Chapter 15

Intellectual Capital: How Knowledge Creates Value

Maria do Rosário Cabrita
Universidade Nova de Lisboa, Portugal

Virgílio Cruz Machado
Universidade Nova de Lisboa, Portugal

António Grilo
Universidade Nova de Lisboa, Portugal

ABSTRACT

With the rise of the “new economy”, knowledge became a most valuable resource. Accepting knowledge as a resource suggests that knowledge can be acquired, transferred, combined and used, and it may be a potential source of sustainable competitive advantage. In this context, knowing how an organization creates value, based on its potential of knowledge, became a central question in management research. Under a strategic perspective, knowledge that creates value is defined as intellectual capital, the application of which will give organisations sustainable competitive advantage. Therefore, identifying, measuring and managing intellectual capital is crucial for corporate innovation and competitiveness. The purpose of our study is to examine the interrelationships and the effects of interaction between intellectual capital components and organisational performance, and defines how knowledge creates value. The study is developed in the context of Portuguese banks, an industry where differentiation of products and services almost exclusively hinges on the continuous rejuvenation of the underlying knowledge base. Empirical findings from this study support the propositions that intellectual capital is a key driver of organisational performance and that a knowledge-based perspective holds a more holistic model of organisations’ value creation.

INTRODUCTION

Globalisation and the rapid technological advances of the past decades, particularly in the area of information and communications technology, created a “new era” that has reshaped the global economic environment. The unprecedented changes in the global economic environment bring a tremendous challenge to organizations and governments. Those trends are changing the competitive structure of markets in such a way that the effectiveness of traditional sources of
advantage is blurred. A New Paradigm economy emerged in which knowledge is seen as the critical factor of production (Carlucci et al., 2004), the vehicle of economic benefits and the source of the nation’s prosperity and sustainable competitive advantage. In response, new models of business are emerging where the value chain have their hard nucleus in the creation, dissemination, application and leverage of intellectual assets.

Organizations face new competitive paradigms associated with their ability to create, use, combine and manage the intellectual assets. Today, organizations and governments recognize the importance of intellectual capital as the key driver of performance and as a core differentiator. Intellectual capital has been identified as a set of intangibles (resources, capabilities and competences) that drive the organizational performance and value creation (Roos and Roos, 1997; Cabrita and Vaz, 2005). This fact suggests causal relationships between intellectual capital and organizational value creation (Marr and Roos, 2005). However, intangible assets seldom affect performance directly. Instead, they work indirectly through complementary and non-linear relationships of cause and effect (Ittner and Larcker, 1998; Kaplan and Norton, 2004). Value is then created through complex dynamic exchanges between tangibles (goods and money) and intangibles (cognition processes, intelligence and emotions) where individuals, groups or organisations engage in a value network by converting what they know, both individually and collectively, into tangible and intangible value.

From the management point of view it is essential to recognise that none of the elements of that set of intangibles is per se sufficient for successful performance. These key elements need to be combined to generate value. What is really important is to understand how these separate pieces come together to form a coherent framework for the company’s future value. Organisations can not create value on their own without the initiative of the individual. Human capital is the collection of intangible resources that are embedded in the members of organisations. However, managing human knowledge is not the same as managing physical resources. Having access to knowledge repositories does not guarantee that people will use them efficiently. Moreover, people have to capture, select, integrate and combine information to create understanding and knowledge. Management capabilities are critically important for realising value from investments in intellectual assets. The role of management is crucial to promote sharing activities, to provide a learning culture, infrastructure and appropriate incentives to generate and disseminate knowledge.

In such a context, intellectual capital offers a possible pathway for reconfiguring our business models in an environment of global interdependencies. Intellectual capital is a phenomenon of interactions, connections and complementarities, meaning that a resource’s productivity may improve through investment in other resources (Tsang and Chang, 2005; Marr et al., 2004; Cabrita and Bontis, 2008). This perspective gives us a more organic and holistic view of value creation and may help us to better understand the interdependencies and dynamic exchanges in our turbulent business environment.

This study helps to understand that not all knowledge creates value. It is crucial to identify the company’s strategic knowledge, the key drivers of performance. It should also be pointed out that the major purpose of our work is not to identify a measurement model for intellectual capital as we believe that the economic value of intellectual capital is almost unachievable. The purpose of this study is to empirically test that intellectual capital is a phenomenon of complementarities, and to assess how the intellectual capital components interrelate to impact organisational performance.