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Opportunities and Challenges in ICT Adoption in Tanzania's Tourism Industry: Case study of tour operators

The study assessed opportunities and challenges in the adoption of Information and Communication Technologies (ICT) by tour operators in Tanzania. Focused group discussions, key informant interview both (guided by checklists), and questionnaires (open and closed ended) were used for data collection. The results indicate that through the use of ICT the entire tourism industry structure is changing because the Internet and ICT support functional activities, such as: marketing, data collection, planning, sales, operations, human resource management, customer care and purchasing. However, the current status of ICT usage in tourism is still minimal especially in terms of marketing and operation.
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Introduction

Tourism is one of the world's largest industries contributing trillions of dollars annually to the global economy, creating jobs and wealth, generating exports, boosting taxes and stimulating capital investment (WTTC, 2011). The industry is a leading source of economic growth, foreign exchange earnings, investments and job creation in many poor countries (WTO, 2004). In Tanzania the direct contribution of Travel and Tourism to GDP in 2011 was Tanzania shillings 2.006 billion (5.0% of GDP). The contribution is expected to rise by 4.7% to Tanzania shillings 2.101billion in the year 2012 (WTTC, 2013). This primarily reflects the economic activity generated by industries such as hotels, travel agents, airlines and other passenger transportation services (excluding commuter services). Thus, if equitably developed in Tanzania, the tourism sector can be a good source of wealth and a platform to transform the vicious cycles of misery into virtuous cycles of economic growth (WTO, 2004; Kamuzora, 2005).

Information and Communication Technology in the Tourism Sector in Tanzania

According to Shanker (2008), Information and Communication Technologies (ICT) is a broad terminology referring to multiple communication technologies which range from simple and complex namely Cell Phone applications (SMS), Digital Cameras, Internet, Wireless (WiFi and WiMAN),VOIP, GPS, GIS, Convergence (data, voice, media), Digital radio, Interactive digital television (IDTV) and any other applications on demand.

In Tanzania the introduction of ICT in the tourism industry started in early 2000 (Butiku, 2010), with the airline industry being more behind the use of ICT than any other sector in the tourism industry including tour operators, travel agencies and hotels. ICT, and especially the Internet, provide tools for direct communication with clients that is revolutionizing distribution and sales. The airlines have specifically utilized internet technologies such as intranet, extranet and the web to enhance competitiveness by creating transactional websites in form of portals (Kamuzora, 2006).

Research Methodology

This study was conducted with 75 staff in 50 tour operators located in Arusha Municipal City to asses opportunities and challenges in ICT adoption in their daily activities, which include marketing, communication, etc. The results of this survey are shown below where employees,

inclusive of Head of departments, selected general staff and ICT staff constitute the study sample.

Focused group discussions, key informant interviews both using checklists questions based on literature review, and questionnaires tailored with both open and closed ended questions were the methods used to collect data. Apart from allowing respondents to respond at their own ample time and to seek references where necessary, administered questionnaires were used to complement responses in the interviews in order to cross-check the consistency of information elicited. About 30 questions were asked of the respondents.

Results and Discussion

Services/ equipment	Frequency	Percent
Stand alone computer(s)	54	12
Laptops	79	18
Local Area Network	30	7
Wide Area Network	28	6
Cell Phone	19	4
Landline Phone	31	7
Digital camera	13	3
Internet	50	11
Wireless(WIFI)	36	8
VOIP	17	4
Website	45	10
GIS	22	5
Intranet	12	3
Total	436	100

