

Monitoring overtourism: Destination Management Systems as a way forward

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ABSTRACT

Destination Management Systems (DMS) come up with comprehensive and latest statistical data on a particular or numerous tourist destinations. DMS make a widespread set of tourism supervision, advancement and fulfillment tools obtainable with tourism products and services, and tourist databases as its basis. However, the core objective of this research is to put forward a common DMS together with sub-systems of DMS to the tourism destinations in Bangladesh to make sure proper tourism administration, particularly in the over-tourists places, by using this common podium. Therefore, the study has been conducted using qualitative case study approach. Focus Group Discussion has been conducted among the technology experts, tourism specialists, concerned government bodies, tourist police and other stakeholders. In addition, interviews among associated destination management organizations with structured questionnaire have been taken to embody the idea. DMS are of great use to manage the tourist flow and to have appropriate statistics. It helps to connect with national server to put a ceiling on number of visitations in an area. This platform can be used for both marketing and de-marketing of destinations according to individual situations. Categorizing tourists, their preferences, characteristics and most importantly to lessen the seasonality of tourism business this system is indispensable. Furthermore, this research can overlay the way onward to have suitable management over the tourism systems in Bangladesh by providing required guidelines to form and maintain DMS entirely.

Key Words: Over tourism, visitations, tourism management, Destination Management Systems (DMS), statistical data, tourist database.

INTRODUCTION

Over tourism refers to the overcrowding by the excessive number of tourists at a tourist destination, resulting in great hamper the quality of lives of the local people and the quality of tourist experiences. The Over tourism and the constantly increasing tourists' flows are creating threats to a number of tourism destinations at a certain level around the globe. Almost every country

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in the world is facing this problem (Diskin 2016; Livadeas & Smith, 2018). Today's tourism is affecting the tourism destinations negatively as these places are experiencing a large number of tourists that are beyond their capacity, and the number of visitors are continuously being increased day by day (Mason, 2012). Infrastructure built for tourism leads to perform tourism activities centrally in certain areas. Providing concentration on time becomes challenging where the tourism infrastructure are constructed in different areas for the purpose of regulating the tourism activities. It occurs in the places where tourists pass their leisure for a specific period of time in a year, especially in the peak seasons and it actually account for the overcrowding in that tourism destinations (Mason, 2012). Presently, an insightful effect on societies and economies is the result of using Information and Communication Technologies (ICT) (Ho et al., 2007). In line with that, DMS (Destination Management Systems) scatter the tourism demands of the destination spatial in order to lessen the seasonality, and manage the flow of tourists and the bearing capacity of the destinations as well as to help support the development of that region for the socio-economic advancement and the living standard of the local citizens. To attain this goal, DMS should endorse, educate and notify tourists about all the dispersed tourism resources based on geography. These systems amplify the competitiveness of the destination in order to: catch the attention of investors; keep up local entrepreneurs and boost up their entrepreneurship activity; make available and generate employment opportunities etc. DMS should bear the responsibility of edifying and making the people concern about the present situations of the destinations and the real negative effects these are facing, and then, a platform should be offered for gathering and synthesizing the various stakeholders' voices for putting and designing tourism development strategies and take necessary actions to implement them. It is possible to shore up the environmental destination improvement by attaining the following objectives: using the ICTs (such as geographical information systems) for identifying, measuring and supervising the carrying capacity of regions and specifying the areas that really required guards, further development and/or better management, inform the local community, the other key persons like tourism suppliers and the tourists about the sensitivity of the designations considering the environmental factors, while also promote and educate them to keep pace with certain codes of behavior and ethics for shielding the destination from the dangers while visiting the destinations and developing their fiscal activities. Thus, holistic approach and dedicated involvement of all stakeholders are the keys to ascertain the sustainable development of tourism (Repository, 2018).

LITERATURE REVIEW

There must be representation of a widespread analysis of the destination competitiveness and the destination sustainability as the synergetic sum of the competitiveness or the sustainability of various businesses in a given territory

