ABSTRACT

Knowledge audits and assessment help organisations to identify the status of knowledge processes and develop strategies to manage their knowledge-based assets. The structure of Indigenous Knowledge Management Systems (IKMS) is different from the organisation’s Knowledge Management (KM) systems and mainly based on the tacit and implicit knowledge forms. Hence, the existing organisation’s knowledge audit and assessment tools are not addressing the inherent structure of IKMS. The paper addresses this gap and uses a methodological approach for the assessment of Indigenous Knowledge Management (IKM) processes. The approach is tested in the indigenous Kelabit community of Bario in East Malaysia. The methods used for data collection are survey questionnaire and semi-structured interviews. The study finding argues that indigenous communities exercise the processes of storage, leveraging, sharing and applying knowledge. These processes are a combination of the knowledge and the ways in which this knowledge is put into practice in their daily life activities. These processes may be different but not less effective or less efficient in comparison to organisation’s KM processes. The study will help Information and Communication Technology (ICT) researchers to better understand the structure of IKMS and then use this understanding for designing the technological solution for IKM.

Keywords: Indigenous Knowledge Management, Indigenous Knowledge Management Assessment, Indigenous Knowledge Management System, Information and Communication Technology (ICT), Traditional Knowledge Management

DOI: 10.4018/jskd.2013010103
1. INTRODUCTION

In the last two decades, the development organisations and researchers have taken a major shifts and recognised the role of Indigenous Knowledge (IK) in solutions of local problems, a resource that can help in producing more and better food, to maintain healthy lives, to share the wealth, to prevent conflict, to manage local affairs, and thus contribute to global solutions (Mkapa, 2004). A decade ago, most of the researchers working in the area of IK were mainly anthropologists and sociologists, but the recent wave of interests in management and documentation of IK also became attractive for the researchers from computer sciences and information technology. Unlike the organisation’s KM systems, IKMS is unique as it relies on knowledge represented mainly in tacit and implicit forms and deeply rooted in the social and cultural context of indigenous communities. However, the ICT tools for IKM have been designed using the conventional approach of creating and manipulating databases of knowledge in the same way as for KM in organisations. This typical approach of IK databases design has thus failed to a large extent in serving the needs of indigenous communities as it tends to alienate IK from the essential context (Velden, 2010; Winschiers-Theophilus, Jensen, & Rodil, 2012).

To address these disharmonies and to create appropriate ICT tools for IKMS, the information technology professionals need to better understand the structures within the IKMS and then use this understanding as a basis for technology design and approaches. In this paper, we reflect our experience in using a methodological approach to explore and assess the process oriented IKMS of the Kelabit’s community in East Malaysia.

After introduction, the first part of the paper presents the background of the study, a brief introduction of research site and a review of the related work on knowledge assessment and audit. The theoretical framework, methodology and data collection process employed in this study are discussed in the second part and the last part of the paper summarises the results and discussion.

2. BACKGROUND

The indigenous communities have an inherent system for managing their knowledge resources which has withstood and proved its sustainability over thousands of years of dramatic events (Sveiby, 2007). The communities have unique ways and processes to manage, preserve and transfer this knowledge from generations and on the basis of relationships (intergenerational) and power structures (Williams, Consulting, Guenther, Conatus, & Arnott, 2011). Unlike the organisation’s KM structures where technology and databases are the essential parts of the system, IK lives in the memory, oral literature, collective intelligence and activities of the community. For example, the World Oral Literature Project, describes a variety of IK forms of oral literature which includes ritual texts, curative chants, epic poems, musical genres, songs, spells, legends, recitations, life histories and historical narratives (University of Cambridge, 2012).

However, according to Kapuire and Blake (2011) the current technology trends and developments have hardly been informed by the rural and indigenous communities’ inherent structures of information communication and IKM. The literature has sufficient number of examples about the failures or short term successes in adapting existing technologies, which are mainly designed for urban settings and implemented in rural communities (Howard, 2008; Thirumavalavan & Garforth, 2009). One of the factors, in the failure of technology appropriation, is the absence of input from local culture in the design of the system (Winschiers-Theophilus, 2009). The indigenous communities have the right to develop culturally appropriate ICT applications with content and access controls on their own terms and respecting their modes of communication and knowledge sharing (Håkansson & Deer, 2006).
Related Content

Rehabilitation Therapists as Software Creators?: Introducing End-User Development in a Healthcare Setting
www.igi-global.com/article/rehabilitation-therapists-as-software-creators/112018?camid=4v1a

Adventure Game Learning Platform
www.igi-global.com/chapter/adventure-game-learning-platform/70094?camid=4v1a
Integrating the LMS in Service Oriented eLearning Systems
[www.igi-global.com/article/integrating-lms-service-oriented-elearning/55260?camid=4v1a](www.igi-global.com/article/integrating-lms-service-oriented-elearning/55260?camid=4v1a)

Re-Branding Community Organizations for the Actualization of Development Goals in the Rural Communities in Nigeria