

## The Influence of Information Systems on Tourist Arrival in the Gambia

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### Abstract

*This paper examines the new futures that develop because of using information systems in the Gambia's tourist and hospitality industries, focusing on the increase in visitor arrivals. Information systems have increased the number of tourists visiting The Gambia by promoting the country, providing information about its attractions and amenities, and making it easier to plan and book trips. This has enabled potential tourists to make well-informed decisions. The study uses the qualitative method with a review of the literature and primary data. According to the study, the functionality of information systems applications offers users data about hotels, travel information, and the allure of recreational products. The Gambia Tourism Authority (GTA) was established in 1982 to promote the Gambia as a tourist destination. It worked with tour operators to create holiday packages and relied on advertising and public relations to promote the Gambia. It participated in international travel fairs and exhibitions to showcase its attractions and culture and engaged in press releases and familiarization trips for travel writers. The Gambia's tourism industry has expanded its marketing efforts with information systems to include digital channels, such as internet websites and social media platforms, to promote the Gambia's natural beauty, cultural heritage, and hospitality. Personalization, localization, user-generated content, and integration can be used to attract tourists to the Gambia. Also, the information system aids in maintaining outstanding client contacts, fostering positive relationships, and ensuring longevity because of the new value chain. The global tourism industry has a complicated value chain, with IBTOs, OBTOs, and travel agencies responsible for overseeing how tourists interact with and experience each tourist site. E-commerce can both change an industry's structure and provide new business options, leading to the emergence of smart marketplaces.*

### Keywords

Information system, tourist arrival, The Gambia, value-chain



### I. Introduction

Tourism is a key player in the Gambian economy since its independence in the 1960s (Dieke, 1993a). As an industry, it has the potential to provide higher levels of income, many more wage-earning jobs, and increased tax revenue for the government. Locals are also employed in the tourist and transportation industries. It also fosters infrastructure development by constructing good roads, hospitality industry structures, and other positive tourism-related activities. Globalization has resulted in an ever-increasing influx of data, resulting in an information society. It's understandable that the advancement of computer technology, as well as changing user expectations and needs, influenced the development of information systems. Consumers may now access data and conduct financial transactions utilizing IoT (Internet of Things) (Li et al., 2018) technology that has a foundation, thanks to the introduction of internet-based apps. Big Data (the cloud) (Li et al., 2018), which

influences or disrupts client behavior patterns in the tourism industry either directly or indirectly, is becoming more dynamic and efficient. Despite significant advancements in information technology, the Gambia's tourism and leisure industries have fallen behind due to a lack of a comprehensive information system and have only lately begun to apply concepts. The importance of information technology in tourism has shifted from wired (internet-connected) to wireless (non-internet-connected) linked via mobile devices. Intelligent technological development (connected via sensors and cloud-based data storage) is ushering in an innovative tourism era (Gretzel et al., 2015). Traditional tourist techniques have given way to more information-based solutions. If Gambia wishes to gain from current tourism trends, it cannot afford to fall behind. One of the key outcomes would be increased awareness among tourist clients from source destinations, as well as among hotel sector stakeholders. It will also increase visitors' average daily expenditures as well as the incomes of tourism industry economic actors. The industry's jobs will be more diverse, regionally diversified, and satisfying. Increasing tax income will assist the government fight poverty. (African Development Bank, 2006).

Due to the significance of tourism to the global economy, numerous sites engage in a variety of strategies to attract visitors. Technology pertaining to information and communication (ICT) has altered worldwide tourist industry, and it can assist travel-related enterprises by opening up a variety of new opportunities. (Bhuiyan et al., 2013). Recent technological advancements have completely changed the way that tourists interact, explore information, and plan trips. Even though we live in a digital age, the internet is becoming a more crucial instrument for intercultural communication in the tourism industry. There are several factors to think about when running a business. It is impossible to overestimate the significance of organizational traits in establishing the firm's orientation. The organization considers both factors. Like this, a nation's tourist bureau oversees its travel industry. The organizational traits of the tourism agency are essential for creating the national tourism strategy. According to the research, the tourist planning process is connected to all institutional realities in the tourism industry. (Alnusairat et al., 2021).

