



Knowledge valuation analysis

Applications for organizational intellectual capital

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Abstract

Purpose – The purpose of this paper is to provide a review of an analytic methodology (knowledge valuation analysis, i.e. KVA), based on complexity and information theory, that is capable of quantifying value creation by corporate intellectual capital. It aims to use a real-world case to demonstrate this methodology within a consulting context.

Design/methodology/approach – The fundamental assumptions and theoretical constructs underlying KVA are summarized. The history of the concept, a case application, limitations, and implications for the methodology are presented.

Findings – Although well-known financial analytic tools were used to justify IT investment proposals, none provided a satisfying result because none offered an unambiguous way to tie IT performance to value creation. KVA provided a means to count the amount of corporate knowledge, in equivalent units, required to produce the outputs of client core processes. This enabled stakeholders to assign revenue streams to IT, develop IT ROIs, and decide with clarity where to invest.

Practical implications – When stakeholders can assign revenue streams to sub-corporate processes, they have a new context for making IC investment decisions. “Cost centers” and decisions based on cost containment can be replaced. Concepts such as a knowledge market, the knowledge asset pricing model, k-betas, and a sub-corporate equities market can be developed and applied. Some of the limitations related to real options analysis can be resolved.

Originality/value – This paper introduces an approach to measuring corporate intellectual capital that solves some long-standing IC valuation problems.

Keywords Intellectual capital, Knowledge management, Measurement

Paper type General review

Introduction

The fundamental building material and engine of wealth of the modern corporation is the creation and utilization of knowledge. The real challenge in the Information Age is to understand how to accelerate the conversion of knowledge into money through understanding how to measure knowledge assets (Kanevsky and Housel, 1998, p. 1). According to King and Zeithaml (2003, pp.1-2), current knowledge resource identification and measurement tools (such as patent or citation counts) are “crude and often inadequate.” Yet, knowledge resources are a source of competitive advantage, i.e. valuable, rare, inimitable, and lacking substitutes (Barney, 1991). A knowledge based theory of the firm requires knowledge to be “defined precisely enough to let us see which firm has the more significant knowledge and explain how that leads to competitive advantage” (Spender, 1996a, p. 49).



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