# A Policy Framework for Developing Knowledge Societies

Ravi S. Sharma, Nanyang Technological University, Singapore Elaine W. J. Ng, Nanyang Technological University, Singapore Mathias Dharmawirya, Nanyang Technological University, Singapore Ekundayo M. Samuel, Nanyang Technological University, Singapore

### ABSTRACT

In this article, the authors explore the definition of a knowledge society and why such a society is desirable in the development of nations. First, this paper reviews the literature on knowledge societies and notes a gap in qualitative approaches which are amenable for framing development knowledge policies. The authors then describe a conceptual framework that depicts a knowledge society in terms of 13 dimensions that span infrastructure, governance, human capital and culture. This framework is validated with published proxy indicators from reputable sources such as the United Nations and the World Bank. In a field exercise, this paper determines the usability of the framework for policy discussion using Singapore, Nigeria, the United States and the United Arab Emirates as the foci of our analysis. The authors conclude by suggesting that such a qualitative framework is useful for policy-makers and other stake-holders to understand that the evolution to a knowledge society is a journey that requires benchmarks, environmental intelligence and an emphasis on the tacit structure of knowledge for sustainable advantage.

Keywords: Knowledge Economy, Knowledge Policy, Knowledge Society, National Intellectual Capital, Sustainable Development

## 1. INTRODUCTION

"Does the aim of building knowledge societies make any sense when history and anthropology teach us that since ancient times, all societies have probably been each in its own way knowledge societies?" (UNESCO, 2005, p. 27). In this article, we claim that it does and attempt to support this claim with a conceptual model that articulates why and how this is indeed

DOI: 10.4018/jksr.2010010103

the case, particularly for the less developed economies. In an environment of globalization and competition, governments at the regional, national, provincial and municipal levels have turned to knowledge as a strategic asset that drives sustainable economic advantage. The value of knowledge is particularly enhanced when it is created, shared and re-used within a critical mass of a society that possesses the requisite absorptive capacity or the ability to understand and apply that knowledge. As Rodrigues (2003) states: "...what is at stake is

Copyright © 2010, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.

more than information: it is knowledge, which implies cognitive capacity, learning, cultural patterns and understanding - in a single word, people." (p. 4). We may term such a community of people a *knowledge society*, an integral feature of a knowledge based economy with its consequent higher quality of life and standard of living afforded to its members – a notion that appeals too much of the advanced as well as developing world.

The term knowledge society was first coined by Peter Drucker in 1969 and is often used inter-changeably with "Knowledge Based Economy" (UNESCO, 2005). However, a knowledge society is distinct from an information society in that whereas information may be structured or unstructured in being consumed by society, knowledge is almost always transformed with the active participation of the people who comprise a society. When the Organisation for Economic Cooperation and Development(www.oecd.org)defined a Knowledge-Based Economy (KBE) as being "directly based on the production, distribution and use of knowledge and information" (OECD, 1996), it was readily adopted and later expanded to also cover the "production, distribution, and use of knowledge is the main driver of growth, wealth creation and employment across all industries" (APEC, 2000). It is generally accepted that a KBE does not rely solely on high technology industries for growth and wealth production, but also requires industries in the economy to be knowledge intensive. This is a Schumpeterian, macro-economic view of leveraging knowledge as a resource for growth and development. It is further implied that the knowledge required by a KBE is wider than purely technological knowledge; also including, for example, cultural, social and managerial knowledge. Hence the community of people and the manner in which they organize themselves play a major role in creating a knowledge society.

In order to create such a knowledge society or economy, the conditions for knowledgesharing have to be conducive; for example, where knowledge is widely held as a public good with universal access to the community and low entry costs. This is the idea from Joseph Stiglitz (the 2001 Nobel Economist) that knowledge is a "global public good" that is most effective when shared without distribution inequities. As Koichiro Matsuura (2006), UNESCO's Director-General puts it: "An economy based on the sharing and diffusion of knowledge provides an opportunity for emerging nations to increase the well-being of their populations." He goes on to cite the examples of several communities which have transformed themselves into network societies favorable to "knowledge seeking, innovation, training and research". He concludes that knowledge sharing is indeed a powerful tool in both the fight against poverty as well as the key to wealth creation.

Therefore societies have for some time organized themselves in order to achieve a healthy environment of knowledge development, learning and sharing. The characteristics of a knowledge society are that they are part of a knowledge economy; possess high absorptive capacity; have structures and cultures that facilitate frictionless knowledge diffusion and sharing; undergo complex chains of creation, production and distribution including interfunctional collaboration; and are sustainable learning communities with an emphasis on innovation (cf. APEC, 2000; Houghton & Sheehan, 2000; Powell & Snellman, 2004; UNESCO, 2005). If these characteristics can be embraced by the community at large, then, conventional public policy holds that a competitive economy and a higher quality of life is the outcome.

From the academic arena, Powell and Snellman (2004) posit that although the causal factors of a KBE is subject to much discussion and debate, current studies may be classified into three major areas of research: (i) the rise of new science-based industries and their role in social and economic change (ii) sociology and labor economic investigations on whether new kinds of jobs and novel forms of work organizations have emerged in knowledge societies and (iii) managerial focus on the role of learning and continuous innovation inside firms. Alternately, Houghton, and Sheehan 22 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: <u>www.igi-</u> <u>global.com/article/policy-framework-developing-knowledge-</u>

societies/41939

## **Related Content**

# An Exploratory Study in an Emerging Approach to E-Learning: Massive Open Online Courses (MOOC)

Phu Vu, Lan Vu, Vien Caoand Peter Fadde (2014). *Emerging Pedagogies in the Networked Knowledge Society: Practices Integrating Social Media and Globalization* (pp. 162-174).

www.irma-international.org/chapter/an-exploratory-study-in-an-emerging-approach-to-elearning/96059

### Decision Support System For Internship Management in Higher Education

Fernando Almeidaand Nelson Amoedo (2018). *International Journal of Information Systems and Social Change (pp. 40-57).* 

www.irma-international.org/article/decision-support-system-for-internship-management-inhigher-education/192094

## Business Continuity During Adversity and Strategies to Revive Certain Sectors

Anil Kumar Singhand Anant Kumar Jain (2022). *International Journal of Sociotechnology and Knowledge Development (pp. 17-40).* www.irma-international.org/article/business-continuity-during-adversity-strategies/288865

#### Value Creation in Business-To-Business Crowd Sourcing

Nina Helander, Hannu Kärkkäinenand Jari Jussila (2014). *International Journal of Knowledge Society Research (pp. 28-39).* www.irma-international.org/article/value-creation-in-business-to-business-crowd-sourcing/113735

#### Civilization Life Cycle: Introduction

Andrew Targowski (2009). *Information Technology and Societal Development (pp. 45-61).* 

www.irma-international.org/chapter/civilization-life-cycle/23586