

## **Leveraging the Digital Economy to Drive Tourism Industry: the Chinese Example**

Ikenna Emewu  
Editor-in-Chief, *Africa-China Economy Magazine*,  
Lagos  
Email: ikeroyale@gmail.com

### **Introduction**

Some 30 years ago, in the University of Nigeria, Nsukka where the dignity of man was permanently restored in me, in then Department of Archaeology, my first degree project was on tourism development. I had a supervisor, Prof. Pat Uche Okpoko who taught me Environmental Archaeology. Last year July, I had the privilege of being with the same man that taught me environmental archaeology and tourism in faraway China through three provinces and six cities. We witnessed tourism at full blast, especially those centered on culture. That challenged us to take a deeper look at the possibility of doing what China has done with tourism, culture, and the environment. We agreed it was possible, at least to start.

I am proud to have been invited by my alma mater to talk on this topic of tourism again. I speak on it from a wider perspective over time than my degree project 30 years ago. In my reporting career as a journalist these past years, I have kept the fire of my love for tourism and the environment, at least smoldering. Today, the opportunity presents itself that I would have to discuss tourism possibilities looking at what China has done and tasking our minds to get up and do something.

China's enviable height in tourism was not achieved overnight, but over time through experimentation with policy, better policy, implementation, better implementation, the adaptation of technology, more technology, and better technology. Today, China's tourism is completely powered by digital technology, and they have honed that inclination so deeply and well that it gets better by the day.

Tourism is one the diverse and characteristically encompassing economic sectors in the globe. It is so large to verge into healthcare, education, leisure, business, agriculture, etc. The importance of travel and tourism is typified by its contribution of 10% to the global GDP or an equivalent of \$11 trillion in 2024 ([www.reuters.com](http://www.reuters.com), 2024). China's economy was turned around by Deng Xiaoping, who took over the leadership of the country after Mao Zedong. The vast idea of an open world in China that blended socialism with democracy to birth the amalgam China, and welded a communist economy with a capitalist

pro-market economy to produce what took China to the top, was from his education and economic tourism in France.

There is no economic activity that will thrive and advance in today's world if not latched to the hinges of technology, digital technology precisely. Digital economy is any and every aspect and sector of the economy driven by digital technology. Tourism is one of such sectors and is deeply impacted and influenced today by the digital rave. The use of digital technology to organize, enhance, manage, and transform the entertainment and tourism industry in order to reflect current realities of the information age is referred to as digital tourism. It strives to improve the quality of tourism products and offers the cultural resource manager multiple tools that can be used to market his/her products to the world via digital platforms and social media (Ezeadiche, 2023). The major factors that power tourism and its operations are the availability of tourism potential and how we harness it. By way of comparison, China has 59 UNESCO heritage sites, one spot less than Italy with the highest, and 40 of them are cultural heritage sites ([www.wikipedia.com](http://www.wikipedia.com)), while Nigeria has two UNESCO cultural heritage sites. China had 3,596 museums in 2016 (Emewu, 2021). Nigeria has 50 national museums managed by the National Commission for Museums and Monuments (NCMM) ([www.museum.ng](http://www.museum.ng)). In 2024, Nigeria's GDP had a 17.89% digital economy component; China's GDP during the same year had a 43.5% digital economy component. In 2024 also, Nigeria's GDP had a 3.6% tourism component, while China's economy had 7.3% of the GDP from tourism the same year.

In concrete terms, China's GDP in 2024 was about US\$19 trillion or RMB133 trillion. The 7.3% tourism content translates to US\$1.387 trillion. This figure from tourism alone is more than twice the entire ECOWAS US\$633 billion GDP in 2022 or more than the entire GDP of Saudi Arabia in 2023. The 3,589 museums in China, including 3,054 state-owned with a collection of over 20 million items, hold more than 8,000 exhibitions every year, and 160 million people visit. Some museums of cultural relics, such as the Museum of Qin Terracotta Warriors and Horses in Xi'an, have become internationally known tourist attractions. The government has exchanges of cultural relics' exhibitions between museums and promotes the display and exchanges of legal non-governmental collections. "Chinese art troupes performed 2.11 million times throughout the year, an increase of 21.9% year on year. A total of 25 China cultural centers have been put into operation overseas, organizing 924 cultural events, and attracting 2.8 million foreign audience members throughout 2015. These are all linked to digital enablers." (Emewu, 2021)

