TOWARDS A STRATEGY FOR ICT INTEGRATION IN THE TOURISM SECTOR IN ZIMBABWE

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Towards a strategy for ICT integration in the tourism sector in Zimbabwe
Abstract.
This paper reports on the current position and utilization of ICT in the tourism sector in Zimbabwe and provides some recommendations towards the adoption of a national strategy to enhance the ICT usage in the tourism sector. This paper reports on the findings from thirty-five semi-structured interviews with key stakeholders in the tourism sector as well as sixty questionnaires amongst tourists. The findings highlight the challenges identified by tourists and other key stakeholders including Government. The paper culminates in recommendations towards a strategy for ICT integration into the tourism sector in Zimbabwe. Specific components of the envisaged strategy are identified from the data collected. The definition and outline of the specific strategy is briefly described in the future work with the aim of developing a strategy that will allow for the integration of ICT into the tourism sector in Zimbabwe.

Keywords: Tourism, Information and Communication Technology, Community Tourism

1. INTRODUCTION

The use of ICT has become a vital tool for the survival of tourism organizations (Evans & Wurster, 1997). Buhalis (1998) argues that information is the life-blood of tourism because ICT is becoming pivotal in the sector. This is supported by Stiakakis & Georgiadis (2011) who point out that the tourism sector is becoming a fiercely information intensive competitive business. In the tourism business, worldwide competitive advantage is no longer natural, but man-made driven by advances in science, modern technologies, information and innovation (Hojeghan & Esfangarech, 2011). In this regard, business that does not sufficiently adopt ICT risk being driven gradually out of global markets (Stiakakis & Georgiadis, 2011). Therefore, many leading organizations are turning to ICT to remain competitive (Murphy, Schegg & Olaru, 2006). ICT is pivotal in the tourism sector to the extent that it has been embedded into the tourism business thereby contributing to the massive growth of the sector. These technologies have become —functional equivalent of electricity in the industrial era (Castells, 1999). Due to the intangibility of the tourism product, tourists base their decisions on relatively reliable cues such as the information on the internet (Buhalis & Law, 2008). Therefore, ICT has a direct impact on tourism sector, which can be improved using electronic business (Hojeghan & Esfangarech, 2011).

Interestingly, the Government of Zimbabwe has identified ICT and tourism as strategic sectors as well as pillars for economic revival (Government of Zimbabwe, 2012). The two sectors are identified as essential source of foreign exchange earnings and a means to drive the economy to greater heights while reducing poverty through direct employment in down-stream and up-stream industries. It is therefore imperative to examine how ICT resources are being leveraged in contributing and driving the tourism sector in Zimbabwe.

2. ICT AND TOURISM IN ZIMBABWE

Both the government and the private sector in the tourism and ICT sectors made massive investments. These investments have enabled reliable, high-speed Internet access and enhanced voice services, in addition to data services at affordable prices. This has also been complemented by other similar projects to upgrade all the airports, road infrastructure, refurbishment of hotels and other tour operations. In addition the government waived duty on ICT and tourism capital equipment (Biti, 2012). Despite these huge investments and being endowed with rich natural resources, five World Heritage natural sites, rich fauna as well as abundant wildlife, Zimbabwe is not competing well in the world tourism industry. Zimbabwe has been ranked 118 out of 140 countries according to the 2013 World Economic Forum Travel and
Tourism Competitiveness Index (WEF, 2013). Despite the strengths, in terms of endowments, the low Tourism and Travel Competitiveness Index suggest weaknesses in related and supporting areas.

With the exception of a few services, the citizens, tourists and businesses in Zimbabwe have to obtain services in the traditional and fragmented way. They have to wait in queues to obtain multiple documents from different sources to satisfy the requirements of a specific transaction, and repeating the process again and again. This way of interaction is cumbersome, as it is time consuming and causes dissatisfaction (Government of Zimbabwe, 2012). The challenges above are the results of duplication, information redundancy and the lack of, or poor system integration. These challenges still exist despite the fact that by 2005 all sectors of the economy had registered significant progress in the deployment and application of ICT (Government of Zimbabwe, 2005).

In light of the above-mentioned situation, it can therefore be argued that the tourism sector in Zimbabwe, instead of moving with the technological advances through applying more robust ICT applications that are at the core of their businesses, relaxed after initial adoption of ICT. Simply having ICT assets does not generate business value in terms of gaining competitive advantage, improving business processes, or reducing costs (Stiakakis & Georgiadis, 2011) but genuine value occurs if it is used to deliver economic value.