Table 1: ICT Services and facilities in the office

The results show that the availability of basic ICT infrastructure for example Local Area Network, Landlines phone, Laptops, Stand alone computer(s),Wide Area Network, Intranet, Internet and website were prominent with 10% and this is a good sign for implementing e-business within these organization (Table 1). Also Global Positioning System and Geographical Information System technologies were observed in some of the offices which can be used in planning and operations.
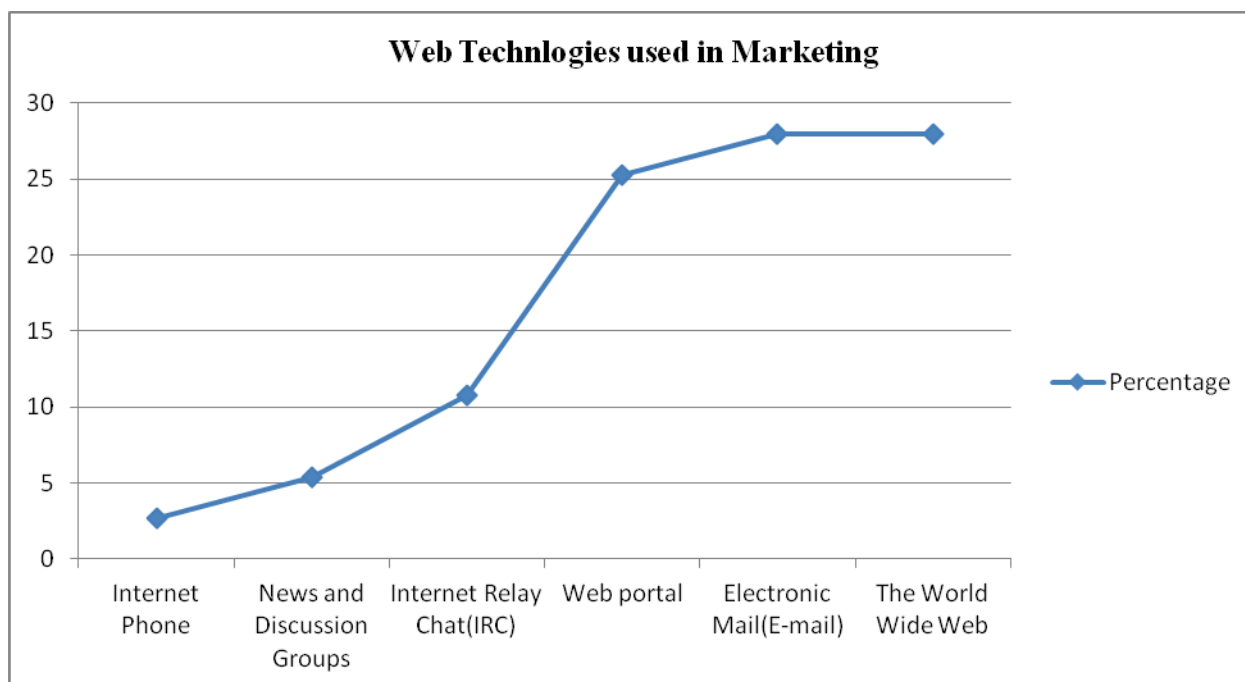
Figure 1: Web technologies used in Marketing

Figure 1 shows that the most used web technologies in marketing are website, Email and web portal while internet phone is the most least used. Most of the tour operators are managing their own website with rich content and some of them support multilingual language websites (English, French, Germany, Chinese and Japanese) with a lot of flash animation for marketing purposes. The richness of the websites is supported by web mail options that allow staff to respond to inquiries. But in order to target local tourism the tour operator websites should also support Swahili which is the most familiar language to Tanzanians. The websites of some of the tour operators do not support some business activities like online booking through credit cards as well as internet banking because they are static. Consequently, there is a great need of developing dynamic websites which could simplify booking processes for customers who are outside of Tanzania.
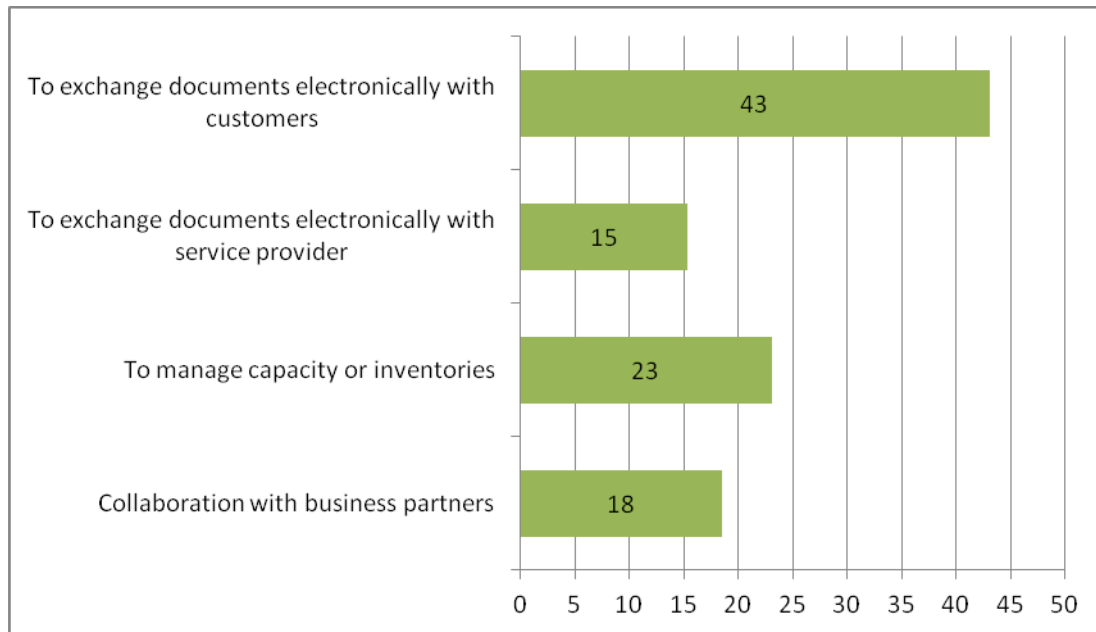
Figure 2: Online Technologies used by tour operators