"According to recent data, tourism in Nigeria contributed approximately 3.6% to the country's GDP in 2022 as stated earlier, which translates to around \$1.73

billion in earnings (*www.Google.com*). At the dismal development stage of this sector, this earning highlights its potential for further growth, despite untapped opportunities. Assuring that the potential is way greater than we tap from it now, another source noted that "The Travel and Tourism market in Nigeria is expected to experience a significant rise in revenue in the coming years. By 2025, the projected revenue is estimated to be US\$3.77bn, and the market is expected to grow annually at a rate of 10.60%, resulting in a projected market volume of US\$5.64bn by 2029." (*www.statista.com*)

Our tourism pool components include ecotourism and cultural tourism, none of which unfortunately, receives adequate attention for growth either from the private or public sector. Nigeria's natural or ecotourism endowments are gold mines that would launch the country into a global economy giant if harnessed. From the mountains to the rivers, the waterfalls, the caves, the beautiful peaks, the diverse vegetation, flatlands, and valleys - these are all wealth.

Over 250 cultural groups make up Nigeria with more than 1,300 festivals all year round, an average of at least three festivals a day. Among the Igbo ethnic nationality for instance, there are over 30 traditional festivals and masquerade performances in a year. Nigeria's delicacies that could be developed into cuisine tourism are more than 2,000, and going around them would keep us busy and attract both domestic and foreign tourists. Our costumes are varied, beautiful, and rich enough to sustain the industry on the track of growth, just like our arts and crafts. In Ikot Ekpene in Akwa Ibom State, for instance, the people convert the coconut hard shell and the *udara* seed and shell into an amazing variety of crafts. But we do not celebrate them.

### **Shortcomings**

At the end of every year, millions of Nigerians travel within Nigeria and spend money on holidays, social events, family, and more. We do not have figures of how many traveled by road, by air, by train, or by water during the last Christmas, New Year, or Sallah celebrations and how much they spent on transportation. We leave all those to conjecture up till now. We do not have enough technology to enhance tourism or have not adequately deployed the ones we have.

Conversely, at the last Chinese New Year celebration or Spring Festival from January 28 and February 4, 2025 the reports of tours and travels were made public just a day after the festival ended. "China's Ministry of Culture and Tourism ... said China saw a record of 501 million domestic tourist trips during the 2025 Spring Festival holiday, up by 5.9 percent year on year. Tourist spending reached a record high of over 677 billion yuan during the period, a 7 percent year-on-year increase. More than 2.3 billion passenger trips were made across all regions in China during the holiday, including 96.26 million railway

trips, 2.18 billion road trips, 9.41 million waterway trips, and 18.24 million air trips. China recorded 14.37 million cross-border trips during the Spring Festival holiday, a 6.3 percent increase from the previous year and including 958,000 trips made by foreigners, according to statistics released by the National Immigration Administration ...” (english.www.gov.cn, February 2025).

We have extreme security challenges, including terrorism, banditry, kidnapping, extremist agitations, etc all of which hamper travel and tourism in Nigeria. We also lack value for our cultural endowment. In our world, cultural manifestations and works are sometimes called fetishes, and therefore demonized, and destroyed. But other worlds incorporate them into their cultural tourism pool. Ironically, when we visit such countries, we pay to go to the equivalents of what we set ablaze, destroy, and demonize.

We lack adequate conservation mechanisms. “Nigeria's Endangered Species (Control of International Trade and Traffic) Act of 1985 protects endangered species and wildlife.” Following this law, Nigeria is expected to comply with international treaties that provide for purposeful conservation and management of wildlife, and protection of endangered species from extinction. There are about 164 plants on the endangered species list as provided by this law. They include 16 critically endangered plants, 16 just endangered plants, and 132 vulnerable plants. Despite these provisions, the people that pose threats to these species do not know about such laws or the plants that belong to this list. “There are endangered birds, mammals, fishes, amphibians, and crustaceans, a list with a total of 292 animals” (Emewu, 2023). Indeed, we take conservation, a core factor in the sustainability of ecotourism components, for granted in Nigeria. This whittles down and wears off the possibilities of our tourism boom.

