

The Use of ICTs for Knowledge Management in Visitor Information Centres: A Pilot Study

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Abstract

Countries across the world have dedicated visitor information centres that exist to provide tourist information to both domestic and international visitors. The dissemination of relevant knowledge/information to visitors is a crucial component of a Visitor Information Centre (VIC). South Africa hosts a countrywide network of visitor information centres. A pilot study of selected (non-profit) VICs investigates whether the information managers have sufficient knowledge management capabilities in terms of tacit/explicit knowledge; the knowledge management information life cycle; and knowledge management assets in terms of organisational processes; also whether such managers are able to access relevant knowledge assets through ICTs. Preliminary results indicate that VIC information managers possess varied Knowledge Management capabilities with differing use made of ICT. Recommendations propose a countrywide survey into the role of the VIC as a potential knowledge management driver utilising ICTs for the development of local tourism communities (ICT4D).

Keywords: knowledge management (KM); knowledge management capabilities; visitor information centres; information and communications technology (ICT).

1 Introduction

Knowledge Management (KM) is concerned with an individual's ability, skill and expertise to solve an 'information/knowledge related query' successfully. KM also involves the process of acquiring, organising and communicating (Alavi & Leidner, 2001) the intellectual capital of staff of an organization for reuse by others. The tourism sector in many countries has dedicated information centres that are mandated to provide relevant tourist information. With the growth of tourist numbers the efficient and effective dissemination of information and knowledge is imperative to enhance the profile of a destination for tourists. South Africa as an emerging destination, although challenged in terms of the digital divide (Minghetti & Buhalis, 2010: 268), has a comprehensive network of Visitor Information Centres (VICs) in nine provinces, some of which are closely affiliated to the National Department of Tourism (NDT), others to local municipalities (both non-profit), and a small group of private entrepreneurs that operate such information centres (Salonius & Kapyła, 2013). This paper investigates the KM capabilities of VIC managers in terms of their tacit and explicit knowledge; the KM information life cycle; and KM assets in terms of organisational processes; also whether such managers are able to access relevant knowledge assets through ICT.

2 Theoretical Background

The distinction remains unclear, but data are symbols with no meaning; information is data with meaning that provides answers to certain questions; and knowledge is information embedded in a person's reasoning resources for use within a decision process and answers "how" questions (Aamodt & Nyard, 1995). The focus is on knowledge as either tacit or explicit knowledge. Tacit knowledge is held in an individual's mind (Nonaka, 1994; Venkitachalam & Busch, 2012) and reasoning processes of this knowledge is difficult to identify, although experts are able to rapidly evaluate and match product category with knowledge stored in memory (Joia & Lemos, 2010). Explicit knowledge is known, codified and shareable knowledge (Nonaka, 1994). Both these types of knowledge are necessary KM capabilities of VIC staff also involving the use of ICT (Palvalin, Lonnqvist & Vuolle, 2013; Venkitachalam & Busch, 2012).

KM is evident at all stages of the information life cycle (Alavi & Leidner, 2001) from the identification and acquisition of resources and assets; to storage and retrieval; to the dissemination or sharing of information and knowledge resources and assets to a community of users that could be a 'visitor' or 'local' community. KM assets are knowledge intended to minimise knowledge loss within the shifting human capital by embedding know-how into standard operating procedures (Alavi & Leidner, 2001). KM capabilities refer to an individual's ability to *'know-what'*, *'know-when'*, *'know-why'*, *'know-with'*, and *'know-how'* to take action, and includes various types of information/knowledge also using ICT (Zack, 1998). ICT for KM uses a variety of IT applications and services (that are identified in par 4.2). However the digital divide in South Africa with the disparate geographical and social access to information and knowledge in urban and rural areas, as well as inconsistent CRM, impacts on VICs to optimally deliver the desired service (Best & Kumar, 2008; Coetzee, du Toit & Herselman, 2012; Minghetti & Buhalis, 2010).

A VIC is a tangible demarcated space, either in a shopping mall, part of another consumer store (e.g., in the shopping space of a highway restaurant/garage), a separate building, or other consumer-oriented store usually well signposted and easily accessible from the road. The sole purpose of the VIC is to provide both tangible (e.g., brochures, maps) and intangible (verbal) sources of information for the benefit of the visitor.

