UNIVERSITY OF SOUTHERN QUEENSLAND

EVALUATING THE CONTRIBUTION OF COMMUNITY INFORMATICS TO RURAL DEVELOPMENT: THE CASE OF MALAYSIA'S RURAL INTERNET CENTRES

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For the award of
Doctor of Philosophy

2012

ABSTRACT

Telecentres in Malaysia were a policy response from the Malaysia government to address the digital divide between urban and rural communities. In the first instance, the main goal of the rural internet centres (RIC) program was to enhance rural access to information and communications technologies (ICTs) and to build human capital in ICT knowledge and skills in rural communities. The main goal of RIC program was extended over time and the RICs in each community were seen as a means for developing economic activity in rural communities through local entrepreneurship. The adoption of ICTs in rural regions may further enhance the effectiveness of RICs to the local communities. Social and economic benefits have been identified as important outcomes (perceived benefits). The objective of this study is to evaluate the perceived affects of RIC program on quality of rural life (QoRL).This study assesses the perceptions of stakeholders (RIC end-users and program managers) in regard to the impact of the RIC program on human capital of rural communities in Malaysia. The research questions were translated into three specific testable hypotheses. Despite that, the main research problem is, "Can rural internet centres be an effective tool in bridging the digital divide for rural communities and improving rural quality of life?." Thus this study is not evaluating if the divide is closing, however, it is evaluating if people perceived there is an improvement in their digital skills due to their use of RIC services.

This study is an evaluation of the RIC program in Malaysia, using a program logic framework to identify and evaluate inputs, outputs and outcomes of RIC program from multiple key stakeholder perspectives. Community informatics, end-user computing and social capital provided the theoretical lens for the program logic evaluation of the RIC program. An online survey of RIC users across 42 RICs was the main data collection method used to determine RIC users' perceptions and level of satisfaction with the services provided by RICs. And furthermore whether there is evidence of outcomes from the use of RIC services which could result in enhanced human capital. The main data collection phase was supplemented by a series of interviews with program managers and RIC managers from different regions and locations, some non-users and members of local RIC management committees. Finally some general observations about how RICs were operating were made during site visits to 11 RICs conduct interviews. The results of statistical analysis of the quantitative survey data and narratives determined from a content analysis of the interviews (qualitative) along with some RIC site observations (qualitative) are presented and discussed. The program logic framework of (1) inputs and outputs and (2) outcomes was used to guide these analyses in order to evaluate the RIC program. The quantitative and qualitative data collected for each stage of program logic framework were analysed, interpreted and triangulated in determining the key findings of this study.

There is generally strong support for the benefits of the RICs in building human capital, including improving job prospects and business opportunities for rural communities in Malaysia. The key findings also show that RICs are strongly associated with enhanced social capital although the causation effects may run both ways. The results are used to propose a model of the effects of community

informatics, noting that many of the potential benefits may be intangible. Theoretically, this study has shown that the RIC improved the individual community QoRL with the use of ICT applications and services. Meanwhile, this thesis developed a comprehensive theoretical framework drawn from community informatics, end user computing and social capital theories to evaluate the RIC program. This is a new empirical contribution to the growing literature on the relationship between community informatics and social capital. The majority previous empirical studies on social capital have been conducted in sociology, whereas there is dearth of empirical studies which have evaluated the contribution of community informatics and social capital in telecentre programs; especially in developing countries such as Malaysia. Furthermore, there are few if any previous studies have evaluated an entire telecentre program such as the RIC program using program logic theory.

The research gap is whether the people perceive that there is an improvement in human and social capital as a result of the RICs. Thus these contribute to perceived effectiveness of the RIC program and improve in digital knowledge and skills in rural Malaysia. Hence, the contribution to practice is to build social capital policy while emphasise more on human capital approach in rural Malaysia. With the improvement on RIC program in Malaysia, i.e.; inputs, outputs and outcomes, this will leads to improvement on ICT for rural development. Therefore, this study makes a contribution primarily to the field of community informatics, drawing concepts from social capital, economic development, quality of rural life and rural development with reference to local rural communities in Malaysia.

CERTIFICATION OF THESIS

I certify that the ideas, analysis, results and conclusions reported in this thesis are entirely my own effort, except where otherwise acknowledged. This work has not previously been submitted for a degree or diploma in any university. To the best of my knowledge and belief, the thesis contains no previously published or written by another person except where due reference is made in the thesis itself.

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ACKNOWLEDGEMENTS

ALLAH S.W.T, syukur Alhamdullilah...praise Allah for giving me the strength and thoughts to complete this thesis.

Deepest thanks to all who have taught, support, advice, encourage and guidance me throughout my 4 years at University of Southern Queensland (USQ). Specially dedicated to my principal supervisor; Professor Dr Geoff Cockfield who always encouraged and guided me with patience and most importantly as a friend. He guide and advice all the way through from the beginning until the end of this dissertation. Thank you so much Prof Geoff; my work would not have been possible without your support, advice and guidance. I value your guidance. My second special thanks to my associate supervisor, Dr Michael Lane who provided critical support and informed comments at different stages of my study. His instant availability helped me move through obstacles in the whole thesis. His expertise serves as a role model for me and continues to influence me in my future academic development. I value his guidance. Dr Michael, thank you; without your support and guidance I could not finished this thesis.