Tourism has become more and more well-liked as a leisure activity in the twenty-first century. It is absolutely necessary to modernize industrial standards and boost managerial effectiveness. A geographic information system is the preferred medium for disseminating travel-related information. To provide effective and logical tourism administration, it can provide a wealth of travel management technology. (Wei, 2012). Geographic information systems (GIS) is a topic of study that combines disciplines such as geography, computer engineering, math, statistics, management, cartography science, and surveying (GIS). Real estate development, land use planning, urban planning, preparedness for natural disasters and mitigating their effects and business are just a few of the areas where GIS is frequently employed. (Wei, 2012).

## II. Review of Literature

### 2.1 Previous Studies

Information systems as a concept has developed substantially throughout time. Each decade saw advancements in the field of use, allowing for speedier service, higher quality, and a shift in consumer behavior. The large amount of different forms of information, as well as its collection and screening, storage, handling, and introduction, all became key parts of a tourist industry organization's development (Malcienė & Skauronė, 2019). The World Wide Web (WWW) has grown in popularity since its creation in 1993, thanks in part to its user-friendly, platform-independent user interface that enables rudimentary multimedia

functionality (Hendler & Berners-lee, 2010). The WWW provides considerable benefits to both the information producer and the user as compared to traditional media. Not only is the information provider able to visually depict even complex facts in an appealing and accessible manner, but he or she is also able to deliver information in a timely and cost-effective manner. The medium's spatial and temporal availability, convenience of use, and capacity to exchange information or even execute business transactions with the information source benefit the user the most. While the WWW was originally designed to interact and attract customers by showing the company and the products it offered, it is now increasingly being used for electronic commerce. More than half of all Internet users in the United States purchased something online in 1996, resulting in sales of USD 500 million. These figures are severely understated since they exclude customers who accessed the internet before making a purchase in person. Retail Internet sales are expected to reach USD 100 billion by the year 2000, according to analysts. (Pröll et al., 1998). The tourism and leisure industry necessitates a wide range of information system applications, from commonly utilized processes for dealing with digital tables, message, and data sets to tailored programs that supply automated labour for unique tourist businesses. The cross-organizational business process in a business network that needs to be optimized in terms of synchronized work-sharing of network members is the main design subject of collaborative production. As a result, enterprises can characterize sub-processes as services and link them to process chains in a flexible manner using the service-oriented approach (Cuenca et al., 2014). Users of tourist products can connect directly with tourism service providers as a result of the extensive usage within the context of the tourism business of information and communication technology.

Tourism information products are current and accurate. The correctness and currentness of the material of a tourism information system are crucial to its effectiveness. Because certain tourism information is changeable, such as prices, schedules, events, opening hours, and weather forecasts, this is a challenging task. If the data is found to be incorrect or misleading, the system may lose its credibility. However, it is a common practice for tourism information providers to fill out questionnaires, which are subsequently sent to the system provider on a regular basis for further electronic processing. Such a time-consuming maintenance approach would not be followed by a large tourism database, resulting in erroneous and error-prone data. One of the most significant needs, especially when reserving online, is that the rates and allotment are always accurate and up to date. As a result, operations in the tourism information system must allow for the provision of high-quality tourism data. (Pröll et al., 1998)

The GIS system used for tourism management and services is known as a Geographic Information System (GIS). Travel data is collected, updated, managed, displayed, searched for, and analyzed by TGIS using engineering and information science theory and practices. Offering prompt, precise, and convenient services is the ultimate goal of TGIS. GIS has the capacity for both information gathering and storing as well as information processing and analysis, so that it may provide solutions to tourism planning through two perspectives. GIS may provide travel information enquiry services and has great data storing capabilities from the viewpoint of tourists. Due to space restrictions, detailed scenic status cannot be provided on traditional tourist maps that are printed on paper. Data maintenance is very easy with GIS and it has very powerful image editing features. The cost of the plans can be significantly reduced, and traditional mapping's laborious process can be avoided. The robust spatial analysis feature of GIS is frequently used in urban planning. You can analyse the natural and human landscape from space

using GIS's spatial analysis capabilities. Meanwhile, GIS is also well-suited to data mining, which could benefit travel administration.(Wei, 2012).