3 Methodology

The research question is to determine whether the information managers in VICs aligned with the NDT have the necessary KM capabilities to access relevant knowledge assets through ICTs. A qualitative approach using nonprobability purposive sampling of 23 respondents in five selected non-profit VICs was followed. Individual interviews and focus groups were utilized over a period of 5 days as the pilot phase to ascertain whether the information managers of the VICs have the necessary KM capabilities including ICT skills to offer an effective and efficient information service. The respondents ranged from 24-58 years of age and represented

both genders. All respondents had travelled to a central venue to attend a pilot course on VIC management. A total of 23 individual short interviews and five daily focus group discussions were conducted to add depth to the data. The respondents displayed varying levels of training in the fields of tourism and information usage. Data were collected during April 2013. For the preliminary data analysis, a content analysis approach was utilised focusing on three themes: tacit and explicit KM capabilities of VIC staff; VIC staff's KM capabilities in terms of the KM life cycle; and KM assets in terms of the organisation processes. A follow-up study should explore the satisfaction of visitors to VICs in terms of information provided to them and the knowledge of the VIC staff.

4 Preliminary Results

4.1 Knowledge Management capabilities of VIC staff

KM capabilities will be discussed in terms of tacit and explicit knowledge of VIC staff; in terms of the KM information life cycle; and in terms of organisational processes.

Tacit and explicit knowledge. KM capabilities in terms of tacit knowledge of VIC staff refers to the inherent knowledge (intellectual capital) of an individual as well as technical skills and procedural knowledge (Nonaka, 1994). Tacit knowledge is difficult to identify (Joia & Lemos, 2010); whereas explicit knowledge is known, codified and shareable (Nonaka, 1994). In a VIC context the solutions to information requests are constantly tailored to specific needs and situations. The respondents said they employed both tacit and explicit knowledge to attend to queries with a turnaround time of 24 hours (i.e., declarative/know-how knowledge using ICT); to constantly update the database (i.e., procedural knowledge using ICT); to influence length of stay (i.e., conditional/know-when knowledge – referring to making the call at the right time); to deliver uncompromised quality service at all times (i.e., relational knowledge/know-with knowledge – to know which ICT types of knowledge to interact with). Respondents of the focus groups felt that they were skilled and well informed on their regions, that they provided accurate, up-to-date and comprehensive information to all tourists and interested parties, working in shifts from 07h00-20h00. All respondents use ICTs with access (a direct hyperlink or through Google) to the centralised database of South African Tourism (SAT: the marketing section of the NDT) that hosts generic countrywide updated information. Some VIC managers saw ICTs as extremely helpful while less positive attitudes were also revealed suggesting that technology caused one to lose important (manual and mental) skills.

Knowledge Management capabilities in terms of the KM information life cycle. KM capabilities refer to the stages of identification and acquisition of information, storage and retrieval, and dissemination of information. Identification and acquisition of information is the VIC manager's ability to recognise a need, share expertise and access coded information for the 'tourist' to consume. Most VICs have standalone databases with their area specific information. One VIC manager expressed the need to collate tourist information of the wider region in a regional centralised database (Salonius & Kapyla, 2013). Storage and retrieval of information is a VIC manager's ability to create a digital, shareable record using searchable terms for easy recognition

of shared content. Some respondents suggested that such terms could be confirmed during impromptu brainstorming sessions. About a third of the VICs in question had dedicated IT staff that update and maintain their standalone databases and that assist with IT-related information queries on unusual topics. Dissemination of information is the sharing and accessibility of information across a community of users and refers to all involved stakeholders, such as VIC staff, domestic and international tourists, the host community; organisational and business partners, tourism bodies, tourism suppliers, government departments within the scope of this paper. Three (of the five) VIC managers stated that the core business of VICs as a one-stop shop is the coordination and distribution of accurate and timely information to domestic and international markets using all communication channels, working with local, provincial and national government, thereby growing the market share of visitors and of their local economies. The Domestic Section of the NDT has employed GIS specialists that are mapping tourist information from local level, e.g., graded accommodation and attractions within 50 km radius of a VIC are being mapped and provided to all VICs to enhance information delivery to tourists. VIC staff uses Google maps to assist with route information, although most tourists seem to prefer destination-specific paper-based maps provided free of charge. VICs are encouraged to develop local route maps (tangible deliverable) for tourists that are uncertain of distances between attractions and accommodation establishments to encourage an optimal experience of a destination.

The importance of indigenous knowledge (IK) in South Africa is an essential component of the larger body of knowledge, and VICs could employ the KM information life cycle by conducting knowledge audits (as a KM tool) in community villages in their areas to capture cultural heritage orally imparted by elders, to provide tourists with authentic experiences and enhance the tourism value chain (Grimshaw & Gudza 2010). A knowledge audit done by a VIC, becomes a knowledge asset of that VIC and includes the identification of knowledge asset creators (community elders); “acquisition” of the IK; the traditional owners (the community) of the IK; the conserver of the IK (the VIC); the disseminators of the IK (the VIC); and the users of the IK through the VIC (Desouza & Awazu, 2004; Mearns & Du Toit, 2008). The outcome of the audit is a knowledge asset and may also be included below.