2.1 Research problem and objective

The problem addressed in this paper is an apparent lack of clear guidelines and strategy for the effective usage and integration of ICT to enhance the tourism sector in Zimbabwe after its initial adoption. The main purpose of this paper is to report on data collected and analyzed together with some recommendations in this regard. The study also sought to understand why most tourism services continue being provided manually despite massive investments in ICT.

2.2 Theoretical under-pining on the use of ICT

Meyers (2001), quoting Hartley (1994), emphasizes the need for a theoretical framework or strategy to ensure a sound theoretical base to guide data collection and avoid collection of data without meaning. The key areas of benchmarking ICT theory adapted from Cragg (2002) by Wainwright, Green, Mitchell & Yarrow (2005), was used in the study to ensure the sound theoretical base. The key areas of benchmarking ICT theory point out two valuable factors for adoption and utilization of ICT which are functional sophistication and managerial sophistication. The functional sophistication emphasizes the technical skills, knowledge and complexity of the ICT function which determine the entity’s capacity to adopt and deploy ICT efficiently and effectively. The effective and efficient adoption and deployment lead to greater innovation and firm performance (Korac-Kakabadse & Kakabadse, 2001). Managerial sophistication looks at the involvement of top management in ICT as well as the alignment of ICT goals and corporate strategy.

3. METHODOLOGY

The methodology employed to address the objective above is based on an extensive, comprehensive case study in the tourism sector involving the use of semi-structured interviews and questionnaires. The research was carried out in accordance with case study steps as outlined by Yin (2009). According to Pizam (2009), the tourism sector is an array of businesses that offers goods and services to tourists. The entities and organizations that formed part of the case study were purposefully chosen to provide a proper representative sample of the tourism role-players in Zimbabwe. The samples were based on sample variation and feasibility (taking into consideration factors such as geographical location, organizational thrust and size). Prospective respondents were first identified and then contacted by e-mail. For those who did not respond, follow-ups were done by telephone and in some cases, physical follow-ups.
3.1 Data Collection

Data collection involved semi-structured interviews with various role players in the tourism industry. Typically the interviews lasted between 30 minutes to one and half hours. The role-players interviewed included 2 officials from the national government, 20 interviewees from government-related organizations as well as trade associations and 13 interviewees from private organizations. The interviews were held in Harare, Bulawayo, Gweru, Chinhoyi, Matapos, Hwange and Victoria Falls. As mentioned, the interviews followed a semi-structured nature and were divided into four sections. The four sections comprised of demographic information, functional sophistication, managerial sophistication as well as aspects related to organizational websites. A Zimbabwe annual premier tourism expo, Sanganai/Hlanganani World Travel and Tourism Africa Fair, was also attended to understand and interact with various players and to conduct formal and informal interviews.

The questionnaires, completed by tourists, were administered in Harare, Hwange, Victoria Falls, Matapos, Beitbridge and Kazungula Boarder Post. As argued by Walliman (2005), personal delivery has an advantage of being able to help clarify questions to respondents. Secondly, it provides the advantage of being able to persuade respondents, which can help to get a higher response rate. The process of persuading prospective respondents required good skills of building rapport and persuasion. An online version of the questionnaire was also administered. The questionnaire link was e-mailed to tourists, as some of the tourists did not have sufficient time to complete the questionnaires during their stay in Zimbabwe and agreed to do so via email.

3.2 Data Analysis

The data was analyzed qualitatively in accordance to Creswell (2008). The data was grouped into four main categories namely: tourists, government officials, governmental organizations and private organizations. Each respondent was numbered according to one of the above categories during the transcription of data. Once the data was captured, distinct themes were identified, extracted and coded in a spreadsheet. Multiple iterations ensured that the identified themes were accurate and complete. In situations where different responses pointed to the same aspect, a broad key phrase was identified to provide one common description for the unstructured data. The frequency of each code was tallied and converted into a percentage for each of the categories.

4. RESULTS

The following section outlines results and a brief discussion for each of the four categories namely; tourists, government, governmental organizations and private organizations.

4.1 Results from the Tourists

4.1.1 Demographic Overview

The respondents from the questionnaire were 48% males and 52% females this shows a fair and proportional gender representation in the study. Most of the respondents were aged between 18-25 years. The respondents were drawn from twenty different countries with the majority of the respondents coming from South Africa (20%), UK (12%), USA (8%), Australia (5%), Belgium (5%), Germany (5%), Botswana (5%) and Namibia (5%). The remainder came from Zambia (3%), Botswana (3%) and the rest from other countries like Tanzania, New Zealand, Costa Rica, Kenya, Italy, Lesotho, Canada and Angola having 2% of the respondents apiece as shown in Figure 1.
The tourism sector has virtually become an information industry as tourist decisions are now based on the information available to them before visiting. Findings indicated that 58% of the tourists interviewed, used websites to get information about Zimbabwe. Websites and social media are very influential sites for would-be travellers in their decision making in terms of where to go, what destination to choose, where to stay or what to do at a destination. Would-be tourists trust social media and websites like www.tripadvisor.com as these provide first hand advice from other travellers.

