




## USING AI AND OPPORTUNITIES FOR RURAL DEVELOPMENT - BY HARNESSING THE UNEXPLORED WORLD OF TOURISM

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### RESEARCH ARTICLE



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#### Abstract

The world is facing multi-fold challenges-in the form of oil crisis, climate risks, geo-political tensions, trade-wars etc. Consequently, there arises challenges to growth, output and employment. It is, crucial to design policies in sync with the countries requirements and also by usage of the fast evolving technologies. We need to take the wisdom, from the huge repository of knowledge of our ancient culture and civilization. The Indian economy, is a service sector led economy. India, is also the most populated country of the world. Growth is concentrated in few sectors like IT, which are confined to urban areas. The rural areas are, largely bereft of such opportunities due to remoteness and infrastructure lags. Hence, there is a huge need for development of the rural areas by designing suitable policies, for progress and employment generation. The Tourism sector, is such a sector which is not only huge but also an ever-evolving sector. It is, largely untapped and also very heterogeneous in India. There is a huge scope for our rural areas, to emerge as tourism spots. The advent of AI, VR etc. is seen both as an opportunity and a challenge for mankind. It is, at this juncture that we need to utilize the new technology to solve our problems and aid in augmenting a better life, with more prospects than challenges. Using Technology to understand the past, and prepare for the future is, perhaps the best way to progress. This paper, is an attempt to link the present with the past by using AI. Further, the paper explores the scope of AI, in promoting Tourism and creating employment opportunities and help India achieve the Viksit Bharat goal by 2047.

**Keywords:** *L83, O31, O32, O33, Q01, Z32*

#### Introduction

The world, at present, is facing multi-fold challenges-in the form of climate risks, geo-political tensions, trade-wars etc which calls for serious attention. At a time, when the world is witnessing the 4<sup>th</sup> phase of Industrial Revolution- 4 IR, it is imperative, that in designing the present educational, institutional and governance policies, we need to take the wisdom, from the huge repository of knowledge of our ancient culture and civilization. India is an ancient land, which boasts of civilizations that have stood the test of time. From Mohenjo-Daro to the present days, the evolution of civilization, is an interesting facet for the whole mankind. India has come a long way, from the discovery of zero/shunya by the great Astronomer and mathematician Aryabhata, to the present day of being the 'start-up capital' of the world. The inscriptions on stones, coins, seals, rock arts, edicts, other archaeological remains have been the proofs of ancient knowledge. In the words of Kofi Annan (23<sup>rd</sup> June, 1997) - 'knowledge is power, information is liberating, Education is the premise of progress, in every society, in every family'. The advent of AI, VR etc. is seen both as an opportunity and a challenge for mankind. It is, at this juncture that we need to utilize the new technology to solve our problems and aid in augmenting a better life, with more prospects than challenges. Using Technology to understand the past, and prepare for the future is, perhaps the best way to progress.

The Indian economy, is a service sector led economy. Compared to the other two sectors, the Service sector is expanding by leaps and bounds. The GDP growth rate is around 7% and it is, perhaps, among the best performing economies of the world. India, is also the most populated country of the world. It is, crucial to design policies in sync with the countries requirements and also by usage of the fast evolving technologies. The service sector covers a wide range of activities, ranging from IT, Banking, financial services, education, telecom, tourism etc. This Sector contributes about 55% of the GDP, and employs about 30% of the workforce. While contributing big to the GDP, this sector has not generated enough jobs for the huge workforce in India. Growth is concentrated in few sectors like IT, which are confined to urban areas, The rural areas are largely bereft of such opportunities due to remoteness and infrastructure lags, leading to uneven development. Hence, there is a huge need for

development of the rural areas by designing suitable policies, for progress and employment generation. The Tourism sector, is such a sector which is not only huge but also an ever-evolving sector. It is, largely untapped and also very heterogeneous in India. There is a huge scope for our rural areas, to emerge as tourism spots. The urban areas are centers of life, work and development. There is increasing congestion, pollution and other challenges too. It is much required that a 'breath of fresh air and recreation' becomes a much needed requirement in life. Rising middle class and their mobility, calls for a huge scope for the expansion of the tourism sector. The rural areas have rich past, and countless stories to tell. The language, literature, livelihood and simple lifestyles in villages can be attractive to the tourists. As per government reports, there has been a remarkable drop in foreign tourists inflow, post the COVID. Hence, India needs to exacerbate measures to revive the sector. By use of AI, VR, our rich heritage and ancient knowledge sources can be better depicted to tourists and create attractive spots for development. India's tagline for Tourists 'Athiti Devo Bhava' is a Sanskrit slogan derived from 'Taittiriya Upanishad', depicts our rich traditions, philosophy of 'treating guests as God'.

This paper, is an attempt to link the present with the past through creative content creation by using AI to recreate the past. Further, the paper explores the scope of AI, in promoting Tourism and creating employment opportunities and help India achieve the Viksit Bharat goal by 2047.