The Tourism, Transport, and Communication division of the Gambia Bureau of Statistics has published its initial report on Information and Communication indicators. The report focuses on how people utilize as well as access to technology for information and communication. (ICT) infrastructure in terms of internet subscriptions, call volume, tariffs charged, employment, the number and types of broadcasting media, the percentage of the population with access to ICT, and the ICT Development Index (IDI). The significance of ICT in a country cannot be overstated, since it may contribute to economic growth in a range of sectors, such as health, education, agriculture, tourism, etc. Improved communication networks have made the world into a global village by promoting the dissemination of information and knowledge. As a result of utilising ICT products and services, social bonds have been strengthened. In addition, the general population's access to education has increased, demanding a report on the country's ICT position in order to facilitate better planning. (Tourism Establishment Survey Report (2018), 2018).

The concept and theoretical underpinnings of smart tourism are examined in the first essay, "Social constructionist Studies of the Smart Tourism," by (Gretzel et al., 2015). It suggests that the Internet and mobile devices are influencing new business models, behaviour patterns, and tourism destination image management and marketing issues. The constructivist paradigm and related research methods are used to understand smart tourism as soft power. Second article: "Social Media and the Tourist Influence of Music." Sehwan Oh, Joong Ho Ahn, and Hyunmi Baek analyze the influence of multimedia social networks on music-inspired tourism in their essay A Study on the Relationship Between Popular Music in Korea and Tourists from Outside. This study demonstrates that the number of visitors coming to Korea is correlated with YouTube clips of Korean pop music (Koo et al., 2015).

Data system success requires completeness, correctness, format, and currency. Nonetheless, research has enhanced e-commerce information systems. For e-tourism to adopt cutting-edge technology, build communication system performance from system, information, and service quality Jon (2010). Information system quality is outlined in e-tourism as services and products that satisfy customers' wants and needs. Customers can acquire schedule services, trustworthy data at anytime and anywhere, as well as speedy information. Companies' internet websites offer integrated platforms for fast, cheap travel (Masri et al., n.d.). Tech-savvy economies boost productivity. 1.8 billion corporations use the Internet, with 2.2 billion expected by 2013. Africa and the Middle East have grown by over 1,600% in the last nine years, as have all overseas industries. (Bere, 2014).

Tourism interpretations depend on information presenting style, media type, and other factors. Wolf and his colleagues found that tech media interpretations are much more efficient than regular mainstream press interpretations (Huang et al., 2022b). Weng and colleagues discovered that tourists' judgments of the value of the resources related to culture and nature differed (Huang et al., 2022b) (2022a). Austin discovered that the choices, opinions, and satisfaction levels of African American and Caucasian tourists differ significantly. Ballantyne and colleagues compared the on-site experiences of heritage interpretation shared by Chinese and non-Chinese visitors to a cultural heritage site, finding differences and similarities. Chinese visitors' connections between poems, philosophies, and stories about the environments were dubbed "Chinese spectacles by Xu and her team" (Huang et al., 2022a).

### III. Research Method

This study is going to use qualitative methodology that included both secondary data and a literature review. Data on the number of visitors arriving during two distinct times periods. The period in which there was no information systems and the period when there are information systems. These are secondary data. The data were cooled from the Gambia government source, Gambia Breaux of Statistics, and other literatures respectively. The study will examine the extent to which these two periods were affected by the prevailing condition in respect to the tourist arrival. The results of the differences in the annual tourist arrivals in the Gambia during the periods under review, the period the information system was non-existent and the period the information system is flourishing. This is because tourism-related data is not readily available to get, and the industry is dominated by international stakeholders and as well tourism is seasonal in the Gambia. This makes it difficult to acquire the necessary data for research. But notwithstanding, there are literature and some secondary data available from the Gambia Government source on the annual arrivals of tourist in the Gambia. I am going to use this information sought from government source to compare the arrival of tourists in the Gambia within these two periods. The period when there was no information system and the era of information system.

