jakarta and very interesting to visit. Urban tourism presents a novelty that differentiates it from other tourist attractions, urban tourism is tourism that empowers unique things in cities.

Reporting from electronic print media, Jakarta has prepared itself for the development of urban tourism which is handled by Destination and Development Sector at the DKI Jakarta Tourism and Creative Economy Department (2021). Urban tourism in DKI Jakarta can be divided into 8 categories, namely recreational tourism, historical tourism, shopping tourism, Meetings, Inventions, Conventions and Exhibitions (MICE) tourism, sports tourism, nature and water tourism, religious tourism, and outdoor tourism (Figure 2)

This is confirmed by the statement of a tourism activist who is a member of the ASITA group, Rahmad (2023). Jakarta will become stronger in the economic sector by supporting the realization of urban tourism in this era of digitalization. In improving the tourism industry, Rahmad explained 10 strategies that can be adopted, namely: 1) Development of

digital infrastructure, 2) digital marketing, 3) development of tourism applications, 4) collaboration of tourism supporting industries, 5) development of multi-media content, 6) digital education and training, 7) Cultural and natural conversion, 8) computerized data processing, 9) data security, 10) responsive development of digital technology.

Linked to the presentation and description in the discussion, it can be said that urban tourism is a deep message from a series of developments in human culture and civilization by optimizing sophisticated and up-to-date communication facilities, namely the AI (artificial intelligence) expert system, especially in the city of Jakarta, a metropolitan city which is ready to transform into a Jakarta Smart City.

CONCLUSION

Updates in communication are rapidly following human needs, especially in solving all problems using machines, electricity, computers, the internet and the birth of the latest technology, namely the AI expert system. Artificial intelligence plays a role in helping humans in their various jobs, and not to replace humans. As a new generation of digitalization systems, AI continues to be tested by humans by entering this system into difficult work areas that require data processing, data collection, prediction of data results and even the use of data from now to the future. Currently, AI is starting to be introduced to the public through information technology means: electronic print media, television, social media and radio. Apart from that, AI and its applications have entered companies and industries, such as: health, education, entertainment, office administration, textile industry, culinary industry and tourism. After the pandemic period has gradually passed, it is hoped that a bright future will be more challenging and interesting for every individual to take a tourist trip that will be made easier by the presence of AI.

REFERENCE

- Amira Sofa (2022). Enjoy the beauty of Jakarta via a Virtual Tour. Jakarta Smart City
- Arnold. Toybee (2004). History of Humans. Yogyakarta: Learning Library
- Balamba. Lumenta. Sugiarto. (2017). 3 Dimensional Informatics Techniques for Heart Disease. Journal of Informatics Engineering. Doi: <https://doi.org/10.35793/jti.11.1.2017.16973>
- Burhan, Bungin (2007). Qualitative Research. Mataram: Kencana
- Cangara, Hafied (2022). Introduction to Communication Science Ed. 5. Jakarta: Rajawali Press
- Devianto, Yudo. Dwiasnati (2020). Saruni. Artificial Intelligence System Framework for improving Natural Resources competency. Journal of Telecommunications and Computers. doi.org/10.2244/incomtech.v10i.1.7460

- Effendy, Onong Uchjana (2013). *Science, Theory and Philosophy of Communication*. Bandung: PT. Aditya Bakti's image.
- Effendy, Onong Uchjana (2017). *Scientific Communication Theory and Practice*. Bandung: PT Teen Rosdakarya.
- Fred N. Klinger (1996). *Principles of Behavioral Research*. Print 5 Ed. Indonesia. Yogyakarta: UGM Press
- Geertz, Clifford (2000). *Culture Reflection*. Yogyakarta: Kanisius
- Hamson (2021). *Village Community Based in Journalism*. DOI: <https://doi.org/10.31764/jces.v4i1.3465>
- Hello, Liliweri (2011). *Intercultural Communication: Definitions and Models*. Palangkaraya: Student Library
- Hello, Liliweri (2015). *Introduction to Cultural Studies*. Bandung: Nusa Media.
- Kememparekraf (2021). *Digital Tourism Strategy to Attract Tourists*
- Kotler, Philip (2009). *Chaostic: The Business managing and Marketing in The Age of Turbulence*. California: Amacon Books.
- Rahmad. (2023). *Enjoy Jakarta Tourism*. Jakarta-tourism
- Rizal. Kurniansah (2018). *Study of the Potential of Urban Tourism (Urban Tourism) as a tourist attraction in the city of Mataram, West Nusa Tenggara Province*, ISSN No. 1978-3787 (Print)
- Salma. Nunung (2020). *The influence of death rates on public mental health*. *Journal of Social Work*. Vol (3) No (1), 16-28.
- Selby. A. (2004). *Life and nutritious food*. Jakarta: PT. Erlangga
- Wiyanto. (2004). *Performing in Drama*. Yogyakarta: Grasindo