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Musawe Sinebare
University of Wollongong

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Private Computer Training in Papua New Guinea: From Chaos to Order

**A Thesis submitted in fulfilment of the requirements for the award of
the degree of**

**Doctor of Philosophy
(Ph.D)**

from

The University Of Wollongong

by

Musawe Sinebare

Dip.S.T., B.Ed *UPNG*, M.Ed *Birm*, M.InfoTech *W'gong*

Faculty of Education

1999

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Abstract

Information Technology (IT) education and training in Papua New guinea (PNG) like those in many developing countries has not been formally introduced into the public school system. The demand from public and private sector employers for personnel with IT knowledge, experience and qualifications from the workplace is growing rapidly as the workplace is gradually applying computing skills to improve efficiency. PNG nationals from the public sector educational institutions, particularly school leavers from the secondary school level (which constitute that population) urgently require education and training opportunities in computer application skills and IT in general.

In PNG, only the universities, some post-secondary institutions and the private training organisations are conducting some form of formal computer related courses. Since entry to universities is highly competitive and often a limited number of study places are available, the majority of the school leavers and employees who require computer skills training often resort to the short-term computer related courses conducted by private computer training organisations. The private computer training organisations are registered as a 'commercial organisation' but conduct computer or IT related education and training programs as a 'private training organisation'. Such a scenario is allowed and facilitated by the current policy and regulatory framework which promotes unregulated, uncoordinated and ad hoc IT education and training environment in the country.

The private computer training organisations, their computer training courses or programs and their present practices under the existing policy framework were examined. The existing government policies and regulations with a potential to facilitate IT education and training in PNG were analysed in view of the current computer training organisations, training programs, and their pedagogical details examined. It emerged that the private computer training in PNG is chaotic under the present policy and regulatory framework. There is neither a specific policy formulated nor a curriculum guideline provided to cater for IT education and training in the country.

Several recommendations based on the research findings, are put forward for implementation by various existing authorities as well as recommendations for a new authority and new structures under which IT education and training can be facilitated. The thrust of the recommendations strongly supports the view that IT education and training in PNG be given national attention by the government because of the potential in using IT in many socio-economic aspects of the country and more importantly because of its potential to create a knowledge industry within the country. In order for

this to occur, the government must play the pivotal role in formulating a national IT Policy for implementation by both public and private sector. Further, necessary administrative and physical infrastructure should be established as a matter of priority in order for IT education and training to be promoted, applied, and implemented. In addition, the many recommendations made must be implemented within the suggested policy and curriculum framework.

Several implications of the many recommendations put forward are suggested. If the recommendations are implemented then IT education and training in the country would be planned, coordinated, and delivered in accordance with the suggested policy and curriculum framework. On the other hand if the recommendations are not implemented then the status quo would be maintained. A Ripple-Effect theory is postulated which attempts to model the current chaotic private computer training organisations and their respective training programs as well as predict the future private computer training scenario under the proposed IT Policy and IT Curriculum framework.

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