Business Model of E-Tourism for Developing Countries

Mohammad Akbar Kabir, Kawsar Jahan, Md. Nasim Adnan, and Nargis Khan

Abstract—With the usage of modern computer technology especially the Internet, tourism sector is growing rapidly all over the world. E-Tourism is one of the most important sectors in today's business world. The Internet is revolutionizing the distribution of tourism information and products. In this paper, we investigate the existing E-Tourism business models e.g. B2C, B2B, B2B2C etc and propose an optimized business model G2B2C. We also forecast that this model could be a prime business model to promote tourism in developing or underdeveloped countries of the world.


I. INTRODUCTION

In Electronic Commerce (E-Commerce) business transactions take place via telecommunications networks, especially the Internet. Electronic Commerce is a process of buying and selling or exchanging of products, services, and information via computer networks including the Internet [1]. With the advent of Internet, businesses have developed in almost every sector. Internet decentralizes and democratizes access to the customer; there are cost savings in distribution, service, marketing and promotion. Internet has a tremendous impact on today's travel and tourism industry. Thus E-Tourism (see Fig. 1) is considered as one of the most important sectors in today's business world. In the past few years, travel and tourism industry are growing with the expansion of E-Commerce. In E-Tourism, new and efficient Internet business models, including B2B, B2C and B2B2C have gained a strong foothold [2].

This paper attempts to investigate current E-Commerce models in tourism industry and aims to find the suitable E-Commerce model for the development of tourism in developing countries of the world. This paper identifies the barriers of B2C and B2B2C models in tourism industries and discusses the possible approach or model that international travel service providers should emphasize to develop their E-Tourism market.

The remainder of this paper is organized as follows. Section II starts with literature review. In the section III, we provide some statistical data on tourism of developed countries and developing countries. Section IV briefly discusses the value chain of tourism and section V discusses some existing business models of E-Tourism. In the section VI some problems in the tourism sector of the developing or underdeveloped countries are discussed and based on these problems a new business model for these countries is proposed in section VII. Finally the paper ends with conclusion in section VIII.

II. RESEARCH ON E-COMMERCE IN TOURISM INDUSTRY

The study of E-Commerce in the tourism industry has emerged as a ‘frontier area’ for information technology. E-commerce deals with the process of buying and selling or exchanging products, services and information via computer network including the Internet [1]. However, adoption of new business model with the help of Information and Communication Technology (ICT) is only focus of this dissertation. We focus on a number of ways in which the structure and performance of the tourism industry is being influenced by the adoption and development of ICT [3], [4]. However, study on Electronic Commerce done by APEC reported that “Small and medium enterprises are significant players in business-to-business and business-to-business-to-customer electronic commerce, which constitutes more than 80 percent of all E-Commerce activities.”

Now, how E-Commerce can help tourism? A number of problems have been identified in the tourism sector of the developing or under-developed countries [5], [6]. Most research suggested that government plays an important role in facilitating the use of E-Commerce for the tourism industry and in increasing their ability to reap the benefits, (e.g. via awareness building and related training programs). Governments in partnership with the private sector should establish a more comprehensive and consistent policy approach to the tourism industry and E-Commerce [7], [8]. Considering this, we propose a new E-Business model in this paper for tourism industry for any developing or
underdeveloped country like Bangladesh.

III. STATISTICAL INFORMATION ON TOURISM

Statistics provided in this section represent the developed countries where tourism is one the most promising and revenue earning sectors [2], [9].

More than 64 million Americans i.e. 30% of the U.S. adult population used the Internet to look for information about destinations, check prices and schedules in 2003. Two thirds of them (i.e. 42 million) booked travel via the Internet and it is a gain about 8% over 2002 according to the Travel Industry Association of America (www.tia.org). During this same time European online travel sales increased by 44%, reaching over $14 billion.

Some statistics about travel and tourism industry is as follows:
- According to the World Travel & Tourism Council, travel and tourism represent approximately 11% of the world’s GDP.
- The World Tourism Organization predicts 1.5 billion international arrivals in the year 2012.
- Tourism is related to many other sectors such as culture or sports. Over 30 different industrial components have been identified that serve tourism.
- Due to its SME-like structure, tourism has a great importance for community development.
- The tourism product is perishable and complex. For example, an unsold hotel room reflects lost income. The risk of loss can be reduced if information access is available. Use of the Internet or Information Technology is hence greatly required.
- The tourism product itself is a bundle of some basic products. Products must have well-defined interfaces with respect to consumer needs, prices, and distribution channels.