The Ministry of Information, Communication and Culture (MICC), the Warisan Global (WG) Sdn. Bhd., the RIC managers, the RIC management committees, the RIC non-users and the local communities involved in this study; thank you very much. I thank each of them for their patience, kindness, valuable information and time. All of the participants/respondents were most helpful. I really appreciate the warm welcome and support during my site visits at the 11 RICs. The managers are very much helpful and assist whenever needed. Through the interviews, visits and observations made at the RICs, I value all the helped and assistance made by this multiple stakeholders. My sincere appreciation and many thanks to Associate Professor Dr Abdul Raufu Ambali for his support and assistance in proofread my final draft chapters. Special thanks to Associate Professor Dr NorAziah Alias for her motivation and support at the final stage of my study. Not forgetting my proofreaders; Helen Whittle and Chris O'Neil, thank you to both of you. To all my friends and administrative staffs at USQ; especially Michelle Griffith, Liz Whatson and Sophia Imran, many thanks to your efficient support, valuable assistance, sincere thoughts and motivation, thanks to all.

I would like to thank the following organizing committees for accepting papers based on this research for presentation and publishing:

1) The ICT for development (ICTd) conference, 13 December 2010 at Royal Holloway University of London, UK: *"Assessing the impacts of Rural Internet Centre programs on quality of life in rural areas of Malaysia"* presented the paper and the electronic conference proceeding available at DiVA-portal on the Kalstad University website: http://kau.diva-portal.org

ISBN: 978-91-7063-369-0 Co-Authors: Professor Dr Geoff Cockfield and Dr Michael Lane. This paper had won the Best Paper Award on IPID Postgraduate Strand.

2) The book chapter (open access) 2012, Book Title: "*ICT and Social Change: The Impact of Public Access to Computers and the Internet" Francisco J. Proenza (ed.)*-Chapter Title: *"Impact of Public Access to computers and the Internet on the connectedness of Rural Malaysians"* Authors: Associate Professor Dr NorAziah Alias, Marhaini Mohd Noor, Dr Francisco J. Proenza, Associate Professor Haziah Jamaluddin, Izaham Shah Ismail and Sulaiman Hashim. Publisher: International Development Research Centre (IDRC),-CRDI, Canada.

3) Recently submitted an article title: "*Assessing significant role of community informatics to rural internet centre in Malaysia*" The Journal of Community Informatics (JoCI), 15 October 2012. Acknowledged the submission and in review process by the Editor: Professor Michael Gurstein. Manuscript URL: http://ci-journal.net/index.php/ciej/author/submission/988 Co-Author: Associate Professor Dr Abdul Raufu Ambali.

Azrul Nizar A.Manaf, my husband, and our children, Azmin Hariz, Adam Zarif, NurDini Hana and Amin Zharfan were my home support team, tolerant of my time on the computer. I thank them for being such patient company. I am deeply indebted to my husband, who encouraged me to pursue my PhD; he gave me support, encouragement and assistance. Thank you 'Abang'. My profound thanks to my mum, dad, sisters and brother for their moral support and encouragement. Finally, I wish to thank the Ministry of Higher Education (MOHE), Malaysia and University of Technology MARA (UiTM) for providing me with full scholarship, without which this thesis would have been impossible.

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LIST OF ABBREVIATIONS

BCT	Basic Computer Training
BDD	Bridging Digital Divide
BOC	Bonding Capital
BRC	Bridging Capital
CI	Community Informatics
DST	Digital Story Telling
E	Employment
EB	Economic Benefits
Ed	Education
ED	Economic Development
EG	Electronic Government
Email	Electronic Mail
EP	Electronic Procurement
EPU	Economic Planning Unit
ES	Electronic Services
EUC	End User Computing
FB	Face Book
GEW	Global Entrepreneurship Week
I	Income
IC	Information Centres
ICT	Information and Communications Technology
IT	Information Technology
ITU	International Telecommunication Union
LCA	Local Community Association
MEWC	Ministry of Energy, Water & Communication
MICC	Ministry of Information, Communication & Culture
MMDG	Malaysian Millennium Development Goals
MP	Malaysian Plan
MQoL	Malaysian Quality of Life
MRRD	Ministry of Rural Regional Development
MSP	Multi Stakeholder Partnership
PB	Perceived Benefits
PID	*"Pusat Internet Desa"*
PMR	Certificate of Lower Secondary Examination
PPPs	Public-Private Partnerships
QoRL	Quality of Rural Life
RIC	Rural Internet Centre
SC	Social Capital
SEC	Social Entrepreneurs Club
SMI	Small and Medium Industry
SPM	Certificate of Malaysian Education Examination
SS	Services Satisfaction
STPM	Certificate of Malaysian Higher Education Examination
UK	United Kingdom
US	United States
USP	Universal Service Provider
WG	Warisan Global Sdn. Bhd.
YM	YahooMessenger