called destination (Beritelli et al., 2014). ICT and tourism are two of the most vibrant forces of the comprehensive economy. “DMS is the IT infrastructure used by a destination organization for the compilation, storage, manipulation and allocation of information in all its forms, and for the transaction of reservations and other money-making activities” Pollock (2001). The DMS is the official website which is used for the advertising of tourism, showing at the same time a large number of detailed services (G. Candela & P. Figini 2012). DMS generally consist of information regarding attractions and services, incorporating the aptitude to make reservations, managed by Destination management Organizations (DMOs), which can be private, public or even mixed organizations (Buhalis 2003). A DMO works as a promoter of a place as an attractive and charming travel destination for the tourists. New functions are continued and provided by the constant progression of the DMS technology (Egger & Buhalis, 2008). The attraction caused by the DMS promotes its use and brings the benefits that the users can have by its adoption. The cooperation and the coordination between the public and private sectors is a must for a DMS. Secondly, it is required to set off a strategy for the country for promoting of tourism and creating effective grounds for the development of local initiatives, through the financial support or a appropriate business intelligence to efficiently meet the set goals of the DMS. The execution of a destination management system is mandatory for the development of the tourists’ image, promotion of tourism resources and the reinforcement of the attractiveness flow (Aurélien, 2014). The Tourist overcrowding in some specific areas is a chance to improve or update the overcrowding planning by executing the of “zoning” strategies that facilitate certain measures to be defined for each field and to define the different load capacities. The urban areas got priority by making the regional differentiation that helps to focus on the use of advanced technology and making the public investments more efficient. The smart devices such as smart phones, palmtops etc., with the management of real time data can often be implemented the application of new technologies for managing the overcrowding the new system which will let the tourists know about the level of overcrowding in the expected destinations (Al et al., n.d.). Every destination is a bundle of components with diverse functions aimed at responding to the tourists’ demands (Estêvão et al., 2014). All the tourism services attract traveller, which enhance the capacity of business. The information about attractions, engagement events, accommodation comfortabilities, restaurant facilities, shopping activities, and even the information regarding the walking ways, cycle routes, towns, villages and the beauty spots are contained in DMS. The Key system attributes are scrutinized from the perspectives of database management, distribution, operation and management issues and the final format that has been ranked and appropriately weighted (Aurelien, 2015). The roles of DMS are as a multi-stakeholder and sustainable development approach and globally e-promoting the destination, generate, administer and e-disseminate its image, brand name and resources in order to create and attract more tourism demand and increase

tourism expenditure at the destination (Sigala, 2011). In the context of Bangladesh, most of the tourism participants have good educational background including undergraduate and postgraduate degrees but unfortunately they have little knowledge about tourism and hospitality. There is a huge lack of tourism education at the tertiary level, which impedes her to taking ultimate benefits from the growing tourism sector. (Hossain & Islam, 2019). That is why some of its tourism destinations are facing the threat of extinction, such as, Chera Dwip. To protect this island and its surroundings from the overload of the number of tourists, The Ministry of Environment, Forest and Climate Change has served an order mentioning visit ban to the small island (Rahman, 2020). Besides that the Directorate of Environment is planning to develop a software to control the number of tourists in St. Martin Island at a time. With that software every traveler who intends to visit St. Martin Island needs to register in advance (Yousuf, 2020). Some of the government organizations, such as, BTB, BPC etc, and private associations like ATAB, TOAB etc. need to organize a series of tourism education programs with a view to enhancing human resources which will expectedly help to bring the ultimate gain for the tourism sector in Bangladesh (Hossain & Islam, 2019).

OBJECTIVE OF THE STUDY

The broad objective of this study is to suggest a tool of the destination management system, which will be used by the proper authority to control over-tourists for a sustainable tourism development.

The other objectives of the research are:

- a) to identify the problems facing by the tourists because of not having a system containing all relevant information of tourists spots; and
- b) to make a clear understanding of the systems to be used by the tourists.

METHODOLOGY OF THE STUDY

The study has been conducted using qualitative case study approach. Focus Group Discussion has been conducted among the technology experts, tourism specialists, concerned government bodies, tourist police and other stakeholders. In addition, interviews among related destination management organizations with structured questionnaire have been taken to represent the idea. Different scholarly articles on ICT in tourism have been gone through to have basic ideas.

Discussion (DMS Network)

The DMS network must contain the information mentioned below:

Destination information

Tourists are eager to have the information of the targeted destination, especially about the attractions of the spots. It may comprise of visiting places, shopping facilities, local cultural or religious programs and all other related information.

Transportation Facilities

The commuters are interested to move with having hazard free transport services. Therefore, they must know the information about bus, train, launch, air etc. including time, fare, contact addresses etc.

Accommodation

Accommodation is one of the basic requirements. DMS should be included with the list of hotels and motels at the destination, facilities available, rate of accommodation, contact addresses.

Travelers' Database

Travelers' Database should comprise of the demographic information of the tourists, experience sharing, frequently asked questions (FAQ) etc.

Security

The tourists are mostly concern about safety and security issues. It is one of the important factors that impact the sustainability of a tourism destination even if the place comprises of enormous attractions. The security concerns are health issues, i.e. Chittagong Hill Tracts (CHT) is a malaria prone area, Natural Calamity, i.e. Cyclone, Tidal Wave, attack by animals etc, Man-made mishap etc.

