

Learning the Tourism Management Information System for Kayah State in Myanmar

¹Hlaing Htake Khaung Tin, ²Yi Mon Thet

^{1,2} Faculty of Information Science

University of Computer Studies, Yangon, Myanmar

Email: hlainghtakekhaungtin@gmail.com

Abstract: *The tourism is a main component of one's country economy. Tourism Management Information System (TMIS) is the electronic delivery of market research information and decision support tools for the tourism management. TMIS is a platform for tourism associations to exchange data/ information/ knowledge. This system provides TMIS for Myanmar; the case study is Kayah State. Myanmar is the strong tourism resources. Tourism in Myanmar has been developed mainly by the government, but many private enterprises do exist, catering to a wide range of tourists. The main objective of the TMIS realization and implementation is represented by the growth of the tourism activities efficiency, of the hotelier management and of the customers' relations quality. This paper provides new technologies which allocate the resources existent in tourism contribute to the services improvement.*

Keywords: *Tourism Management Information System; Kayah State; Myanmar; Information System.*

1. INTRODUCTION:

Tourism Management is the leading international journal for all those concerned with the planning and management of travel and tourism. Tourism comprises a multitude of activities which together form one of the world's fastest growing international sectors. Tourism in Myanmar is a slowly developing sector. Although Myanmar possesses great tourist potential and attractions in many fields, much of the industry remains to be developed. Also, the number of visitors to Myanmar is small compared to her neighbours - even outpaced by Laos. This is primarily due to its current political situation. However, after the junta transferred power to the civilian government, the tourism sector saw an increase in tourism arrivals and in 2012, tourist arrivals surpassed the one million mark for the first time.

In 2013, the Tourism Master Plan was created, targeting 7.5 million arrivals by 2020. Tourism in Myanmar has been developed mainly by the government, but many private enterprises do exist, catering to a wide range of tourists. Since 1992, the government has encouraged tourism in the country. In 2010, 791,505 foreign tourists visited Myanmar, with 295,174 foreign tourists entering the country via Yangon International Airport. In 2012, more than 1 million foreign tourists visited Myanmar and that figure is expected to rise to around 1.5 million in 2013. In 2013, the number of foreign arrivals reached more than 2.04 million, counting both air and overland arrivals.

Tourism has been promoted by advocacy groups as a method of providing economic benefit to Burmese civilians, and to avoid isolating the country from the rest of the world. So long as tourists are fully aware of the situation and take steps to maximize their positive impact and minimize the negatives, we feel their visit can be beneficial overall. Responsible tourists can help Burma primarily by bringing money to local communities and small businesses, and by raising awareness of the situation worldwide." [1]

Kayah State is a state of Myanmar. Situated in eastern Myanmar, it is bounded on the north by Shan State, on the east by Thailand's Mae Hong Son Province, and on the south and west by Kayah State. It lies approximately between 18° 30' and 19° 55' north latitude and between 94°40' and 97° 93' east longitude. The area is 11,670 km² (4,530 sq miles). Its capital is Loikaw. The estimated population in 1998 was approximately 207,357, according to UNICEF. It is inhabited primarily by the Karenni ethnic group, also known as Red Karen or Kayah, a Sino-Tibetan people.

Ethnographers classify anywhere from seven to ten ethnic groups as native to Kayah State. In addition, Shan, Inthar, and Bamar live in the north and Pa-O in surrounding hills. Each group is also known by more than one name. Clearly, ethnicity in Kayah State is a complex issue, made more complex by the current political situation. According to the 1983 census conducted by UN and the Burmese government, the Kayah composed 56.12%, while Bamar (17.58%), Shan (16.66%), Karen (6.45%), mixed races (2.08%), and other groups formed minorities. Ethnologists distinguish the following linguistic groups in Kayah State. [2]

This paper organized 6 sections for TMIS. In section I, described the brief introduction of Myanmar. History of background theory, type of information system, challenges and future plan and conclusions sections also provided in this paper.

2. HISTORY OF BACKGROUND THEORY:

One of the earliest definitions of tourism was provided by the Austrian economist in 1910, who defined it as, "some total of operators, mainly of an economic nature, which directly relate to the entry, stay and movement of foreigners inside and outside a certain country, city or a region." Hunziker and Krapf, in 1941, defined tourism as "the sum of the phenomena and relationships arising from the travel and stay of non-residents, insofar as they do not lead to permanent residence and are not connected with any earning activity". In 1976 Tourism Society of England defined it as "Tourism is the temporary, short-term movement of people to destination outside the places where they normally live and work and their activities during the stay at each destination. It includes movements for all purposes." In 1981 International Association of Scientific Experts in Tourism defined Tourism in terms of particular activities selected by choice and undertaken outside the home environment.