Meanwhile, the Government of India along with several other organisations are taking efforts to promote the use and adoption of AI in various fields. The Government launched the National Strategy for AI (2018) -which lays a comprehensive plan to leverage Artificial Intelligence for economic growth and social development. Apart from this, Sector-specific AI initiatives have been laid, AI for Agriculture-To improve agricultural productivity and farmer welfare. To equip young people, with the necessary skills and mind set for AI readiness, efforts like AI for All, Responsible AI for Social Empowerment (RAISE), are steps in the right direction.

### **Objectives of the Paper**

1. This paper, is an attempt to highlight the role of AI in linking the present with the past, through responsible and creative content creation.
2. The paper further explores the scope of AI, in promoting Tourism and creating employment opportunities and help India achieve the Viksit Bharat goal by 2047.

### **From Knowledge to Ideas**

**1. Using AI for Promotion of Ancient Indian Literature:** There is a huge scope for development of the rural areas through the promotion of tourism. Our villages are rich sources of history, and interesting mix of beauty and mythology. AI can be useful popularising the learnings from our ancient knowledge, and build an attractive way to visually describe our ancient India. It is rightly said – the past is a good guide to future. There is no doubt that our ancient knowledge system, is the strongest and most voluminous knowledge source of the world. The beauty of our past, should reverberate, in our present times and, also percolate to the making of a beautiful and strong future. Using AI to understand Ancient Indian literature, Religion, Vedas, Puranas and Upanishads can be interesting and impacting, as they contain a vast reservoir of knowledge on scientific and sustainable living practices. Our Philosophy, Religion, Vedas and Upanishads are believed to contain knowledge on holistic and balanced life, preserving ecological balance. Ancient philosophies and scriptures like Vedas, Upanishads, Puranas also show us the path to holistic and compatible living. Our Ancient literature and philosophy believed, that all living beings deserve respect, compassion and care. As per the Vedas, the five elements of space, air, fire, water and earth, connect the human lives with the Brahmand/cosmic structure. The Vedic laws prescribed practices that help preserve and sustain nature. Our ancestors lived their lives in close proximity with nature .They were not only nature abiding but sought blessings from the five elements of nature: Prithvi (Earth), Jal (Water), Vayu (Air), Agni (Fire) and Aakash (Ether).The Hindu philosophy of life believes in 'Tat Tvam Asi'(derived from Sanskrit word) meaning 'we are a spark of the Divine'/thou art that. The emphasis on harmonious living and sustainability constitutes an essential aspect of this philosophy. That humans, along with other living beings, are a part of the eco-system and hence the need to protect nature. It also believed in the inter-connection of the 5-elements /Panchh Tatwa with the Cosmos. The human sensory organs are directly linked to these elements, thereby laying the foundation of man-environment relationship. The interdependence exists in relation to the supreme reality or Brahman. Thus, environment is what exists within and outside the human body- like an inseparable entity and in this philosophy lies the seeds of sustainable development. AI is transforming historical research by accelerating the digitization, decoding, and restoration of historical data. DeepMind's Ithaca uses neural networks to restore ancient damaged inscriptions and dates them with 60 % accuracy. Key applications include, decoding ancient texts with tools like Ithaca, identifying people in old photos, and reconstructing damaged manuscripts, allowing researchers to uncover patterns and context at unprecedented speeds. AI tools like Transkribus are used for transcribing handwritten or printed historical documents

**2. AI Can Foster Creativity and Curiosity:** The museum of Art and Photography in Bengaluru has created 'a digital twin' of late artist M.F. Hussain. The digital figure has the capability to interact and answer queries related to his paintings. This speaks volume about the AI and its power to foster creativity and curiosity. American Business-Journalist and Pulitzer -prize winner George Anders in his book, 'you can do anything: the Surprising Power of a 'Useless 'Liberal Arts Education (2017) writes that 'curiosity, creativity and empathy aren't unruly traits that must be reined in to ensure success. Just the opposite. The human touch has never been more essential in the workplace than it is today...the job market is quietly creating thousands of openings a week for people who can bring a humanist's grace to our rapidly evolving high-tech future.' To quote Alain Ducasse-

Renowned Chef 'We should share knowledge if we want to grow'. The knowledge system is like your savings. The more we add to it, the deeper it becomes. Philosopher Isaiah Berlin (1953) in his treatise 'The Hedgehog and the Fox' writes on the ancient Greek poet Archilochus idea on two types of thinkers; the hedgehogs –who see the world through a lens of single defining idea, and foxes –who see the world by soaking in all experiences. India is a huge country with so much cultural diversity. The strength of India lies in its huge and heterogeneous cultural practices inherited from the past. Creative content creation using AI, is a good way project our rich past. The deadly combination of demographic dividend, technology and policies, are going to help us to achieve the tag of developed country. The promotion of skill based courses using AI and other high employment potential courses, is the need of the hour. This is perhaps, a rational way to use the human capital to contribute to the economic growth.