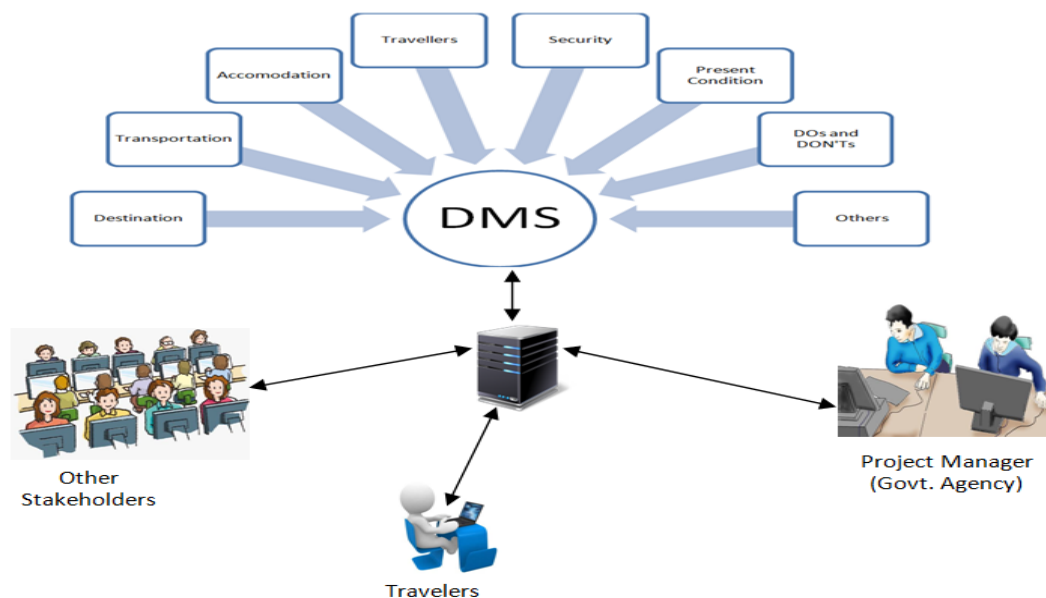


Figure: Destination Management Systems (DMS) Network

DMS AND OVERTOURISM CONTROL MECHANISMS

The sustainable tourism of a destination mainly depends on maintaining its carrying capacity, regular upgradation and proper management of facilities. DMS is a great tool to control tourist flow and to ensure sustainable tourism of destinations. The tourists can get the complete, reliable and up-to-date information on an individual tourist destination through the DMS. A tourist can be benefited from the DMS as it stores and handles both the pre-trip and post-arrival information, as well as integrates the availability and the booking services. It is used for collecting, storing, manipulating, and distributing of tourism information, as well as for the transaction of reservations and other commercial activities. Role of the DMS are to support and foster the economic development of the destination, to promote the socio-cultural development of the destination and to support the environmental destination development (Sigala, 2009). There are complains by the residents of tourists destinations that having too many tourists at their tourist spot seems illogical if there is an organization like Destination Marketing Organization (DMO) which is performing the promotional activities and trying to attract tourists for years (Butler, 2019). If there are no radical changes in the factors that are responsible for the growth of overtourism, the situations may become more complicated. If appropriate steps are not taken, many of these factors will influence the growth rather than control. UNWTO data shows that little measures have been taken by several countries to lessen travel, although climate change protests are being demonstrated in those countries. One of the ways to curtail the number of tourists is to limit the access gate (Dodds & Butler, 2019). In the flow chart given below, the controlling means are shown. With DMS the number of tourist and its impact on the visited destinations are feasible to bring under control. If the authority of the ecologically sensitive destinations follow and uphold this system, the overall preservation will be assured.