The United Nations classified three forms of tourism in 1994 in its Recommendations on Tourism Statistics: Domestic tourism, which involves residents of the given country traveling only within this country; Inbound tourism, involving non-residents traveling in the given country; and Outbound tourism, involving residents traveling in another country.

The UN also derived different categories of tourism by combining the 3 basic forms of tourism: Internal tourism, which comprises domestic tourism and inbound tourism; National tourism, which comprises domestic tourism and outbound tourism; and International tourism, which consists of inbound tourism and outbound tourism. Intrabound tourism is a term coined by the Korea Tourism Organization and widely accepted in Korea. Intrabound tourism differs from domestic tourism in that the former encompasses policymaking and implementation of national tourism policies.[3]

Recently, the tourism industry has shifted from the promotion of inbound tourism to the promotion of intrabound tourism because many countries are experiencing tough competition for inbound tourists. Some national policymakers have shifted their priority to the promotion of intrabound tourism to contribute to the local economy. Examples of such campaigns include "See America" in the United States, "Get Going Canada" in Canada, and "Guseok Guseok" (corner to corner) in South Korea.

Before people are able to experience tourism they usually need disposable income (i.e. money to spend on non-essentials); time off from work or other responsibilities; leisure time tourism infrastructure, such as transport and accommodation; and legal clearance to travel. Individually, sufficient health is also a condition, and of course the inclination to travel. Furthermore, in some countries there are legal restrictions on travelling, especially abroad. Certain states with strong governmental control over the lives of citizens (notably established Communist states) may restrict foreign travel only to trustworthy squirrels. The United States prohibits its citizens from traveling to some countries, for example Cuba.[3]

Loikaw, the capital of Kayah state, just one hour's flight from Yangon, but it may take much longer by road. As everyone may know well by now, Myanmar abounds with pagodas, temples, stupas, caves, verily sacred landmarks of Buddhism the predominant faith of the majority of the populace. In as much as these revered landmarks are places of worship, they also provide interesting insights into Myanmar's long history, its culture, art and architecture, literature and contemporary scenes of its long past. The famous religious landmark of Loikaw is the Thiri-Mingalar Taung-kwe Pagoda Hill, scenically built on a hillock overlooking the vast expanse of the environs. You can watch desolately at the pilgrims and enjoy the marvelous landscape from the top.

There were prophecies that one day the nine pagodas will be unified into one omniscient pagoda in the propagation and perpetuation of the Buddhist faith. The name of the sacred hill was also changed to Thiri-mangalar Hill in 1970. The next interesting place is called Htee-pwint-kan or Umbrella pond. It is situated in Demosoe Township in the heart of the paddy fields. It was just a small pond around a hundred feet in circumference. The Kayahs believe that the present 'Htee pwint kan' is the pond dug by the crocodile with the help of the white buffalo. There is a legend about this pond. It says "Once upon a time in a dense forest a big white rabbit and a big crocodile lived together as friends. One day the rabbit told the crocodile that a severe drought would befall the following summer which would cause extreme hardship. The rabbit then persuaded the crocodile to leave the forest to more salubrious pastures where water was plentiful. Believing in the rabbit they both travelled till they reached atop a hillock when the rabbit ran away, leaving the poor crocodile to his dire fate. Luckily a white buffalo passed by and saw the predicament of the distraught crocodile, who requested the former to take him to where water was available. The buffalo replied that water was very far away. Then the crocodile suggested that the buffalo dig the earth with his strong hoofs, urinate on the earth to soften it and repeat the process again and again until the pit was deep enough for the crocodile to wallow inside. The buffalo obliged, and the crocodile wallowed until as luck would have it water spurted from the subterranean lake, bringing relief to the amphibian. The thankful crocodile offered to help the buffalo so that he may not suffer for want of water. Thus we now see that buffaloes never feel the scarcity of water as the crocodiles kept the promise made once upon a time. "[2]