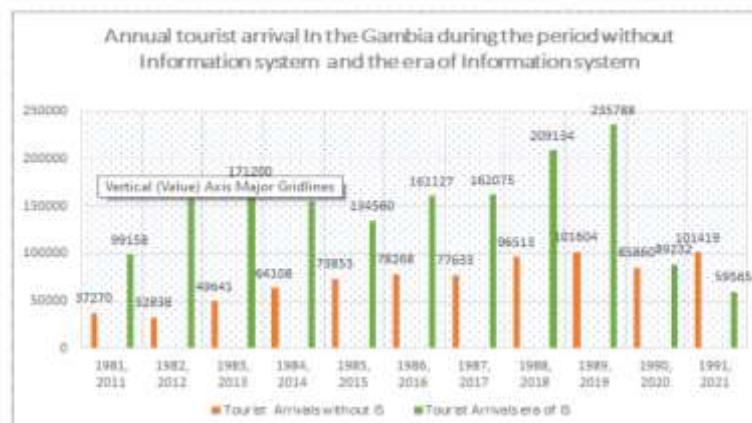
**Table 1.** Tourist arrival during the period of no Information system.

Year	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991
<b>Tourist Arrivals</b>	42752	37270	32838	49641	64108	73853	78268	77633	96513	101604	101419	101419

Source : created by the author of the article with data from *The Gambia (Dieke, 2017)*

**Table 2.** Tourist arrival during the Period of the of Information system.

Year	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Tourist Arrival</b>	99158	157323	171200	155721	134560	161127	162075	209134	235788	89232	102460



Source : created by the author of the article with data from *The Gambia Bureau of statistics 2022 and The Gambia (Dieke, 2017)*

**Figure 1.** Comparison of the tourist arrival during the period without Information system and the era of information system.

Table 1 depicts the years from 1981 to 1991, the Gambia's tourism business did not employ an information system because at that time the technology was not developed or available in the country. Since the Gambia did not have the necessary infrastructure to support information systems during this time, therefore, it cannot use the system for the nation's tourism and tourism-related activities. During this time, The Gambia promoted its travel and tourism industry and products using conventional and conservative methods. The tourism is seasonal, from October to June and largely Managed by the international tour operators. The marketing of the tourism products then was done conservatively in the form of through Travel agents, tourism information centers, flyers, print/digital brochures, promotional marketing services, and tour operators and these are indirect traditional distribution channels. Generally, these are mainly the main source of information for tourism product from the Gambia.

Table 2 displays the period from 2011 to 2021 during which The Gambia's tourism industry makes use of various kinds of information systems in the tourism sectors. The establishment of the country's information technology infrastructure and use of its services by those involved in tourism at this time. For instance, the use of the internet, emails, social media, and smart phones, and all other technologies and innovations made it possible for both the tourist sources and tourist destinations to interact without any intermediaries. This helps enhance the total quality of the ultimate product. Information systems are used in the tourism industry to enable tourism consumers to identify, customize and acquire tourism services and products. It helps develop, manage, and distribute offers to tourism consumers worldwide.

Figure 1 is a histogram showing the number of tourist arrivals in the vertical axis and on the horizontal axis are the year for the two-period highlighting the number of tourist arrivals in a year. The brown bins represent the number of tourists arrival during the period without information system (1981 - 1991) and green bin represent the tourist arrival in the period of information system (2011 – 2021).

## **IV. Research and Discussion Results**

### **4.1 Tourism and System Information in The Context of The Gambia**

Before the advent of information systems, the Gambia's tourism industry was marketed through traditional means such as print media, travel agencies, and word-of-mouth. The Gambia Tourism Authority (GTA) was established in 1982 to promote the Gambia as a tourist destination. The GTA worked with tour operators to create holiday packages that included flights, accommodation, and excursions. In the absence of information systems, the GTA relied on advertising and public relations to promote the Gambia. The authority participated in international travel fairs and exhibitions to showcase the Gambia's attractions and culture. The GTA also engaged in press releases and familiarization trips for travel writers to generate positive publicity for the Gambia.

