Chapter XIV

Knowledge Assets in the Global Economy: Assessment of National Intellectual Capital

Yogesh Malhotra
@Brint.com: The BizTech Network, USA

“Our government is filled with knowledge…We have 316 years’ worth of documents and data and thousands of employees with long years of practical experience. If we can take that knowledge, and place it into the hands of any person who needs it, whenever they need it, I can deliver services more quickly, more accurately and more consistently.”
— From ‘Knowledge Management: New Wisdom or Passing Fad?’ in Government Technology, June 1999

ABSTRACT

This chapter has the following objectives: developing the need for assessing knowledge capital at the national economic level; reviewing a national case study of how intellectual capital assessment was done in case of one nation state; suggesting implications of use of such assessment methods and needed areas of advancement; and highlighting caveats in existing assessment methods that underscore the directions for future research. With increasing emphasis on aligning national information resource planning, design and implementation with growth and performance needs of business or nation, better understanding of new valuation and assessment techniques is necessary for information resource management policymakers, practitioners and researchers.

INTRODUCTION

Emergence of the service society after the last world war brought increased realization of role of employees’ knowledge and creativity in adding value to the company. Attempts to capitalize company investments in people on the balance sheet in the 1970s failed because of measurement problems. The subject gathered increased interest more recently in the 1990s, with the rapid emergence of informa-
tion and communication technologies (ICTs). As business processes became increas-
ingly ‘enabled’ by large-scale information systems, information systems designers
attempted to capture employees’ implicit and explicit knowledge in “corporate
memory” by means of intranets and other similar applications (Malhotra, 2000a,
2000b).

It was recognized that in contrast to the knowledge of individual employees,
such corporate memory does form part of a company’s capital. Accordingly,
“knowledge” has become a key production factor, however the financial accounts
are still dominated by traditional factors of production, including buildings and
machinery. Hence, there is an imperative need for developing an understanding of
“knowledge capital,” or the so-called intangible assets. The topic is not only pertinent
to individual enterprises, but also to national economies that are making a rapid
transition to a society based on knowledge work.

This chapter develops the case for assessment of national intellectual capital by
drawing upon existing research, practice and a recent study of an Asian nation
representative of countries making a transition from ‘developing’ to ‘developed’
status. The issues discussed herein are important for information resource manage-
ment policymakers, practitioners and researchers for assessing their contributions in
terms of new measures of performance. More importantly, as the world economies
transition from the world of “atoms” to world of “bits,” they would be expected to
plan, devise and implement information and knowledge management systems that
provide differential advantage in terms of ‘intellectual capital.’

KNOWLEDGE ASSETS AND INTELLECTUAL CAPITAL

Traditional assessment of national economic performance has relied upon
understanding the GDP in terms of traditional factors of production—land, labor and
capital. Knowledge assets may be distinguished from the traditional factors of
production—in that they are governed by what has been described as the ‘law of
increasing returns.’ In contrast to the traditional factors of production that were
governed by diminishing returns, every additional unit of knowledge used effect-
ively results in a marginal increase in performance. Success of companies such as
Microsoft is often attributed to the fact that every additional unit of information-
based product or service would result in an increase in the marginal returns. Given
the changing dynamics underlying national performance, it is not surprising that
some less developed economies with significant assets in ICT knowledge and
Internet-related expertise are hoping to leapfrog more developed economies.

Despite the increasingly important role of knowledge-based assets in national
performance, most countries still assess their performance based on traditional
factors of production. Today’s measurement systems are limited in their capability
to account for tacit knowledge embedded in the human resources, although there is
some agreement on measuring other categories of knowledge, including patents and
trademarks. However, the emerging knowledge economy is characterized by indus-
tries that are more knowledge intensive and by goods and products that are more
intangible than they were in the post-industrial economy. Knowledge assets or
intellectual capital may be described as the “hidden” assets of a country that underpin
Related Content

Using Business Analytics in Franchise Organizations
[www.igi-global.com/chapter/using-business-analytics-in-franchise-organizations/212138?camid=4v1a](www.igi-global.com/chapter/using-business-analytics-in-franchise-organizations/212138?camid=4v1a)

Strategic Information Systems in Arab Organizations
Ahmad Fayez Albadri (2019). *Strategic Thinking, Planning, and Management Practice in the Arab World* (pp. 197-210).
[www.igi-global.com/chapter/strategic-information-systems-in-arab-organizations/224521?camid=4v1a](www.igi-global.com/chapter/strategic-information-systems-in-arab-organizations/224521?camid=4v1a)

The Role of Emotional Capital in Organisational KM
[www.igi-global.com/chapter/role-emotional-capital-organisational/58240?camid=4v1a](www.igi-global.com/chapter/role-emotional-capital-organisational/58240?camid=4v1a)

Creating a Sustainable Supply Chain in Response to Unstable Market Expectations
[www.igi-global.com/chapter/creating-a-sustainable-supply-chain-in-response-to-unstable-market-expectations/177646?camid=4v1a](www.igi-global.com/chapter/creating-a-sustainable-supply-chain-in-response-to-unstable-market-expectations/177646?camid=4v1a)