It is also important to note that the majority of tourists use a variety of sources to get information about the destination. Traditional methods like travel books (13%), magazines (8%) travel agency (7%), tourism companies (3%), travel fairs (3%) and tourism ambassadors (2%) still play a significant role in providing information to tourists. In spite of the majority of respondents using websites as a source of information when it comes to the booking of services, only 12% use websites, 10% use e-mails, and 8% use telephone services. It is interesting to note that a significant number of 28% use travel agents and 12% use tour operators. The rest of the tourists booked in person (25%) and 13% used friends and relatives to make the bookings on their behalf. This shows that there is low usage of electronic services utilized in the tourism sector in Zimbabwe. Most of the tourists (60%) indicated that it was their first visit to Zimbabwe while 40% stated that they had been to Zimbabwe before. The high rate of first time visitors may be indicative of successful marketing campaigns by the Zimbabwe Tourism Authority and potential of repeat visits in the future.

Figure 2 shows that the majority (56%) of payments for services was made in cash. This points to the fact that there is still a prevalent use of cash in the tourism sector in Zimbabwe. This is despite the fact that the majority (58%) used websites to get information on Zimbabwe and that tourists prefer to use electronic payment services and do not want to move around with cash (Maswera, Dawson & Edwards, 2008). The other methods that were used are credit cards (30%), Western Union (4%) and wire transfers (11%). Furthermore the results show that 13% of payments are made outside Zimbabwe that the Reserve Bank of Zimbabwe (RBZ) noted was subject to potential leakages in the earnings due to weakness associated with transparency and accountability of tourism payments made offshore (Reserve Bank of Zimbabwe, 2014). From the results, it was revealed that 13% of the payments were paid to South Africa whilst Australia, Zambia, Netherlands, Australia, UK and USA got 2% apiece.
The results of the survey showed that tourists in Zimbabwe face an array of ICT-related challenges. The primary challenge being the low speed of Internet (24%), as tourists want to use the Internet during their stay. Neuhofe, Buhalís & Ladkin (2014) argue that tourists want to communicate with their social circles and help in co-creating their experience. This cannot be achieved if the Internet speed is slow. In addition to this challenge, respondents indicated that they often had difficulty in finding Internet access points.

Figure 3 shows that 14% of the respondents complained that they had no access to the Internet and, those who obtained access to Internet (6%) felt that the cost of Internet of average USD$1 for 40 minutes was too expensive. The other major challenge identified in the results is poor mobile networks that made it
difficult to receive calls even though they were on roaming. Buying a Zimbabwean SIM card did not help either as the network problems persisted. Even though the mobile network access was poor, 8% were of the opinion that the mobile phone charges were high averaging USD$0.24 per minute for international calls.

A further challenge that was identified is that of inadequate availability of local information. The tourists found it difficult to find local information about activities, banks and other ancillary services. Further challenges included the lack of availability of ATMs as experienced by 4% of the respondents. However, 6% of those who managed to find the ATMs, indicated that they were unable to draw funds as their electronic cards were not accepted by the Zimbabwean banks. The majority of the ATMs in Zimbabwe only accept VISA and MasterCard. American Express cards and Diners Club are for example not catered for. Additionally, there is no in-store ATMs in Zimbabwe as they are found only at banks.

4.2 Results from the Government

Senior civil servants were interviewed to obtain government views on policy directions. Based on the interviews, it was deduced that the current policies of the government are based on the economic blueprint titled the Zimbabwe Agenda for Sustainable Socio-Economic Transformation (ZIMASSET). This document contains major policy announcements for all areas of the economy. Civil servants stated that the fiscal policy statements from the ministry of finance and the monetary statements from the RBZ were used to guide their operations. It was made clear that the government was experiencing financial challenges. On other hand they stated that government assumed that it had provided infrastructure to enable ICT to be used in all areas of the economy including tourism. It was mentioned that the government is in the process of implementing e-government and has introduced e-visa. The e-visa is currently open to nationals from China and India. From the interviews it became apparent that after successfully co-hosting the United Nations World Tourism Organization conference, the government wants to encourage and diversify into the Meetings, Incentives, Conventions and Exhibitions (MICE) niche market. The government wants international meetings, conventions and exhibitions to be hosted in the country.

