

Abstract
A Framework for Sustainability of Advanced ICT Education in a Developing Country

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The introduction of Information and Communication Technology (ICT), in the Developing World has brought with it the immense need for higher expertise for applying, managing and researching ICT in different Organizations(Wesley-Tanaskovic, I.1989 ; Munasinghe, M.1989 ; Dow, M.1989; Galvis, A.1989 ; Lock, K. and Khosrowpour, M.1992; Abdul-Gader, A.H. 1992).But ICT education and training faces a real problem, that of sustainability, which bedevils higher education Institutions in general, and postgraduate ICT education Institutions in particular.(Manuh, et al, 2007;Wesley-Tanaskovic,I.1989; Munasinghe,M.1989;Dow,M.1989;Galvis,A.1989; Lock, K. and Khosrowpour, M.1992; Abdul-Gader, A.H. 1992)

The Term sustainability (Which we define in terms of capacity for continuation of organizational mandate) however has not been applied in the ICT/IS Field as a reference discipline, except in the one case by Madon, et al 2006, though it has implications for the failed ICT/IS initiatives in Education and Organizations, and could help make Sustainability a real fulfilling experience in the field.

The aim of this research therefore is to investigate how we may develop and apply a sustainability framework to postgraduate ICT education, using the Osei Tutu II Institute for Advanced ICT Studies in Kumasi-Ghana, to understand the Challenges and opportunities for sustaining Postgraduate ICT education in a developing Country in order to contribute to the body of knowledge on sustainability, whilst making practical improvements in the Institute.

Sustainability (Madon et al, 2006) and Grounded (Le Roux, 2006, quoting De Burca and Mc Loughlin 1996,Strauss and Corbin 1999, De Vos and Van Zyl 1998,) theories will mainly inform the study.

The Methodology of the Study is qualitative critical interpretive(Walsham 2005, Howcroft and Trauth 2004, Pozzebbon 2004), action research using Checkland's soft systems (Baskerville, R. and Wood-Harper, A.T.1998; Checkland, P. 1991;Checkland,P. 1995;Checkland,P. 1999)) and McKay and Marshall cycles of dual imperative.(Germonprez,M. and Mathiassen,L.2004;McKay,J. and Marshall,P.2001)) approaches to canonical and cyclical action research(Baskerville, R. and Wood-Harper, A.T.1998;Germonprez,M. and Mathiassen,L.2004)

The hypothesis is that if we apply a sustainability framework to the Ghana Institute through a critical interpretive action research process, it will improve the sustainability of the Institute in particular and increase our knowledge on challenges, opportunities and processes for sustainability of Organizations in general.

Data collection techniques are qualitative data collection, Review of documents and Literature, in-depth interviews, observation of the workings of the Institute as a

participant, record taking and Practical Action (which will be a means for intervening in some of the practical problems of sustainability that will be observed, learned about and emerge related to the eight pillars of sustainability)

Inductive approach will be used to assist in the data analysis (Thomas, D.R. 2003), for several reasons. It is a straight forward approach, which allows themes to emerge from the raw data instead of imposing themes, and ignoring the obvious. It is also theory based and will help in developing the sustainability theory under consideration as it has characteristics similar to a 'grounded' approach. It also provides a clear linkage between research objectives, themes and findings of the research (Thomas, D.R. 2003)

The quality criteria depend on the data collected and how to do it. We will be guided by Pozzebon on quality assurance as related to application of her four criteria-authenticity, plausibility, criticality and reflexivity as related to data collection and data analysis (Pozzebon 2004). Permissions and Agreements will also be sought

The expected findings of the study are:

Developing and applying a sustainability framework in an action research process will help to improve the sustainability of the Ghana Institute in particular, and contribute to the knowledge on challenges and opportunities for sustaining post graduate ICT education in a developing country context , and the body of knowledge on sustainability of organizations in general.

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