We have not also seriously incorporated many archaeological sites into our heritage pool to enrich our tourism. Places like Lejja, Umundu, and Aku iron works of antiquity, are tourism attractions we place no value on. But in China, such places are celebrated and developed to attract the world. The Longmen Grottoes in Luoyang City, Henan Province is a typical example of such sites, which attracts thousands of visitors daily in China. The museum at Igbo-Ukwu, with chalcolithic arts and artifacts, the oldest in Nigeria, is overgrown by weeds. The Ugwuele Acheulean stone axe sites at Uturu appear to be forgotten. Iwo Eleru Man’s provenance is worthless to the cultural tourism database of Nigeria. Yet our religious tourists pay handsomely to visit Mount Camel when the Mount Camel Man, is of the same age as the Iwo Eleru Man.

We lack awareness and are sometimes brainwashed to blame our misfortunes on our cultural artifacts. We therefore demolish and desecrate groves, and streams instead of harnessing them for tourism. In other words, our system lacks a sense of business and enterprise for those places. Even if the state and

institutions cannot manage them, they can be opened up for private-sector investment.

### **Digital economy application**

Before the digital or infotech age, transportation technology was the all-permeating and most impacting technology. Transportation also gave tourism the wings to fly. Today, infotech powers and moves transportation, thereby taking over as the all-conquering human invention. It has also endowed tourism with extra wings and mileage.

The following are some digital technologies that can be deployed in Nigeria's tourism.

- Use of AI or robotics
- Websites
- Adoption of the Internet of Things (IoT)
- Adoption of gadgets
- Smart health vital checks and diagnosis
- Digital documentation of tourist attractions
- Digital tracking of tourism items such as artifacts to curb theft or looting
- Digital security measures
- Online or virtual tourism and visits
- Availability of internet access
- Digital marketing, promotions, and payment
- Use of social media and mobile apps
- Digital antiquity restoration and management methods
- Online booking of travel, sites of interest to visit
- Adoption of adequate digital communication channels - for feedback, sampling, notices and information updates
- Digital literacy and training
- Digital weather monitoring and reporting
- Digital and automated data collection, analysis and reporting
- Smart parking space monitoring and access
- Relaxed, online, and smart visa application procedures

Chinese tourism and travel has already adopted all these applications and approaches. Consequently, China's tourism revenue has continued to grow in recent years. "With rising standards of living, the tourism industry in China experienced a substantial growth spur over the last decade. The Chinese tourism industry reported an 11.7 percent increase in revenue to around 5.7 trillion yuan in 2019, right before the COVID-19 pandemic. Being the fourth largest country in the world by land area, China provides a wide range of natural, historical, and cultural sites. China's tourism industry consists of domestic and international tourism. Around 5.6 billion domestic trips were

made in 2024. The number of foreign tourists visiting China that year ranged at only around 132 million” (Blazyte, 2025).

### **Digital drive**

The digital economy has been a prime factor in boosting Chinese tourism by “facilitating online booking platforms, personalized travel experiences, data-driven marketing, and smart tourism infrastructure, effectively increasing accessibility and demand for travel within the country, particularly through the integration of technologies like big data, AI, and mobile applications; this has allowed for a more efficient and tailored tourism experience for Chinese travelers while also driving economic growth in the sector ([www.chinaculture.org](http://www.chinaculture.org)). It is tourism driven by the digital revolution that took Chinese tourism earnings on a steady growth from RMB3.7 trillion in 2014 to RMB6.6 trillion revenue in 2019 before Covid-19 struck and crashed it in 2020-2022 at an average of 2.5. It started growing again from 2023 and 2024 to an average of RMB6.0 trillion ([www.statista.com](http://www.statista.com)), 2024.