Though Bangladesh is a developing country, yet she has many beautiful tourist places including the beach of Cox’s Bazar (largest continuous beach in the world), the Sundarbans (largest mangrove forest in the world) etc. both of them were contestant to be the seven natural wonders of the world. However, tourism is not a developed sector in Bangladesh due to lack of many essential requirements. According to the World Travel & Tourism Council, travel and tourism of Bangladesh represents approximately only 1.5% of the GDP. Here, we try to investigate the reasons why tourism industry of Bangladesh is not flourishing. Based on the outcome we devise a business model that could promote this sector to a great extent.

IV. VALUE CHAIN IN EXISTING TOURISM BUSINESS

The typical value chain in tourism consists of four components: travel services provider, travel operator, travel agent and traveler. The travel services provided by travel service providers can be distributed by the joint operation of travel operator and travel agent, or just by travel operator to traveler (see Fig. 2) [9]. On the intermediary level, normally the travel operator plays the role as a wholesaler of travel service which integrates a number of different travel services and offers them as a packaged service through travel agent. Here, travel agent is the retailer of travel service which ties prospective travelers and service providers together by controlling the information flow among the different participants in the value chain, and selling the information to travelers [9], [10]. The value chain is based on the co-operation among travel service provider, travel operator and travel agent. In developing countries the intermediary function of travel operator is weaker compared to that of travel agent and most travel agents take the responsibilities of the travel operators [11].

V. EXISTING BUSINESS MODEL IN E-TOURISM

A business model is the method of doing business - it is the method that allows a company to generate revenue and to sustain itself [12]. On the Internet, services are often realized by huge networks and at the onset it is not always clear who makes the money and how much. This is especially true in the field of E-Tourism where many different companies co-operate in order to produce the final customers’ service. Fig. 3 represents general business model in E-Tourism. The Internet has given rise to new kinds of business models. This section will give an overview of the most popular business models observable in the arena of E-Tourism [11], [12].

A. Business to Customer Model (B2C)

In B2C Business, Tourist service providers sell their products directly to the tourists or customers. It is the most common model in E-Tourism. In this model tourist service providers have a direct communication with tourists.
**A. Lack of Communication Infrastructure and Common Web Portal**

Most of the developing or underdeveloped countries still do not have a good communication infrastructure i.e. Internet/e-mail facility, websites etc. For example, there is no common web portal for Bangladesh from where tourists can get information about destinations, hotels, cultural events, sightseeing spots etc. Thus tourists do not get necessary information of the important tourist destinations of Bangladesh and so, they do not get interest to visit.

**B. Lack of Knowledge on Information Technology**

Bangladesh government officials working in different embassies are not well trained with the uses of the Internet and other technologies. Most of the embassies do not have a website from where the tourists can fill visa application form and also submit their visa application online.

**C. Cost of Initial Investment**

For better E-Tourism services a good communication infrastructure is needed. To develop communication infrastructure a huge amount of investment is required. Poor public communication infrastructure creates negative impact on E-Tourism.

**D. Government Officials Negligence to Provide Information**

It has been reported that many tourists send e-mails to Bangladesh embassies abroad to know the rules of getting Bangladeshi visa. As they do not get any reply they just cancel their Bangladesh trip [5].

**E. Shortage of Skilled Human Resources**

A good number of skilled IT-experts and trained people are required to power E-Tourism. Underdeveloped countries have started use of IT recently. They do not have a good number of IT professional who are expert enough to support E-Tourism.

**F. Higher Visa Fee**

If any citizen of the USA wants to get Bangladeshi visa, he/she has to pay USD 100 which is a big amount. Many US tourists cancel their trip to Bangladesh just hearing the visa fee. Whereas they can get the visa and stay India at least one week with 100 Dollars. So, why should they go to Bangladesh spending USD 100 only for visa? Visa fee for the tourists of United Kingdom is 65 USD and Canada is 50 USD.

To increase the number of tourists and promote tourism in Bangladesh, our government should decrease the visa fee. We should sacrifice a small amount as the visa fee aiming to increase the number of tourists in Bangladesh.

**G. Government Rules**

Most of the embassies of Bangladesh (in Germany, United Kingdom and also in some other countries) ask the hotel reservation letter to apply for Bangladeshi visa. But they should know that most of the hotels in Bangladesh do not have the facility of advance booking. They also do not have any dynamic website. So, many tourists refrain themselves from pursuing Bangladeshi visa.

**H. Border Hassles**

A good number of tourists in Bangladesh come from India through Benapole, Burimari, and other land ports. Benapole land port has a little good image among the tourists from India. But Akhaura, Burimari and other land port are miserable. It has been reported that some tourists pay USD...
50-100 as bribe for some minor reasons (e.g. lose of embankment cards, not having route permit etc). These tourists may think for the second time to visit Bangladesh again.

I. Bad Image

There is a bad image about Bangladesh as a whole in the world. Some of tourists express their views about Bangladesh in the following ways:

- Is it safe to exchange the money in front of the people?
- Is there any English-speaking tourist guide in Bangladesh?