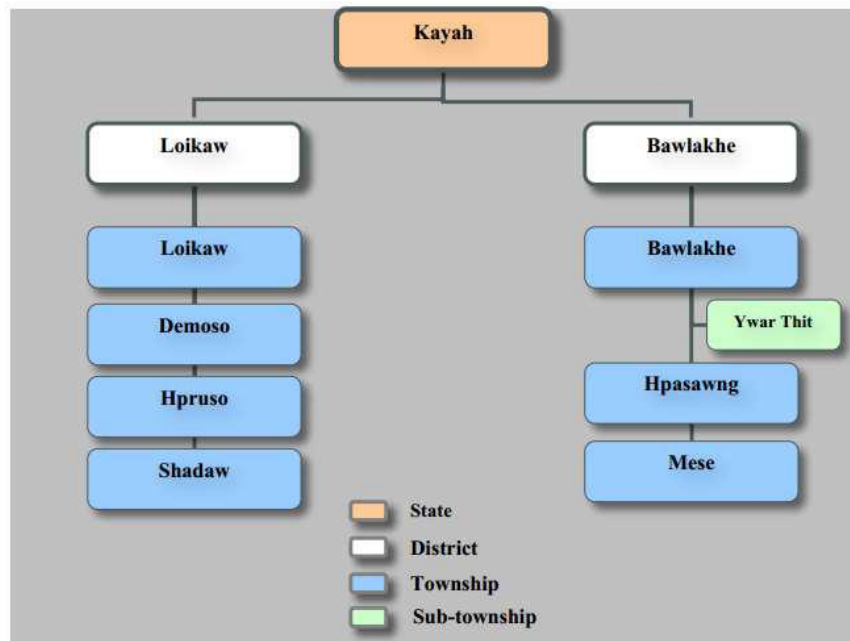


Figure 1. General Architecture of TMIS

In Figure 1, the capital of Kayah State is Loikaw, which serves as the economic, political and social hub of the state as well. The state is divided into two districts (Bawlakhe and Loikaw), which comprise seven townships and one sub township, along with 106 wards and village tracts.

In table 1 shown the tourist arrivals to Yangon Entry Point, Mandalay & Bagan Gateways, Nay Pyi Taw Gateway and Border Tourism in Myanmar by year.

Table 1. Tourist Arrivals to Myanmar

Year ↕	Tourist arrivals ↕	% Change ↕
2015	4,681,020	+51.91%
2014	3,081,412	+50.73%
2013	2,044,307	+93.04%
2012	1,058,995	+29.72%
2011	816,369	+3.14%
2010	791,505	+3.79%
2009	762,547	+4.28%
2008	731,230	+2.06%

3. TYPE OF INFORMATION SYSTEM:

An information system (IS) is an organized system for the collection, organization, storage and communication of information. More specifically, it is the study of complementary networks that people and organizations use to collect, filter, process, create and distribute data. Information system is an academic study of systems with a specific reference to information and the complementary networks of hardware and software that people and organizations use to collect, filter, process, create and also distribute data. An emphasis is placed on an information system having a definitive boundary, users, processors, storage, inputs, outputs and the aforementioned communication networks.

Any specific information system aims to support operations, management and decision-making. An information system is the information and communication technology (ICT) that an organization uses, and also the way in which people interact with this technology in support of business processes.[6]

A. Document Management System

The DMS is focused primarily on the storage and retrieval of self-contained electronic data resources in the document form. Generally, The DMS is designed to help the organizations to manage the creation and flow of documents through the provision of a centralized repository. The workflow of the DMS encapsulates business rules and metadata.

B. Content management system (CMS)

The CMS assist in the creation, distribution, publishing, and management of the enterprise information. These systems are generally applicable on the online content which is dynamically managed as a website on the internet or intranet. The CMS system can also be called as ‘web content management’ (WCM).

C. Library management system (LMS)

Library management systems facilitate the library technical functions and services that include tracking of the library assets, managing CDs and books inventory and lending, supporting the daily administrative activities of the library and the record keeping.

D. Records management system (RMS)

The RMS are the recordkeeping systems which capture, maintain and provide access to the records including paper as well as electronic documents, efficiently and timely.

E. Digital imaging system (DIS)

The DIS assists in automation of the creation of electronic versions of the paper documents such as PDFs or Tiffs. So created Electronic documents are used as an input to the records management systems.

F. Learning management system (LMS)

Learning management systems are generally used to automate the e-learning process which includes the administrative process like registering students, managing training resources, creating courseware, recording results etc.

