Chapter 13 Aiding the Fourth Industrial Revolution in the Developing World:

Socio-Cultural Leadership in ICT4D
- Learnings From Telecentres
in a South Asian Country

Sampath S. Windsor

https://orcid.org/0000-0003-4251-7713

Independent Researcher, Australia

Carol Royal

Independent Researcher, Australia

Chatura C. Windsor

Independent Researcher, Australia

ABSTRACT

Academic research that examines different leadership models utilised in the digital age within ICT4D that facilitates the Fourth Industrial Revolution for the marginalised people are scarce. This study focused on the e-Sri Lanka program, initially funded by the World Bank as a unique South Asian project that established a network of 1,005 Nenasala telecentres. Sri Lanka is further focused on building an e-smart, e-inclusive society through ICT4D. In 2020, the Nenasala 2.0 initiative is to be expanded on the Nenasala network to scale up e-society innovations. This context provides an exciting research bedrock to explore. The research findings revealed

DOI: 10.4018/978-1-7998-4861-5.ch013

that leadership at various organisational levels will be key to Nenasala 2.0 and ICT4D program sustainability. The Nenasala model that benefitted from unique community-based leadership was termed socio-cultural leadership. A replication of the study in other developing countries to identify the leadership needed in ICT4D could prove invaluable as it may identify viable complementary options to commercially orientated telecentres.

INTRODUCTION

The Fourth Industrial Revolution is obscuring boundaries between the physical, biological, and digital dominions. The speed of breakthroughs within these fields has no historical precedents of humankind and is evolving at an exponential phase. More importantly, such advancement in technology is disrupting every industry in the world from machines utilised, production methods, management methods, and government regulatory systems. Advances in artificial intelligence (AI), robotics, quantum computing, the Internet of Things (IoT), 3D printing, nanotechnology, biotechnology, genetic engineering, energy storage, materials science are at the forefront driving this technical and industrial revolution.

Within this rapid change Information Communication and Technology for Development (ICT4D) can be considered not only as a technology diffusion mechanism, but also a sector facing the threat of decline unless innovative approaches are found. This context is explored in the form of South Asian regional telecentre movement and findings of a case study of unique community-based Nenasala (which means Knowledge Hubs) telecentres. Nenasala is a portal to reach remote, disadvantaged communities in Sri Lanka's ICT4D journey. Overall, Nenasala is a grass-root non-profit and for-profit demand-based Private & Public Partnership (PPP) initiative. Information and Communication Technology Agency (ICTA), oversees the implementation of the Nenasala program and has the sponsorship of the Sri Lankan government, international donors, and the World Bank. In this chapter, it will be revealed how a new hybrid breed of Socio-Cultural Leaders (SCL) in Sri Lankan Nenasala telecentres successfully utilised Corporate Social Responsibility (CSR) to gain not only sustainability within the ICT4D initiative, but also competitive advantage against commercial telecentre counterparts.

Sri Lanka has a unique multi-ethnic cultural and religious base. Hence the researchers were interested in investigating how this diversity in leadership, influences Sri Lanka's effort in bridging the digital divide. Moreover, e-Sri Lanka was the first World Bank-funded project in South Asia, which sets the best practice for the other countries in the region to follow. Sri Lanka is also a recuperating country

36 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage: www.igi-publisher

global.com/chapter/aiding-the-fourth-industrial-revolution-in-the-developing-world/260668

Related Content

Moving Vehicle Detection in Traffic Video Using Modified SXCS-LBP Texture Descriptor

Arun Kumar H. D. (2021). *Managerial Issues in Digital Transformation of Global Modern Corporations (pp. 257-273).*

www.irma-international.org/chapter/moving-vehicle-detection-in-traffic-video-using-modified-sxcs-lbp-texture-descriptor/286210

Aviation and Climate Change: Becoming a Climate-Neutral Industry

Anil Padhraand Salim Kurnaz (2023). *Challenges and Opportunities for Aviation Stakeholders in a Post-Pandemic World (pp. 84-108).*

www.irma-international.org/chapter/aviation-and-climate-change/319898

Exploring the Use of Performance Measurements in Arab Manufacturing Firms

Ahmed B. Abdel-Maksoud (2013). *Cultural and Technological Influences on Global Business (pp. 86-106).*

www.irma-international.org/chapter/exploring-use-performance-measurements-arab/76486

Premature Deindustrialization Risk in Thailand

Ni Larand Hiroyuki Taguchi (2022). *International Journal of Asian Business and Information Management (pp. 1-15).*

www.irma-international.org/article/premature-deindustrialization-risk-in-thailand/302248

A Panel Data Analysis for Exploring the New Determinants of Growth in Small and Medium Sized Enterprises in India

Manoj Kumar (2017). *International Journal of Asian Business and Information Management (pp. 1-23).*

 $\frac{\text{www.irma-international.org/article/a-panel-data-analysis-for-exploring-the-new-determinants-of-growth-in-small-and-medium-sized-enterprises-in-india/172815}$