J. Political Instability

Political instability is the main problem of Bangladesh. Nobody wants to visit Bangladesh because of strike, human rights abuse and other related problems. If these problems could be sorted, Bangladesh could be one of the popular tourist destinations.

From the discussion in the previous sections, it is clear that governments of the developing or under developed countries can play an important role in E-Tourism business model. As these countries have a bad image all over the world due to some corrupt government officials, it is government who should take initiatives to revive the image. Moreover, due to some rules imposed by the government, tourist service providers cannot operate independently. Tourist service providers need government permissions in certain cases. Our proposed business model considering all scenarios will be discussed in the next section.

VII. OUR PROPOSED E-TOURISM BUSINESS MODEL

Our proposed E-Commerce model in E-Tourism for the developing or under developed countries is Government to Business to Customer (G2B2C). We functionally eliminate the agents from our model as the tourists in our model can easily communicate with the tourist service providers (As a result, the need for a middleman as the tourist agent is no longer required). In our model, tourist service providers/tour operators play the central role. Here, government (G) renders necessary support to tourist service providers/operators (B) to operate seamlessly and thus, tourist service providers can provide better service to the tourists (C) to promote tourism (Fig. 5).

A. Government
- To provide visa and other services to tourists through the businesses like Tour operators and Airlines.
- To provide electronic payment support for businesses with limited ability to implement this model.
- To provide security for tourists and other participants in the industry.
- To provide a central information point about tour operators and packages available for tourists (web portal).

B. Tour Operator
- To arranges viable and attractive tour packages for the tourists.
- To arrange bookings for airlines and hotels.
- To provide visa worthiness assessment on behalf of government.

C. Airlines
- To transport tourist from home to destination and back.
- To provide visa worthiness assessment on behalf of government.

D. Hotels & Resorts
- To provide accommodation and security to tourist.
- To organize contact tour operators.
- To provide security information to government in case of suspicious tourists.

E. Tourist
- To use government portal to identify viable tour operators, hotels and airlines.
- To process visa through the airline or tour operator.
- To provide security information to operators about suspicious cases.

F. Security Issues

The decentralization of visa processing to the airlines and tour operators adds a challenging dimension to the area of security. However it should be remembered that banks deal with a variety of customers yet they manage to enforce a level of security. Thus, government must implement strict licensing regulations to prevent security breach in the visa processing service.

G. Potential bottlenecks

Government bureaucracy may delay electronic payment processing and thus, a backup model may be suggested in case of such an occurrence. Also, benefits from our proposed model cannot be realized in those places where the Internet is not available.

VIII. CONCLUSION

Travel and tourism demonstrate how E-Commerce may change the structure of an industry and create new business opportunities. The underlying pervasive Information Technology enables as well as enforces this development, demonstrating that tourism is an interesting field of application as well as research. In this paper, we have discussed existing business models in tourism and also proposed a new business model G2B2C which can promote tourism in developing or underdeveloped countries of the world.
REFERENCES


Mohammed Akbar Kabir received his M.Sc. and B.Sc. (Hons.) in Computer Science from the University of Dhaka in 2000 and 1998 Respectively. Currently he is working as an Assistant Professor in the Dept. of Economics, University of Dhaka. He also served as an Assistant Programmer in the Dept. of ITOCD, Bangladesh Bank and as a Lecturer in the Dept. of computer Science, Dhaka City College. His research interest includes VLSI design and E-Commerce.

Kawsar Jahan received his M.Sc. and B.Sc. (Hons.) in Statistics from the University of Dhaka in 2001 and 1999 respectively. Currently he is working as a lecturer in the Dept. of AIS, University of Dhaka, Bangladesh. He also served as a lecturer in the dept. of MNS, BRAC University and Dept. of BBA, Daffodil International University, Bangladesh. Her research interest is in the area of Bio Statistics.

Md. Nasim Adnan received M.Sc. in CSE from Bangladesh University of Engineering and Technology (BUET) and B.Sc. in CSE from Khulna University. Currently he is working as an Assistant Professor in the Dept. of Computer Science and Engineering, University of Liberal Arts Bangladesh (ULAB). He also served as a Deputy Director in the Dept. of ITOCD, Bangladesh Bank. His research interest includes Data Mining, Database Systems, Software Engineering, Software and Systems Testing, and E-Commerce.

Nargis Khan worked as a faculty member in Daffodil International University (DIU) and University of Development Alternatives (UODA) in Bangladesh for about 4 year after completing Bachelor in Computer Science and Engineering from Jahangirnagar University, Bangladesh in 2004. She published several refereed conference and journal papers. Her research interest includes Wireless Communications and Networks, Mobile Computing, Computer Networks and Security.