Mastercard and Ant Group, owner of Alipay have collaboration on easy online payments for tourists. They created Consumer Friendly Zones in Beijing, Guangzhou, Shanghai, Chengdu, Chongqing, and some other places tourists visit to have their payments simplified in digital platforms that run in many international languages. For visitors to places in Beijing like Tian’anmen Square, and Great Walls such as Badaling, Mutianyu, Jinshangling, and Forbidden City, there are over 500 contactless payment spots aligned to the city railway system. This protects foreign tourists from the troubles of looking for ATM points or issues of currency exchange ([mastercard.com](http://mastercard.com), 2024). In 2022, the Online tourism market alone grossed RMB746 billion, that is \$7.6 billion, with 5G, Big Data, AI, and other tech effectively deployed (Li Yinga, et al, 2024, [www.tandfonline.com](http://www.tandfonline.com)).

### **Personal experience**

From my experiences having visited up to 50 tourism spots and cultural events in about 34 cities in China, spanning 21 provinces, the digital economy in Chinese tourism manifests in innovative ways:

- Robots deliver food and other orders in your hotel room

- Robots welcome you and check you into the room, take you around a tour facility

- Your supply could be flown to you via UAV or drones faster

- You book and pay online before proceeding to the tourism destination

- Logistics to the site, within the site, and from the site are available

- Flexible payment options are available

- Internet access is uninterrupted

- Internet and social media apps feed travelers with promotions and advertising

### ***Leveraging the Digital Economy***

Use of booking Apps

Constant online updates and intermittent information

Tourism facility websites contain details of what to expect and what is offered which helps in the growth of personalised tour

There are Onsite display screens and digital PR and simulation facilities that, for instance, teach you how to climb the Great Wall, the height, elevation, weather, likely experiences, and length of time before you embark on the climb.

### **Increased accessibility**

These tech options and incentives for tourism make it convenient for tourists, both local and international visitors to book, plan, and arrange for their accommodation, transportation, things of interest to see, and activities that may be skipped. The options a tourist chooses influence the budget for such trips. There is no guesswork on what a tourist will see on location as every activity is spelt out ahead of time for the visitor to make choices.

During the inauguration of the Belt and Road Initiative (BRI), a Nigerian journalist I traveled with who was a first-timer in Beijing and his friend took a bicycle tour of the Chaoyang District of the city and were guided by online city navigation guide in their ride that covered over 20km. In November 2019, I was in Kenya and booked a tourism trip to Nakuru to visit the Great Rift Valley. When the trip got underway with the tour company, we encountered a heavy traffic build-up on the major highway. With the use of the internet and Google Drive, we veered off the major road and were guided all through by tech until we cut off the traffic jam and saved so much time and fuel in the process.

### **Personalized tours**

Data analysis allows tourism operators to tailor travel packages and recommendations based on individual preferences and interests, enhancing the overall tourist experience.

### **Smart infrastructure**

There are technologies for facial recognition and QR codes at tourist attractions, which streamline entry processes and improve visitor management. I experienced this at the Beijing Film Museum and Technology Company on the Yellow Island of the city of Qingdao, Shandong Province. At the Qingdao place, tourists get the option to use Virtual Reality to have a replay of what the city looked like thousands of years ago as uninhabited fallow land.

### **Rural Tourism Development**

Digital platforms can also promote tourism in rural areas, connecting them to a wider market and creating new economic opportunities for local communities. Some practical instances I experienced were in Lhasa, Tibet (Xizang), the Giant Panda Sanctuary in Chengdu, and the Wenchuan earthquake site in Sichuan Province. The site of the 2008 China earthquake a little before the Beijing Olympic Games was a few years later built into a tourism attraction that yields hundreds of millions of yuan a year.

### **Marketing and Promotion**

Digital marketing strategies, including social media campaigns and targeted advertising, can be used to effectively reach potential tourists and promote destinations. Examples of digital economy applications that aid tourism marketing and access include:

Booking platforms - Ctrip, Qunar, and Fliggy

Mobile payment systems - WeChat Pay and Alipay

Virtual reality experiences - Immersive virtual tours of tourist attractions

Big data analysis - Utilizing data to understand tourist behavior and optimize tourism offerings

A museum in Chengdu, Sichuan Province called Sanxingdui Museum offers virtual tours using VR technology, allowing visitors to experience ancient civilizations in a new way. Digital processes do a replay of the place where ancient boats, stone tools, pottery, and porcelain were dug out from. They also replay simulated images of the people who lived in that generation, a form of digital forensic archaeological reconstruction.