4.3 Results from the Governmental Organizations

As part of the study, interviews and observations were made of ten trade associations and governmental bodies in the tourism sector. Although the study showed that organizations in the sector have the hardware infrastructure they are varied and at different level of granularity. Most organizations use ICT for basic office, finance and human resources functions. All the studied organizations were not involved in software development and their systems were not integrated. In most of the cases (52%) the highest ranking ICT personnel were in the lower management and 15% was in the top management though they did not report directly to the Chief Executive Officer. A total of 20% of the organizations have ICT management committee and 80% does not have. The lack of ICT management committees results in failure to articulate ICT issues at management level.

In all organizations studied, there was no ICT committee at board level hence the board do not sufficiently carry its oversight role on ICT activities. In all the organizations surveyed, there was no scheduled training for staff as most of the trainings were needs based. This could also be explained a significant number of organizations that outsource (42%) their ICT functions.
The survey revealed that there are many challenges facing governmental organizations and these hamper them from fully utilising ICT. Figure 4 shows that 74% of the respondents revealed that the greatest challenge faced by governmental organizations in the tourism sector was the lack of finance. As a critical factor, the lack of finance results in other challenges such as the failure to attract skilled ICT staff (42%), and low ICT skills (47%). The participants stated that the other reason for the lack of skills arises from the fact that ICT is continuously evolving; hence the skills valued today may not be required in the next few years. The next challenge was high cost of hardware and software (21%) as the price of hardware is comparatively higher in Zimbabwe than in its neighbour countries. Furthermore the participants especially at lower levels of the organisations identified out-dated hardware (37%) as another challenge. Out-dated hardware may have compatibility challenges with new software. The other big challenge is that the ICT department, at organizational level, is not properly represented at the top echelons of organizations.

Moreover, a total of 16% felt that the Internet speed was very slow thereby affecting their operations. The other challenge was that users often resist changes because of lack of training and constant introduction of new versions of software.

A further challenge is loss of data due to hardware failure (21%) and this problem can easily be solved if data is backed-up. The failure to do this shows poor ICT practices and skills. A skilled person will ensure that data is backed-up on a regular basis, ensuring that all the data generated in the past is safe and secure. Additionally the limited use of electronic payment services was another problem identified by 16% of the respondents. The limited use of electronic payments is hindering business, as companies cannot sell their services to tourists who prefer not to carry large sums of money. Allowing the use of electronic payments would be a huge enabler for growth in the sector.
4.4 Results from Private operators

The majority of tour operators in Zimbabwe are largely Small and Medium Enterprises and the large corporates being a handful (Rusike & Chitambara, 2012). The challenges faced by corporates are almost similar to the ones outlined for government-controlled organizations. The number of ICT personnel in medium enterprises was generally between one and three who are mainly engaged in user support. None of the surveyed organizations were involved in software development or web development. This can explain why 67% of the websites were developed and managed outside the organization. Some of the outsourced websites are hosted outside Zimbabwe. In most cases, these websites were rarely updated, as the outside vendors usually demand payment upfront before they update the websites. It was also revealed that most of the websites that receive payments were hosted outside Zimbabwe. This creates mistrust with monetary authorities that are not sure if the money is remitted back to Zimbabwe (Reserve Bank of Zimbabwe, 2014). The surveyed organizations were all using a computer-based financial system and 50% also had a computer-based reservation system as such it reveals that ICT is mainly used to ease administrative purposes as opposed to operations. Furthermore only 20% of the organizations had ICT strategic plans accompanied with ad-hoc budgeting indicating that there is limited planning as far as ICT strategy is concerned.

![Figure 5: Challenges faced by private organizations](image)

The survey also revealed that in 50% of the organizations ICT positions, was lowly represented as they occupied first-line management level and below. ICT personnel do not have the opportunity to articulate their issues to management. The problem is further compounded by management that sometimes procure ICT equipment without consulting them. However, when equipment fail, or require high costs for maintenance ICT personnel are always blamed. Power outages (50%) due to power shortages in the country were also another problem that was constantly cited by the respondents. This forces organizations to buy diesel or petrol powered generators and this pushes up the operation costs. The major problem was unreliable network connectivity. This for instance disrupts systems that depend on the availability of Internet and riles tourists.