Money generation is one of the most important contributions tourism makes to the Gambia's economy. It provides employment for those in the tourism business and encourages the improvement of our civilizations and cultures. Significant contributions to the national economy are made by the tourist industry, which accounts for 16–20% of GDP and employs around 41,800 direct and 65,500 indirect workers. (Ministry of Tourism and Culture, 2019). Over the past five years, it has attracted US\$ 45 million in foreign investment, enabling it to offer the essential air cargo services to support the expansion of other subsectors in The Gambia (shellfish, horticulture, and other international business activities).The tourism industry in The Gambia is seasonal. In recent years, The Gambia has

experienced constant expansion: travel packages, which frequently include flights, ground transportation, and hotel bed and breakfast lodging, account for 84 percent of the guests, who are almost all tourists. (Ministry of Tourism and Culture, 2019).

Given the sector's dynamics and the highly competitive e-market, practically all stakeholders have put their plans into action. Tourism has also become a playground for newcomers, whether they are startups or firms in the media and IT industries. Tourism is an information-based industry; thus, it fits quite well with their backgrounds. A trend toward increased specialization and the continued deconstruction of the value chain may be seen, as well as the integration of players and goods. Companies compete and collaborate at the same time, and industry lines are merging. Every market participant is impacted.

- Tourists are addressed by a greater number of participants, and they have a greater say in the services they receive, such as through reverse-auction sites.
- Because travel agents perceive their sales channel's strength dwindling, they are focusing more on consulting and more complicated items.
- Internet travel sites are focusing on individualized intelligent tools for travellers offering new market functionality and technology.
- Within destinations, destination management organizations are experimenting with new collaboration models. As a consolidator and aggregator, they will play a new role here.
- Tour operators will find it difficult to differentiate between individual and packaged tours by mass-customizing and allowing for flexible combinations.
- Suppliers will form more partnerships and boost electronic direct sales, resulting in more pricing competition and differentiation. Customer processes such as computerized ticketing and automated check-in will also be redefined.

As a result of these developments, the market is evolving in a way that can best be described as a constant interaction between concentration and the simultaneous entry of new competitors. The rising complexity of this evolution necessitates technological advancements to provide greater consumer services such as transparent access, market overviews, and price comparisons.

## **4.2 Growth and Nature of Tourism Development in the Gambia**

According to (Dieke, 1993b), The Gambia was not known as a tourist destination prior to 1965; in the years 1956–1966, there were only 300 foreign visitors overall; this number increased to 21,000 ten years later; and, by 1978–1979, it had reached 26,000. However, since 1979, arrivals have been sporadic and can be attributed to a variety of factors. The overall hotel network's average bed occupancy rate between 1988 and 1987 was 45%. The annual bed occupancy rate would be close to 58.1% if one includes visitors who travel by air charter as well as regular travellers. Although there has been significant growth in the tourism industry in The Gambia over the past 40 years, arrivals have been sporadic, which can be attributed to a variety of factors. Due to structural modifications and additions made by hotel operators during the same time frame, the number of available hotel beds has rapidly increased (Dieke, 1993b).

### 4.3. Information System and the Trend of Tourist Arrivals in the Gambia

**Table 3.** Tourist arrival Analysis during the two different period of with and without information System

Period	Total arrival	Average monthly arrival	Percentage increase
1980 to 1991	799,007	72,637	
2011 to 2021	1,677,778	152,525	110%

*Source:* created by the author of the article with data from The Gambia Bureau of statistics and The Gambia (Dieke, 2017)

**Table 3** depict the analysis of tourist arrival in the Gambia prior to the availability or the existence of information system in the Gambia and the period the information system is kicking and running in the Gambia and around the globe. From 1981 to 1991, the total tourist arrival in the country was 799,007 with 72,637 average monthly visitors to the country. In this period, the tourism information was only available in the traditional or conservative form such as travel agents, tourism information centers, flyers, print/digital brochures, promotional marketing services, and tour operators and these are indirect traditional distribution channels. From 2011 to 2021, the total tourist arrival in the country was 1,677,778 with 152,525 average monthly visitors in the country. There is a marked increase of about 110% increase in the visitors' arrivals. In this period, the information system and its infrastructure in used in the tourist and its related activities. In this period, the use of the internet, emails, social media, and smart phones, and all other technologies and innovations made it possible for both the tourist sources and tourist destinations to interact without any intermediaries. Information system makes it possible to use internet search engines to enquire and find out any tourist source information and destination easily.

