Chapter 7
Essentials for Developing a Prosperous Knowledge City

Rabee M. Reffat
King Fahd University of Petroleum and Minerals, Saudi Arabia

ABSTRACT

The essentials and challenges of the 21ˢᵗ century's economy include knowledge and innovation. Both are the key in order for a city to calmly race forward and safely ride out in the ever changing global economy. Knowledge and innovation could be viewed as the true hard currency of the future and corner stones in developing a prosperous knowledge city. This chapter introduces a model for developing a prosperous knowledge city through knowledge and innovation. The model consists of five components that are most important for cities pursuing towards prosperous Knowledge Cities including: developing creative environments, knowledge creation, skills, collaboration/partnership, and leadership. The chapter focuses on articulating the primary components of the proposed model and identifying how they will contribute to achieving prosperous Knowledge Cities and innovative knowledge regions.

1. INTRODUCTION

In the recent years a new theme of Knowledge Cities is brought to the forefront through having science, technology, supporting activities as well as normal city functions to stand side by side and be organically integrated. The research, innovation and commercial activities are expected to be imbedded in an environment that has all the functions of a global city. The local knowledge infrastructure includes economic, social and cultural knowledge networks of the city that are particularly place-specific knowledge resources. Accordingly, there are two kinds of understanding the models of Knowledge Cities, the model of real world and the model of virtual Knowledge Cities. The former includes the geographical components, technical facilities, and people. The latter includes the technological and social networks and knowledge resources (Wang & Pan, 2005).

The emerging notion of Knowledge Cities attracts considerable interest from city policy makers

and researchers in the domains of knowledge management and knowledge based development. Knowledge Cities are economically focused on innovation and pushed forward by science and engineering employment. Knowledge Cities are incubators of knowledge and culture forming a rich and dynamic blend of theory and practice within their boundaries and are driven by knowledge workers through a strong knowledge production (Work Foundation, 2002). Edvinsson (2003) describes a Knowledge City as a city that was purposefully designed to encourage the nurturing of knowledge. Knowledge Cities are introduced by Ergazakis et al (2004) as cities that aim at a knowledge-based development, by encouraging the continuous creation, sharing, evaluation, renewal and update of knowledge. Furthermore, Knowledge Cities are cities that possess an economy driven by high value-added exports created through research, technology, and brainpower (Carrillo, 2006). There are several complementary perspectives from which to consider the concept of Knowledge Cities, such as: Information Technology Technopolis (Smilor et al, 1988), (Komnions, 2002), Knowledge-based Clusters (Arbonies & Moso, 2002), Urban Capital Systems (Carrillo, 2004), Ideopolis (Garcia, 2004), Knowledge Corridors, Knowledge Harbors, Knowledge Villages, and 'knowledge regions' (Dvir & Pasher, 2004), and Regional Intellectual Capital (Bounfour & Edvinsson, 2005).

Knowledge Cities are cities in which both the private and the public sectors value knowledge, nurture knowledge, spend money on supporting knowledge dissemination and discovery and harness knowledge to create products and services that add value and create wealth. Today's potential Knowledge Cities, such as Shanghai, Seoul, Singapore and San Francisco, are investing in the future and spending billions on infrastructure and human capital (people's skills and abilities), to position themselves for the global economy. These cities focus on developing quality housing, smart communities, creative education, challenging work opportunities, and livable environments for its residents. Furthermore, they provide advanced telecommunications, freight and goods movement systems that are the base for creating new, good jobs for a more diverse population. Therefore, prosperous Knowledge Cities must invest in the future and deal with several myths that are holding other cities back. Some of these myths for example include: let the market do the planning, and cannot afford the infrastructure (Blakely, 2005).

- *Let the market do the planning*: The market is scarcely an infallible tool for urban planning. In most cases, the market delivers needed infrastructure only when demand is clear, which can create long delays in needed services.
- *Cannot afford the infrastructure*: Cities must invest in the future. There is a continuous need to provide better housing and better community amenities to improve people lifestyles and be attractive for coming generations.

Knowledge Cities represent a new concept and "the field still lacks a consensus regarding appropriate conceptual and methodological frameworks" (Carrillo 2006). Not surprisingly, there is no unified methodology for either the articulation or implementation of Knowledge Cities. Nevertheless, there are certain characteristics of the knowledge city that seem to resonate in the literature. Dvir (2006) introduced a Knowledge City model wherein a Knowledge Moment happens at the intersection of People, Places, Processes and Purposes. In this model Knowledge Cities trigger and enable an intensive, ongoing, rich, diverse and complex flow of Knowledge Moments. A Knowledge Moment is a spontaneous or planned human experience in which knowledge is discovered, created, nourished, exchanged, and transformed into a new form. This model connects Knowledge Cities to the daily experiences of the citizen. The fundamental idea behind this

10 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-global.com/chapter/essentials-developing-prosperous-knowledge-city/41688

Related Content

An Improved Web Page Recommendation Technique for Better Surfing Experience
Rajnikant Bhagwan Waghand Jayantrao Bhaurao Patil (2018). *International Journal of Knowledge-Based Organizations (pp. 1-13).*
www.irma-international.org/article/an-improved-web-page-recommendation-technique-for-better-surfing-experience/212565

Using Knowledge Management to Create Self-Reliant Communities in Thailand
Chalard Chantarasombat, Boonchom Srisa-ard, Matthew H.S. Kuofieand Murray E. Jennex (2010). *International Journal of Knowledge Management (pp. 62-78).*
www.irma-international.org/article/using-knowledge-management-create-self/39091

Personalized Information Retrieval in a Semantic-Based Learning Environment
Antonella Carbonaroand Rodolfo Ferrini (2009). *Semantic Knowledge Management: An Ontology-Based Framework (pp. 370-389).*
www.irma-international.org/chapter/personalized-information-retrieval-semantic-based/28826

A Birds-Eye View of Knowledge Management: Creating a Disciplined Whole from Many Interdisciplinary Parts
David G. Schwartz (2007). *Knowledge Management in Modern Organizations (pp. 18-29).*
www.irma-international.org/chapter/birds-eye-view-knowledge-management/24981

Anchoring Corporate Innovation Communities in Organizations: A Taxonomy
Bastian Bansemir, Anne-Katrin Neyerand Kathrin M. Möslein (2012). *International Journal of Knowledge-Based Organizations (pp. 1-20).*
www.irma-international.org/article/anchoring-corporate-innovation-communities-organizations/61425