## **II. From Ideas to Implementation and Development**

**1. AI Can Boost Rural Industries Based on Ancient Practices:** Mahatma Gandhi once said that India lives in villages'. While India may have progressed a lot through urbanisation, it is an undeniable fact that, even now our villages play a significant role. The cities and towns are centres of growth, but also suffer from congestion, pollution and other challenges. The Indians still have a longing for the old world charms and natural beauty of our villages. The popularity of Khadi and Charkha, which formed the symbol of our freedom movement, continues unabated. India has immensely promoted the Khadi products by setting up the Khadi and Village Industries Commission. As per the Ministry of Micro, Small and Medium Enterprises (MSME), the production of Khadi fabrics requires lesser water than the other fabrics. The Government encourages the use of solar power, through subsidies and promotes Khadi Industries. Hence, promotion of Khadi Industries, is a way to create employment through sustainable development, as it helps save energy, save water and also generate jobs. Countries like China, have successfully demonstrated to the world, on how to convert rural areas, into 'nerves of industrial development', through the 'bottoms-up' approach. The Modi Government's call for 'Vocal for Local' is also a way to use our traditional and local knowledge, to create employment opportunities. India's textiles, handicrafts products have a huge demand across the world. Traditional potteries, terracotta products are not only attractive, but also are hugely demanded for health reasons. There is an increasing demand for utensils made of mud/clay by health conscious people. This is again, an inspiration from our ancestor's cooking and eating styles. Also, there is increasing demand for organic products—from grains. Fruits, vegetables –which shows the revival of nature friendly products. AI can help in researching and designing products based on ancient India practices and make them available for consumers. This will enhance production and employment opportunities for our rural youths. We should take this opportunity to apply AI, to different facets of our traditional industries and utilise the 'demographic dividend' to get the best results. India needs to make the best policies, which are not only in tune with the latest technology but also include the 'treasures from our past knowledge, to harness the immense potential of tourism to develop the rural areas, to create employment opportunities and to achieve the goals of Viksit Bharat. AI can be useful in getting the GI (Geographical Indication) for certain products, specific to the place and hence can boost the popularity of the product and the place. From Kulhad wala CHAI to AI, great potentialities exist in India. As India is poised to become a developed country by 2047, it is, of great significance that, we utilise our productive potentialities in the best possible manner.

**2. AI And Scope for Tourism Promotion:** India, is one of the oldest civilization of the world. The vast geography and the heterogeneous culture speaks volume about the great country. India is blessed with large number of such places, which can be developed as tourist spots. Apart from historical tourism, health and good living and eco- tourism are also growing. From the caves of Himalayas and Khajuraho to the forests of Sunderbans, there is a vast abundance of information for seekers of knowledge. The Sun Temple at Konark, which is also known as 'Black Pagoda', dedicated to the Sun God, is a UNESCO World Heritage site, dates back to 13<sup>th</sup> century. Not only that, the beautiful white sand of the kutch region in Gujrat to the Andaman and Nicobar Islands, there is so much of local history that needs to be unravelled. The popularity of Kerala's panchkarma-oil massage, kumkummadi tailam, Kashmir's Saffron are some examples of our glorious beauty products, which are popular worldwide. The famous Muga silk of Assam, Murshidabad silk, the Benarasi silk are few examples of woven silk in existence since ancient times. The Bandhani tie-dye textile of Rajasthan and Gujrat are in huge demand, both domestic as well as by foreigners. Places like Udaipur, Jaipur attract a lot of tourist throughout the year. Delhi, the national capital city, boasts of relics of our past- that draws crowds, who enjoy the great architectural marvels of the Mughals, the Britishers. India is also known for its 'medical tourism' - the knowledge of our doctors and the cost of treatment, are the reasons for attracting patients, from far and wide. The recent 'Pran Pratistha' of Ram Temple at Ayodhya, is an example of our ethos, our rich past and how it can enhance 'the spirit of India'. Hence, it can be rightly said that India boasts of a rich and powerful past, that it is more than a country, perhaps, it is as vast as a continent.

## **Conclusion**

India has slipped from the rank of fourth largest economy, to presently the sixth largest economy. It is also the most populated, and one of the fastest growing economy of the world. In the present times, the role and scope of technology is omnipotent and ever expanding. Technology can annihilate time and distance. At a time, when the world is witnessing the 4th phase of Industrial Revolution- 4 IR, it is imperative, that we need to take the wisdom, from the huge repository of knowledge of our ancient culture and civilization to ensure a bright and egalitarian future. We should take this opportunity to apply AI, to different facets of knowledge and utilise the 'demographic dividend' to get the best results. India needs to make the best policies, which are not only in tune with the latest technology but also include the 'treasures from our past knowledge, to harness the immense potential of tourism, to create employment opportunities and to achieve the goals of Viksit Bharat. The goals for 'Viksit Bharat' by 2047,

can surely be attainable, when our human capital is synergised with latest technology and made productive, both qualitatively and quantitatively. The success stories of Japan, South Korea, Germany and many other countries stands evidence, about the role of empowering human capital and achieving high rates of development. Education and skill development, is the best way to empowerment. The Indian treasure of knowledge, has a significant role to play in the road to 'Viksit Bharat 2047'. Hence, let us harness the power of AI, to promote rural tourism and wellness tourism, which have immense potentialities, and are greatly untapped. AI is here to stay, and can be productively utilised to aid our inherent creativity, and help us achieve our developmental goals.

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