### **China's Cultural Tourism**

The country is so steeped in culture and the value of identity. Although China has many cultural celebrations and festivals, the ones that attract national attention and holidays include:

Chinese New Year (Spring Festival)

Mid-Autumn Festival

Lantern Festival

Dragon Boat Festival

Qingming Festival (Tomb-Sweeping Day)

Hungry Ghost Festival

Digital inclusion has transformed these festivals into goldmines and brought them to global notice.

### **Conclusion**

From the point of view of a media reporter, an editor with eyes for scoops will always send a reporter to an area she/he has never been before for a special

assignment. The reason is that everything such a reporter sees is news. We once sent a reporter from Ekiti State who never visited South East Nigeria on assignment to Imo State. He came back with loads of reports, even a report of seeing women riding bicycles and motorcycles for the first time. In excitement, he narrated in the newsroom that he was amazed to see ladies doing such things. We asked him to put them down in a report because there are readers like him who never visited such places and will read it with the same enthusiasm as himself.

So, Nsukka for instance elicits such new things or surprises for first-time visitors.

Everything about Nsukka and University of Nigeria is news to a new visitor online or *in situ*. Instances of people selling foods called *ijiriji* or *okpa* some people never saw or knew is news. News actually means something new. Watching Ikorodo dance, *akatakpa*, *ori okpa* masquarade is exciting news to a first timer. The University of Nigeria landscape, commonly referred as the “soft green hills,” is an amazing awe, not excluding the newly refurbished Archaeology and Tourism Village with its local delicacies.

Let us start by putting University of Nigeria and Nsukka on the tourism website we create, invite internet users to take a virtual or online tour, and see how it works. Such experiments start free, but over time, every click attracts a fee that is paid before the site opens. This idea can be replicated in other destinations and sites in Nigeria to boost tourism. Thus, beyond words, let us commence the experiment of adapting the university and its environs as well as other viable destinations in Nigeria into platforms of digital economy-powered tourism. That is the best way to go.

## References

- Blazyte, A. (2024), Rural Tourism and Cultural Heritage in China; [www.gallatin.nyu.edu](http://www.gallatin.nyu.edu),
- China’s Ministry of Culture and Tourism (2025), Report of tours during the 2025 Spring Festival; [english.www.gov.cn](http://english.www.gov.cn).
- China is Rolling out the Virtual and Digital Red Carpet for Tourists (2024), [www.mastercard.com](http://www.mastercard.com).
- Contribution of Tourism to Nigeria’s Economy, 2022; [www.google.com](http://www.google.com)
- Digital Input and China’s Tourism; [www.statista.com](http://www.statista.com).
- Emewu, I. (2021), *supra*, page 23
- Emewu, I. (2021) China: Rise and Global Influence in the 21<sup>st</sup> Century, 2021
- Emewu, I. (2023) My Ancestors Shrine.
- How the digital technology drives China’s tourism growth,(2024), [www.chinaculture.org](http://www.chinaculture.org).

*Journal of Tourism and Heritage Studies*

Ezeadichie U. E. (2023), Digital Tourism and the Development of Nigeria's Cultural Resources, *Journal of Tourism and Heritage Studies*, 12(2):1-8

Li, Yinga, et al; The Development of Cultural Tourism in China, 2024, [www.tandfonline.com](http://www.tandfonline.com)

Nigeria's Travel and Tourism Market; [www.statista.com](http://www.statista.com)

Nigerian Museums and Monuments Commission, [www.museum.ng](http://www.museum.ng)

Tourism as a major factor in global economy's growth, (2024), [www.reuters.com](http://www.reuters.com).

UNESCO World Heritage Sites, [www.wikipedia.com](http://www.wikipedia.com)