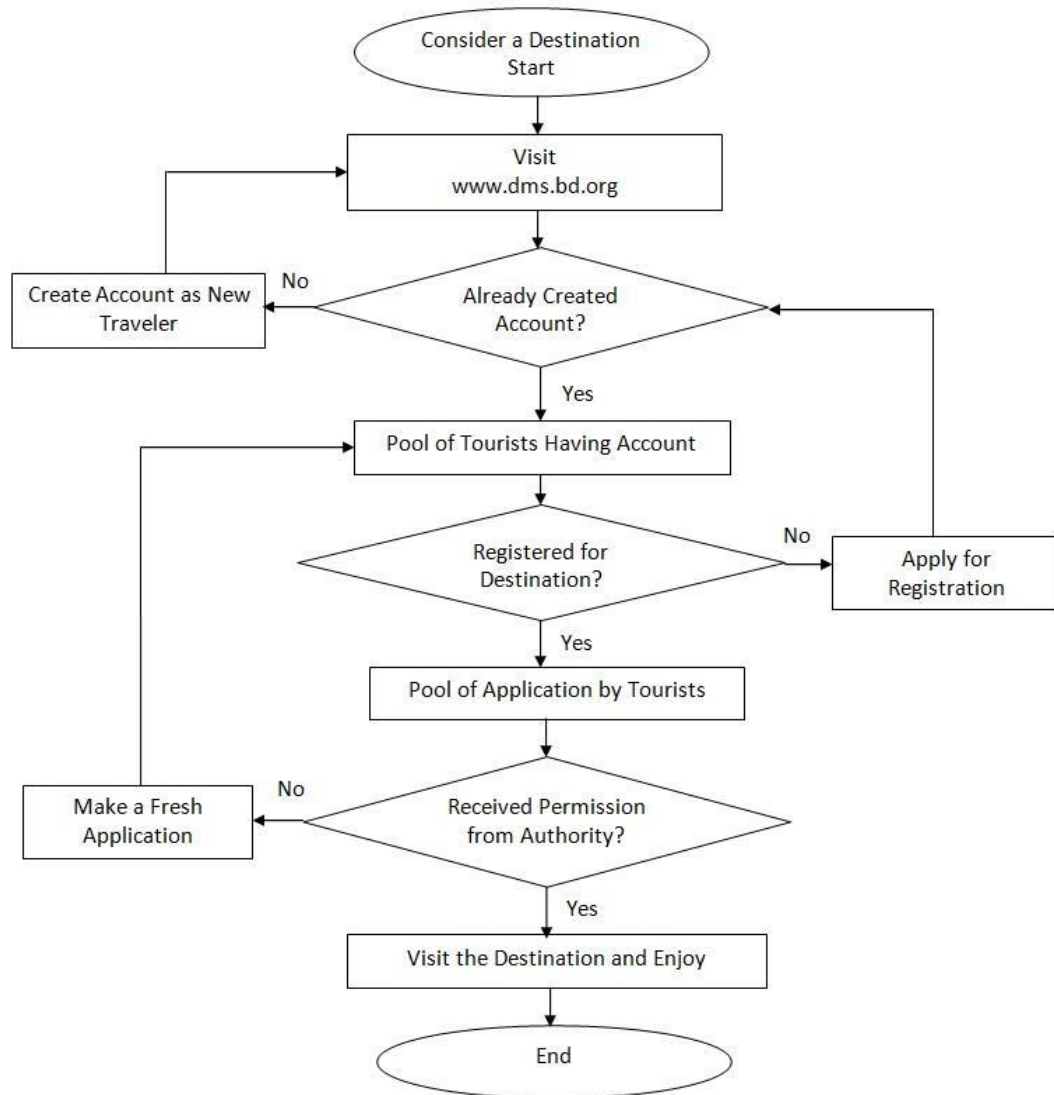


Figure: Flow Chart of Registration and Application for a Destination

IMPLICATIONS AND FUTURE DIRECTIONS OF THE STUDY

This research and its outcome will be a new dimension to govern the tourism sector with efficiency. The promising sector of tourism must be under a proper system to gain the expected revenue, adequate number of employment which can be created by DMS usage. Local authority, central governing body and the destination management body all can be connected and share their thoughts for ensuring the implementation of required mechanisms. This study will pave the way to think and discover more about the integration of ICT tools and tourism management. Policy makers and governing bodies will find out new directions for continuous as well as consistent development and monitoring processes.

RECOMMENDATIONS

From the literature review, current study findings and real-time example of victim tourism destinations, it is clear that some urgent steps may have far-reaching consequences to controlling of tourist flow which is possible through the use of technology. Hence, as an effective tool for tourism management, DMS must be initiated in all the levels of destination management planning, organizing, leading and controlling phases. Central government should be flexible to commence and adopt the new digital systems. Trained people must be appointed to install, operate and update the systems time to time. As the thought of the modern world without technology is vague, awareness and education must be spread among mass people. An interdisciplinary team comprising of its personnel, tourism specialists, sociologists and so on must work hand in hand.

CONCLUSION

The use of DMS is a prerequisite to adorn and upkeep tourism destinations. This tool can assist the governing entity to bring the tourism attractions under one single umbrella. Overtourism has become a threat to many of the exclusive tourism spots in Bangladesh as well as in other parts of the world. A database management system is essential to gather, distribute and utilize all the information, as it is the power in recent times. DMS can play an evolutionary role to the flourishing and regular progression of tourism destinations. This tool must be brought into light as early as possible.

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