### 4.4 The Value Chain, Intermediaries, and Tourism in the Gambia Before and During Information System

A significant portion of the small dispersed worldwide suppliers that make up the global tourism business. This is made worse in Third World countries by remote locations, small domestic markets, and shoddy infrastructures. Utilizing the expertise of numerous intermediates, the industry has established a complicated value chain. Local travel agents, incoming tour operators, outbound tour operators, and destination service providers make up the chain. Tourism suppliers and producers include destinations and final service providers. These include hotels, bed-and-breakfasts, restaurants, safaris lodges, game parks, cinemas, museums, boating companies, bus companies, airlines, and vehicle rental businesses. Tourists' contacts and experiences with each tourist destination are overseen by inbound tour operators (IBTOs)(Wynne et al., 2001).

### 4.5 Value Chain Roles and Duties

The value chain and market actors are summarized here. IBTO, OBTO, and travel companies address destinations and final service providers.

#### a. Locations and Ultimate Service Providers



They produce and distribute goods and services for the travel industry. These businesses include those that run hotels and bed-and-breakfasts, eateries, safari lodges, amusement parks, theatres, musketeers, boating companies, transport companies, aviation services, and vehicle rental agencies. In a larger sense, we define them as the organizations in charge of overseeing how each tourist interacts with and experiences each tourist site. Typically, final service providers are small to medium-sized enterprises with financial limitations, marketing knowledge, and technological infrastructure. They typically only meet a handful of a traveler's vacation needs; each one only keeps a little portion of the money. Destinations are frequently dispersed geographical areas, and particularly across Africa, might not be served by advanced infrastructure. They had limited options for getting in touch with the client directly before the invention of the information system, specifically Internet. Many will satisfy both local and foreign tourists' tastes. Even though they may not even consider themselves to be in the tourism business (such as theatres and restaurants), these may be crucial to the ultimate experience of every visitor. The service providers' operations are naturally physically demanding.

### **b. Inbound Tour Operators (IBTO)**

An IBTO is a business that specialises in a certain sector of the tourism industry. The IBTO's areas of competence will frequently be safari and adventure excursions. IBTOs help the sector by imparting their vast expertise on local tourist attractions, customs, and culture. They reduce the cost of finding more actors in the value chain by often using destinations, which also makes it simpler for transactions between those destinations and other participants to become routine. A firm like Gambia Tours, which offers bus tours for groups of international tourists to various destinations, or a company like Safari Gambia, which arranges safari excursions around the country, are both examples of IBTOs. Because tour operators in other countries lack an in-depth understanding of the local market and customs, they are unable to make all the necessary arrangements. Therefore, it is essential for those tour operators to have an organisation in the country that is hosting them to guarantee that everything goes smoothly and to whom they can turn to help solve any unexpected problems. Because foreign tour operators lack in-depth understanding of the local marketplace and customs to undertake all special preparations, it's indeed essential that they have a local agency to guarantee all goes smoothly and to whom they can approach to resolve unforeseen issues.

### **c. Outbound Tour Operators (OBTO)**

A typical OBTO has its headquarters in a developed country and offers pre-planned excursions to several different destination countries. They lower the expense of the tourist's trip by providing a wide variety of excursions around the globe. Many of the larger travel agencies also handle OBTO responsibilities. These businesses generally control the value chain, and their marketing departments are typically robust. They distribute pamphlets periodically that contain details and comparisons about each of their locations, making them the main source of marketing material for potential tourists. They do all the intermediary's responsibilities. Instead of making direct arrangements while travelling, they typically collaborate with a variety of local IBTOs to plan excursions on their behalf. However, they do not accept business travellers, who typically forego OBTOs, or independent travellers who wish to arrive in a nation and make their own arrangements. Typically, they collaborate with IBTOs to organise more specialised, but more expensive, excursions for affluent tourist groups. Tour companies are primarily responsible for driving the Gambia's tourist industry. Tourism in Gambia has expanded enormously with the help of foreign travel organisations.

The Gambia Experience UK, Thomas Cook UK and Northern Europe, Ving Norway, and Ving Sweden are some of the OBTO member companies.