Knowledge Management assets in terms of the organizational processes. The leveraging of KM in terms of knowledge assets (both tangible and intangible) is problematic as the description of knowledge assets continues to be incomplete (Freeze & Kulkarni, 2007). However, to effectively use knowledge assets, organisations must be able to identify and quantify these resources, although measures for intangible assets is lacking (Freeze & Kulkarni, 2007; Zack, 1998). The desired approach to leveraging KM in terms of knowledge assets (Freeze & Kulkarni, 2007) includes the identification of standardised knowledge within organisations with the goal to minimise knowledge loss by embedding know-how into standard operating procedures. As noted from the respondents the leveraging of KM in terms of knowledge assets is addressed by NDT documents (all downloadable from www.tourism.gov.za), i.e., the National Tourism Sector Strategy with Strategy Documents such as amongst others, the Domestic Tourism Strategies, the National Tourism Service Excellence Strategy; the Policy and Knowledge Services, the South African Tourism’s Database (www.southafrica.net), the National Visitor Information

Centre Database, the Service Standards and Charters, and the Operational checklist to ensure that all VIC staff deliver smart service. The National Tourism Service Excellence Strategy is regarded as the core KM asset within the VIC context in creating an organisational culture incorporating intercultural communication and norms in all organisational processes (Krauss & Turpin, 2010). The VIC managers at the two 'gateway' VICs (for international tourists) expressed their need to make "theirs the best" to and in the country, aspiring to make South Africa one of the top 20 global destinations by 2020 by building a service excellence culture within the NDT and the tourism sector value chain (Mitchell & Faal, 2008; Yilmaz & Bitici, 2006).

4.2 ICT usage in the VIC for Knowledge Management

Within any information-based environment such as a VIC, where ICT is applied for KM, the following data applications and services can be identified: e-mail; search engines, internet services; data warehousing/mining/analytics; database management systems, knowledge base/knowledge repository; document management systems; work flow management systems; knowledge maps; videoconferencing; group decision support systems; social media; expert systems; case-based reasoning systems; intelligent agents and neural networks (Kim & Trimi, 2007). From the focus groups the responses revealed a wide range of intentions from limited use of technology to restricted use to full engagement in order to take advantage of ICT applications for information search and decision-making to address the needs of tourists. VIC managers' intentions to use technology vary and depend on the type of information query and context of both the query and location of the VIC. Most respondents expressed the importance of a good ICT system to allow easy access to information. The interviewed VIC managers, emphasised the importance of a good telecommunications infrastructure with broadband internet connectivity. Most VICs had ICT systems in place, (i.e., satellite/broadband connectivity for wifi, running a dedicated server to provide services, a CRM System, own databases, a call centre (with an easy to memorise number), land- and mobile phones, fax machine). Avenues of distribution noted are websites (linked to the SAT website as well as interactive websites where tourism suppliers can upload their products (e.g. indicate discounts and advertise events) and emails. Social media such as blogs are used, with Facebook and Twitter pages monitored on a weekly basis. Two of the VICs (located at airports) have touch screen 24/7 accessibility should information be required outside of the VICs operating hours. VICs operating as an information hub for regions have internet links with attractions and small towns in the vicinity.

5 Conclusions and recommendations of the pilot phase

In conclusion, the preliminary findings show that the short interviews and focus group discussions proved a useful way to ascertain staff capabilities of KM and general management training for a VIC. Although similarities exist among KM capabilities of respondents there is a complex mix of attitudes, subjective norms, cultural differences and group dynamics with individuals differing considerably. Importantly, the interviewees report that the importance of KM for ICT and technology use is vital within a VIC context. The central role technology plays is imperative irrespective of whether it is seen as enhancing or distracting. The results of the pilot study suggest that further research is important to explore the use of ICT within a wider context for

VICs to play a more worthy role in their host communities in addressing local socio-economic conditions through (tourism) development initiatives. Since ICT4D is currently viewed as the effective approach for the development of economically disadvantaged groups with 'tourismisable' assets (Nadkarni 2008), the roll out of a comprehensive survey focusing on KM as the conceptual framework and as key driver of human and information capital that can be harnessed to provide interventions to bridge the gap between knowledge and information in underdeveloped communities is proposed. From the perspective of the VIC as custodian of knowledge and 'partially responsible' stakeholder, ICTs may be essential in nurturing entrepreneurship in grassroots tourism entities within this context. Additional research is also needed to explore technology use by leisure tourists (Kennedy-Eden, Gretzel & Mistilis, 2013) as current research does not take into account that tourists may want to actively restrict their technology use while on vacation, which in turn elevates the role of the VIC as having embraced technology as provider of relevant visitor information.

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