## Ensuring Participatory Design Through Free, Prior and Informed Consent: A Tale of Indigenous Knowledge Management System

Tariq Zaman<sup>1</sup> and Alvin Yeo Wee

Institute of Social Informatics and Technological Innovations-Center of Excellence for Rural Informatics (ISITI-CoERI)

Universiti Malaysia Sarawak (UNIMAS)

## **1.0 Introduction**

Information and Communication Technologies (ICT) for Development is a growing field of study. There has also been an increasing interest in how access to ICT, such as connecting to the Internet, might impact social and economic development by, for example, giving access to unlimited knowledge (e.g. e-learning), providing health-related services (telediagnosis), offering businesses opportunities (e-commerce), employment opportunities, and access to government services (e-Government websites) (Siew, Yeo, & Zaman, 2013). In all such development projects, two critical success factors are the degree of the users' satisfaction of the technology and the degree to which the services offered by the technology address the primary needs of intended beneficiaries (Dearden, 2008).

Over the past two decades and with the evolving concepts of Indigenous Knowledge Management (IKM), researchers, development organisations and even indigenous communities are exploring digital technology and techniques to codify and improve access to Indigenous Knowledge (IK) (Dyson, Hendriks, & Grant, 2007; Holland & Smith, 2000). ICTs provide many opportunities to codify and make explicit non-codified tacit knowledge and then disseminate it through various forms of expression such as pictures, audio and videos. There are many examples of using ICTs for revitalization of indigenous languages and preservation of cultures and knowledge (Winschiers-Theophilus et al., 2013).

Most ICTs for IKM are designed and implemented without making distinction between the end users (urban and rural) of the system. These technologies would not work given that the target communities of urban and rural dwellers are very much different. These differences include the rural-urban context, literacy, language and prior experience with computers (Saeed, Rohde, & Wulf, 2008). Hence, the literature is littered with failures and short term successes of these systems. One of the factors, in failure of technology appropriation, is the absence of input from local culture and community in the design of the system (Winschiers-Theophilus, 2009). The indigenous communities have their own concepts of knowledge and forms of information communication so it is necessary that they should able to develop their ICTs usage in such a way that their cultural identity should not come under stake (Zaman, Kulathuramaiyer, & Yeo, 2010).

<sup>&</sup>lt;sup>1</sup> Corresponding Author

Email address: zamantariq@gmail.com