#### **d. Travel Agents**

In many ways, travel brokers are valuable. Due of their proximity to the tourist, they help them by conducting a lot of their searches on their behalf. They can tailor a vacation to suit each customer's needs, unlike tour companies, and are more able to accommodate the specific needs from each tourist. Independent travellers, guests on business trips, tourists, and tour groups can all be catered to by them. They automate transactions and payments thanks to their access to booking systems, and when combined with their years of experience and in-depth knowledge of the sector, they also make searching easier. In addition, they act as aggregators by keeping a wide variety of OBTOs' brochures on hand, allowing customers to select their vacation from a wide range of diverse options. They are best positioned to develop relationships with clients because they are the middleman closest to them. The market for corporate travel is a good example of this.

#### **e. Information System, Tourism, And the Gambia's Value Chain**

The Gambia tourism value chain consists of international tour operators, airlines, ground-tour tour operators, passenger management at airports and hotels, food and beverage service, hotel and restaurant operations, shopping, expeditions, and other discretionary expenditures. The international tour operators, airlines, and hotels at the destination absorb much of the value, according to a value chain analysis of the travel package itself (Green Season contributes for around one-fifth of the package cost and reaches a high of nearly one-third of the more expensive wintertime package.) (Ministry of Tourism and Culture, 2019). The discretionary or out-of-pocket expenditure of visitors helps the Gambian tourist industry in some ways. Just under a third of the tourism value chain is made up of food and drink, shopping, and excursions.

Although people are employed in the tourism business, little is known about the indirect relationship between the supply of food from farm owners and fishermen, many of whom appear to be participating in the tourist value chain, and the demand for it from hotels and restaurants that serve tourists. Most of these individuals are locals who are not employed in the information technology industry.

Because they enable more tourists to be aware of Gambia and the tourist products offered, information systems and tourism have significantly boosted the country's tourism business. As a result, we have seen a significant increase in the number of tourists visiting the Gambia, which has increased the opportunity for people to work in the tourism sector directly or indirectly. It has increased employment in almost every sector associated to tourism. It has increased the number of jobs in the transportation industry, the number of businesses selling goods to tourists, and the number of farmers who provide vegetables and dairy products to hotels and restaurants. Also, there are more retailers of beverages. Yet even though all of these adjustments have been made to benefit the tourism industry, it is unclear how much of a role the information system has played. due to the fact that, the majority of those who are necessary for these tourism-related activities are illiterate. Most of these people are locals, and most of these individuals possess little or no knowledge of the information system and its advantages.

Knowledge of foreign languages is crucial because while travelling alone, you must acquire a variety of knowledge about the destination you plan to experience because not all this information is available in the Gambia. Consumers can still access out-of-date information and the fact that consumers can still access out-of-date information and that only

a limited fraction of recreational and tourism products can be purchased online should be highlighted. Small travel companies in the Gambia do not want to invest money in their websites. Another problem that prevents people from using online systems is mistrust, as these platforms typically provide unreliable, unclear, and deceptive information.

## V. Conclusion

The use of information systems has a substantial effect on the number of tourists visiting The Gambia. Information systems aid in promoting the country as a tourist destination, provide potential tourists with information about the country's attractions and amenities, and make it simpler for tourists to plan and book trips. Utilising online marketing and advertising is one method by which information systems have promoted The Gambia as a tourist destination. By establishing targeted online campaigns and utilising social media platforms, The Gambia increases its exposure to potential tourists and highlights its distinctive offerings. The information systems have also provided prospective visitors with extensive details regarding The Gambia's attractions and amenities. This includes information about hotels, restaurants, and local attractions in addition to information about the country's culture, history, and geography. By providing exhaustive information, potential tourists can make well-informed decisions about traveling to The Gambia and better organise their trips.

Tourism and travel have shown how e-commerce can both change an industry's structure and provide new business options and new value chains. The implementation of more specialised services, adaptable network setup, and improved customer integration will lead to the emergence of smart marketplaces. This development is made possible and enforced by the underlying scenario of pervasive information technology, demonstrating that tourism is an exciting area for application and study. As a result, other businesses might be curious to take notes from this development and comprehend newly developing e-marketplaces.