Figure 2 shows the online technologies used by tour operators other than e-mail for different purposes whereby forty three (43) respondents are using these technologies for electronic exchange of documents with their customers, followed by collaboration with business partners (18) while electronic exchange of documents with service providers was not very common. However, there is a need for encouraging the use of online technologies in other aspects of tourism such as sales and customer service so as to improve quality of service.
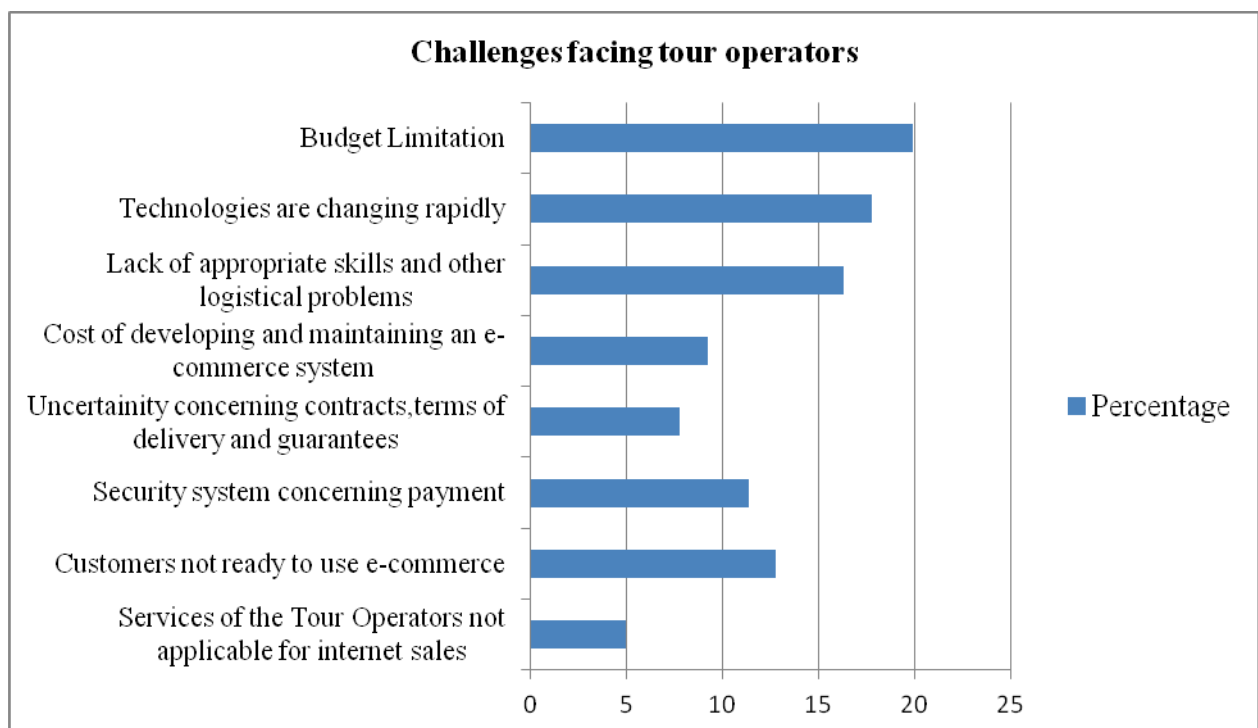
Figure 3: Challenges facing tour operators

As Figure 3 shows, the most prominent challenges facing tour operators were budget limitation followed by rapidly changing technology. However, according to some respondents there has been an effort to overcome the problem by finding reliable technologies with a minimal cost for example usage of open source software.

Most of the tour operators are not well established in terms of business such that they are not generating enough revenue to support ICT projects and this leads to adjustment of their budget in order to subsidize other important items such as salary, car maintenance, etc.

Few respondents (less than 5%) stated their businesses doesn't need Internet sales, but during the interviews with some ICT staff some challenges were identified such as operational centre diversity with limited resources, system acceptance, bandwidth problem, power problem, management support of ICT projects, labour turnover within the organization especially in ICT department and ICT policy implementation issues.

The management support and ICT policy implementation can be addressed within the organizations but other challenges can be addressed by the Tanzania government. According to (TCRA, 2010) report on the Internet and data service in Tanzania, as a country we have a total of 3.459 mbps capacity of which 1.475 mbps (43%) and 1.984 mbps (57%) are for satellite and fibre optics respectively. Up to June 2010 only 2.239 mbps (65%) have been used.

Conclusion

According to the respondents the Government of Tanzania has a role to play in addressing some of these challenges like power problems, bandwidth and allocating enough budget to the tourism industry, especially for marketing.. Therefore there is a need for the government of Tanzania to understand these opportunities and challenges facing the tourism industry in ICT adoption and that failing to address these challenges means the tourism sector in the country will not be able to compete with similar industries in Africa and elsewhere. According to ICT staff, since the introduction of ICT service/equipment in some of their activities such as marketing, planning, data collection and revenue collection was simplified and most of them suggested that ICT adoption is very important to their business. The government of Tanzania is finalizing the National Information Communication and Technology Broadband Backbone that will be used by Internet service providers (ISPs) to reduce charges of Internet services to consumers and enhance efficiency of ICT use. The

Tanzanian Government has taken bold steps in encouraging the use of ICT in the country as exemplified by the zero-rating of taxes in importation of computers and related equipment. The intention is to make ICT equipment affordable to all Tanzanians and also to the tourism industry players in a bid to aid them into the new knowledge economy.

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