Chapter 1

Intellectual Capital Components, Measurement and Management: A Literature Survey of Concepts and Measures

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ABSTRACT

Intellectual Capital (IC) is neither a new phrase nor an old formally accepted term to measure the intangible assets of an organization. This concept has been used in different theories of organization and management. In the 1990s, the focus of attention dramatically changed from financial aspects and the techniques used for their measurement to the knowledge and intangible assets and the way businesses could manage them strategically in order to gain a competitive edge. By this way, IC has been recognized as one of the core components for managing and analyzing the strategic organizational intellectual capabilities, hence; to improve the quality of knowledge management (KM). The chapter aims to conceptually review and analyze the importance, definitions, components, and reporting mechanisms in the field of IC measurement and management.

INTRODUCTION

With the beginning of the new era of knowledge-based production and mentality development, the need for a comprehensive background on knowledge and the methods on its measurement gained importance. However, there is a lack of published reviews in the related field. A review of prior relevant literature is an essential feature of any academic and practical project, because an effective review cre-
ates a firm foundation for advancing knowledge (Webster and Watson, 2002). The present chapter aims to cover the need for a better understanding of conceptual and practical contributions on various approaches of intellectual capital. Although there are many articles and working papers focusing on intellectual capital, no major attempt has been made on the conceptual and practical review of it for about a decade. As a matter of fact, we often need to draw on theories and views from a variety of fields. Since, the reviews are considered to be the foundation for research and development of theories, they tend to be critical in strengthening the related field of study. Analyzing the works done in the past, removes the threat of non-comprehensive and partial understanding on the subject and therefore helps in organizing and making a better foundation for preparing new theoretical and practical developments. In the present chapter, the scope of study on intellectual capital is in the following manner:

• **Background**

In this section, a review of the literature on intellectual capital and knowledge management is provided and some evidences on importance of intellectual capital and the reasons for growing attention to it, is presented.

• **Definitions, Components and Metrics of Intellectual Capital**

In the next three sections, a rather comprehensive set of definitions, a chronological review of classifications in the literature, and the trends of IC in the recent years have been reviewed. A pervasive list of various classifications of IC components is also presented. The metrics section provides a comprehensive list of the most accepted IC metrics (or indicators) across the literature for each of the IC components that are intended to be measured and managed. This section significantly enables the scholars and practitioners in establishing the initial IC measurement foundation. Also, the indicators can notably assist in configuring and implementing KM systems according to the specific organizational needs in order to provide a continuous and accurate assessment mechanism of measurement and reporting.

• **Intellectual Capital Measurement**

Through acquiring a rather comprehensive viewpoint on IC definitions and classifications, the measurement is the next step in which firms attempt to continuously evaluate the overall status of their intellectual capabilities. The IC measurement capability of the organization is one the main factors influencing the visibility of the managerial efforts on empowering the current IC status with regard to the overall strategies specified by top managers.

• **Intellectual Capital Statement and Reporting**

One of the managerial inputs for strategic decision making has been recently stated to be the IC statement, a new approach to embracing the importance of IC and evaluating intellectual capabilities of the firm. IC statement can play a significant role in initiating the process of identifying the difference between market and book values of the firm. This section provides a framework to guide managers in their initial efforts of creating IC statements.

• **Future Research Directions**

In this section, an integrative model relates the concepts of human, organizational, and relational capitals with R&D (or innovation capital). This model has been added to complement the literature on R&D which has recently related the importance of R&D concept to the components of intellectual capital. Although the research and development aspect has been repeatedly stated in