The lack of financial resources was indicated by 33% of respondents in this category as hindering the private organisations in the sector from effectively leveraging ICT. Also another 33% of respondents believed that there were no adequate ICT skilled personnel that lead to the outsourcing of ICT support services. However 44% of surveyed organisations outsource ICT services because they do not have standalone ICT department. Furthermore a total of 17% cited a concern on the constant change or...
advances ICT requiring staff to learn new skills as a challenge that causes some of the employees to resist change. Furthermore the lack of budget for ICT training was cited as another reason for resistance to change. Training is critical to help organizations to improve ICT readiness, adoption and usage within organizations.

5. DISCUSSION OF RESULTS

Based on the findings presented in Section 4, a few implications, concerns and trends were identified. The general various themes and categories of information can be used towards the formulation of a strategy for ICT implementation in the tourism industry. Provisional components for the proposed strategy include, but are not limited to, best practices and policies. Figure 6 depicts the core elements that will be used towards the formulation of the proposed strategy.

![Diagram of Key Elements Towards the Proposed Strategy]

The proposed elements highlighted in Figure 6 identified key actions required from the government, government organisations and private organizations. These key actions are briefly discussed in the following sub-sections.
5.1 Government
Actions required from government include having appropriate legislation and policies that enforce and monitor use of ICT particularly on the licensing, registration process and grading of tourism organizations. The results in this paper highlight the lack of electronic payment facilities as a major challenge and that the government should enable the use of a variety of electronic payments. Tourism requires telecommunication connectivity, good roads network and other supporting infrastructure. The government should embrace the use of public-private partnerships to build robust infrastructure in tourist resort areas as neither government nor the private sector can do it alone. In order to good telecommunication service the government should enforce service standards on Internet and mobile services providers and penalise such providers for poor services.

The government should also take the lead by fully computerising its operations; hence the need to attract skilled staff by giving appropriate remuneration as this will help to attract skilled staff. Poor remuneration results in a high staff turnover. This factor applies also to both the government and private organizations. All the factors discussed under this section will depend on a strong political will.

5.2 Government Organisations and Private Organisations
The value of ICT depends on how companies exploit ICT to enhance their management processes and operations. ICT assets on their own can produce no value to a company; whereas ICT assets entrenched in a company’s daily operations are usually found to be indispensable – as a multi-purpose technology. This calls for appropriate IT governance structures. IT governance is achieving strategic alignment between business and ICT, in order to make sure that money spent on ICT is delivering business value. The governance will also determine how ICT will be represented at management and board level as well as the procurement of ICT equipment. The governance structure will also determine key performance indicators for ICT. However the success of the entity depends on how top management supports the ICT function, as they are the custodians of organisational resources.

There must be an interactive portal for the tourism sector in Zimbabwe. It must also be able to interface with databases of related companies and allow virtual tours, videos, online bookings and payments. However for the system to be integrated, organizations must ensure that all their internal systems are integrated first. The system can only then be enabled to interface with other systems. The portal must be managed by a pool of skilled people from diverse backgrounds like; marketing, communication, advertising and web development. The portal must have, for example, ‘clickable’ maps showing hotels, resorts and places of interest on each site on the map as well as revenue sharing agreements.

Universities and colleges must add more ICT-related courses, relevant to the tourism sector in their curriculum. Refresher courses must be constantly provided to both management and ICT personnel to brace up with constant advancements of technology.

6. CONCLUSION
This study has highlighted that there is lack of government policy, together with the implementation thereof. This is further exuberated by the absence of ICT legislation that provides an enabling environment for ICT use. There is also an inconsistent data network and unreliable power supply in Zimbabwe. The tourism sector requires reliable, uninterrupted and low service connectivity in the form of telephone networks, Internet networks and constant power supply. As there is no online payment gateway in Zimbabwe, the country can benefit from an integrated system for marketing, bookings and payments that accommodates most international credit cards.

At organizational level, even though management recognise the importance of ICT and its capabilities, there is lack of commitment and leadership to entrench ICT into core business operations. In most organisations there is a governance problem as ICT persons who are supposed to implement ICT strategies...
are not represented at management and board levels. Furthermore, there are no clear decision rights between management and ICT personnel. Organizations in the sector must train, support and capacitate their staff to effectively utilize relevant ICT services as huge ICT investments in the hands of unskilled manpower will not improve performance.

7. FUTURE RESEARCH

The main purpose of this study was to gain deep insight into the current position and utilization of ICT in the tourism sector. This was accomplished by means of an extensive case study using semi-structured interviews and questionnaires. Future research will entail using the key elements, identified during the data collection phase, to feed into a strategy to integrate ICT into the tourism sector in Zimbabwe.

6. REFERENCES