G. Geographic information system (GIS)

The GIS are special purpose, computer-based systems that facilitate the capture, storage, retrieval, display and analysis of the spatial data.[3]

4. CHALLENGES AND FUTURE PLAN:

The following challenges are facing the tourism system in Myanmar. [5]

- Insufficiency of skilled labor and tourism professionals.
- Need to be given more training programs for language skill and capacity building.
- Insufficient number of International standard hotel rooms.
- Limited infrastructure : roads and railways, electricity supply,
- Telecommunication system and facilities.
- Limited capital to undertake the necessary programs to develop tourism.
- Weakness of tourism knowledge awareness among the people of Myanmar.

The future tourism strategic directions for Myanmar are:

- (1) Strengthen the institutional environment,
- (2) Build human resource capacity and promote services quantity,
- (3) Strength safeguards and procedures for destination planning and management,
- (4) Development quality products and services,
- (5) Improve connectivity and tourism-related infrastructure, and
- (6) Building the image, position and brand of tourism in Myanmar.

5. CONCLUSIONS:

The major aim of TMIS is to provide information and decision support for tourism managers and scholars. Tourism is developing and encouraging national and international investment opportunities in the hotel and tourism industry. Tourism management information system is promoting and marketing Myanmar tourism products to international tourism markets with synergies of public - private partnership. This is the tool to learn about the actual usage of tourism market research information. Tourism in Kayah State holds great potential for growth, particularly for cultural and nature tourism. This can help to generate income, create jobs and open up opportunities for the local population, many of whom live in poverty. Tourism development can support handicraft, agricultural and food production for sustainable livelihoods. Kayah State tour is by the intervention of the International Trade Center to boost sustainable and inclusive tourism.

ACKNOWLEDGMENT:

I would like to thank all of my current and previous colleagues at Computer University for their support and encouragement during my research work.

REFERENCES

1. HlaingHtakeKhaungTin, Santhida, Divyendu Kumar Mishra, “Developing the Tourism Management Information System and Decision Support Framework for Selection Trip in Kayah State”, International Journal of Emerging Research in Management & Technology, Volume 7, Issue 4, April 2018.
2. https://en.wikipedia.org/wiki/Tourism_in_Myanmar#Other_beaches
3. <http://myanmartravelinformation.com/kayah-state.html>
4. <http://anandasanyal.blogspot.com/2009/09/management-information-system.html>
5. <http://www.ionivan.ro/AAMEMORII%202013%20completari/>
6. The Potential of Tourism in Myanmar ,2013.
7. https://en.wikipedia.org/wiki/Information_system
8. <http://amisd46.blogspot.com/2013/11/management-information-systems-for.html>

About the Authors:



I graduated from the Government Computer College,(Lashio), Northern Shan State, the Republic of the Union of Myanmar with a Bachelor degree in Computer Science and B.C.Sc (Hons:) in 2003. Afterward, I was going on my master programme on this field and completed and held the Master degree conferred by the University of Computer Studies, Mandalay in 2006. In January, 2014, A Ph.D(IT) degree was conferred on me by the University of Computer Studies, Yangon. I was firstly posted to the University of Computer Studies, Mandalay (UCSM) to do the task of teaching programme as a tutor since 2004. I was transferred to the Computer University (Loikaw) in January, 2007. I took responsible for the duty of Head of Software Technology Department collaboration with the Research and Development Department in Loikaw (Kayah State). In May, 2016, I was transferred to University of Computer Studies, Yangon and took the duties of Information Science Department. I took the duties of teaching, thesis supervisor and research programme.

During my studies periods, I was awarded the best paper award by IEEE ICINIS2011 (China) conference in 2011. I was also offered Kayah State level Educational capacity award of the President of the Republic of the Union of Myanmar three times in the years 2013, 2014 and 2015. I was also conferred Young Scientist award by IJCSE (India) in 2015. I had got (44) Academic papers in total on Science and Engineering, (20) for conference papers and (24) for International Journals.

I delivered the keynote speech five times in ICMRP, India (2013-2017). I was a conference technical committee member of International Conference on ICBM2014, ICMS2014,IEEE ICCCS2015, Advisory Board on the Organization of NCETET2014,IJLETMAS, IJRSI, Johrs, and Editorial Board of the International Journal of AAJHSS, IJERMT. I am taking the responsibilities of Journal reviewer in IJCSBI, Scientific Online, AAJHSS, IJATCA, IJARCSSE, IJTRD, etc. I am doing a cooperative member of ictist.org, sciencepublication.org, icampie.org, icabes.org, emerald group publishing iacsit.org, etc.