An examination of the current studies has shown that leisure and tourism business demand a wide variety of information systems, from standard ones for managing databases, electronic tables, and text to specialized programs that automate labour for specific tourist companies. Leisure and tourism organisations employ several information technologies, including booking systems, the world wide web, satellite tracking systems, and e-commerce platforms, social media, online travel firms, mobile applications, personalisation, localization, user-generated content, and integration can be used to attract tourists to Gambia and to assist the operation and growth of the tourist industry services companies. And because of information system, even though its infrastructural development in the Gambia is still requires some improvement compared to the developed world but still it has contributed markedly the number of tourists arrivals in the country from 2010 to 2021.

The most recent information platform enables the user to easily design an individual "tourism experience," according to an analysis of consumers' utilisation of information systems and purchases of leisure and tourism items. Also, the value and competitiveness of firms in the tourism sector are increased using information technology systems. The study's findings indicate that the Internet, electronic payment and reservation systems, and these systems all work best for meeting the individual demands of customers in the travel and leisure sectors. The investigation also found several issues with how new information systems were installed from the perspective of the clients. There is a lack of 24-hour online support, restricted use of various payment methods, and inadequate system functionality.

The ability of consumers to enjoy and be content with tourism and leisure goods is constrained by all these issues.

### **5.1 Constraints and Recommendations**

The expansion and development of the tourist sector are in the best interests of the Gambia since it provides significant direct and indirect advantages to all parties involved. Demand for the goods and services offered by everyone involved directly or indirectly in The Gambia's tourism value chain, including the poor, will increase as the business develops. The portion of that pie that goes to the poor will increase considerably because of targeted programs. The primary barriers to the expansion of the tourism sector in The Gambia are discussed in this section, along with some recommendations for how to do so.

### **5.2 Unreliable and Inadequate Infrastructure**

Two factors limit the growth of the tourist industry in The Gambia's and its economy activities. First, the develop of the tourism industry is in fact constrained by the absence of various types of economic infrastructure. For instance, because it was not previously served by asphalt roads, the majority of the Tourism Development Area (TDA) could not be developed. The Gambia has pledged to fast draw more tourists and upmarket visitors, but it doesn't seem to be able to build or manage the infrastructure required to fulfil this growing demand.

It is important to tackle the problem of supplying economic infrastructure from two directions. It is understood that some form of concession should be made, but first, the utilities parastatal's operation should be improved as soon as possible to satisfy the rising demand from tourists. Second, the state-owned TDA's initial plan was for some of the value improvement, the progressive increased land values that results in the approval of tourism development projects, to be used as a means of funding infrastructure development (Mitchell et al., 2007). The rates that developers pay for tourism land have stayed steady for the past three decades since the TDA was founded, which has decreased the potential of this source of financing.

### **5.3 Demand Is Seasonal**

From the standpoint of the destination, the seasonality of tourist demand poses a serious obstacle to the growth of the industry. Better marketing and providing a more varied tourism product are two strategies to lessen seasonality, as discussed in the sections below. External control on the availability of incoming tickets is noted as an impediment to tourist growth in the Master Plan for The Gambia and preceding tourism strategy documents. Since chartered aircraft is the only practical means of accessing the country's major source markets, international tour operators effectively have total control over how tourists arrive in The Gambia.

However, according to statistics from the Gambia Civil Aviation Authority, inbound seats from the principal European and American source markets might reach 173,000 in 2006–2007. This is more than 40% greater than the actual number of tourists who arrived in 2005, which was 110,815. (Mitchell et al., 2007). Despite no discernible rise in destination marketing initiatives, The Gambia has seen a significant growth in incoming seats from charter operations. There is questionable empirical data to back up the accusation that tour operators are limiting the number of seats available for tourists visiting The Gambia (Mitchell et al., 2007) (Faal, 2006)

### **5.4 Governance and Making Policy**

The government only owns and has equity in one hotel. It has several policy or strategy initiatives. The Gambia's tourism policy is quite extensive, generally can be helpful, and frequently disregarded when it comes to actual implementation. It is impressive how many tourism action plans have been produced over the past 20 years from various sources. Aside from the government selling off, the action plan recommendations made during this period strongly concur with one another but have simply not been put into action.

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