



# Chapter 3

## Using Strategic Management Accounting Practices to Measure and Manage Intellectual Capital: A Proposal


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### ABSTRACT

*The main purpose of this chapter is to examine the role of management accounting to measure and manage intellectual capital (IC), and more specifically to explore the potential role of strategic management accounting (SMA) in this process. In addition, this chapter is intended to link SMA practices and some IC resources. SMA practices enable the identification, measurement, and management of IC resources such as production processes and innovation capacity (e.g., target costing), quality management (e.g., quality costing), knowledge-based resources related to the organization's external relationships (e.g., attribute costing, value chain costing, and target costing), and brand image (e.g., brand valuation/management). SMA practices, given its external orientation, enable, mainly, the identification and management of resources encompassed in relational capital. Therefore, this chapter contributes to the extant literature regarding the measurement and management of IC, highlighting the role of SMA, and provides some suggestions for further research.*

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## **INTRODUCTION**

In the last decades the organizational environment has suffered several changes. Among these are the globalization of business, the increased physical (people and products) and financial (capital) mobility, the continuous innovation and technological sophistication and, in turn, fierce international competitiveness, as well as the increased customer demands (Bukh, Nielsen, Gormsen, & Mouritsen, 2005; Guthrie, 2001; Johanson, Martensson, & Skoog, 2001; Tayles, Pike, & Sofian, 2007). All these changes, among many others, led to a fast transition from an industry-based economy to a knowledge-based economy (Guthrie, Ricceri, & Dumay, 2012).

In this context, the organizations were forced to permanently change and adapt to their surroundings in order to maintain and achieve competitive advantages. To this purpose, they have turned to new sources of value creation, including employees' know-how, capabilities and skills, information and communication systems, development of processes based on knowledge, and the ability to attract and retain business partners (Jordão & Almeida, 2017; Moeller, 2009). So, while traditional competitive advantages result from the collection and use of tangible resources, for instance long-term heavy machinery, such advantages are now associated with others strategic resources as is the case of intangible assets based on knowledge (García-Meca & Martínez, 2007; Guthrie, 2001; Hejazi, Ghanbari, & Alipour, 2016; Tan, Plowman, & Hancock, 2008; Tayles, Bramley, Adshead, & Farr, 2002; Widener, 2006).

In the literature, the knowledge-based resources are recognized as intellectual capital (IC) (Asiaei, Jusoh, & Bontis, 2018; Dumay & Rooney, 2011; Edvinsson & Malone, 1997; Guthrie et al., 2012; Kasztler & Leitner, 2009; Novas, Alves, & Sousa, 2017; Stewart, 1997; Striukova, Unerman, & Guthrie, 2008; Tayles et al., 2002). Thus, the term IC comprises the set of strategic resources such as knowledge, information, know-how, intellectual property, reputation of products and organization, and relations with business partners (Abeysekera, 2006; Guthrie, 2001; Jordão & Almeida, 2017). More simplistically, IC represents the intellectual or knowledge-based resources (Striukova et al., 2008), or all intangible assets, based on knowledge, of an organization (Cleary, 2009). In most studies, these resources are also organized in three main components: human capital (HC), structural capital (SC) (internal, organizational, or process capital), and relational capital (RC) (customer, external, or social capital) (Duff, 2018; Pedro, Leitão, & Alves, 2018; Subramaniam & Youndt, 2005).

Several authors consider that the IC has become increasingly important for organizations since it represents the set of critical resources to achieve strategic and sustainable competitive advantages, determining the value creation and organizations' success (Abeysekera, 2006; Buenechea-Elberdin, Sáenz, & Kianto, 2018; García-Meca & Martínez, 2007; Jordão & Almeida, 2017; Mohamed & Jones, 2014; Roslender & Fincham, 2001). According to Marr (2008, p. 29), "success and value creation of any organization in today's economy is driven by intellectual capital." In fact, some studies show a positive and significant influence of IC on performance (Buenechea-Elberdin et al., 2018; Chowdhury, Rana, Akter, & Hoque, 2018; Hejazi et al., 2016; Jordão & Almeida, 2017; Nadeem, Gan, & Nguyen, 2018; Novas et al., 2017; Tayles et al., 2007).

In this context, it is vital to identify, measure, manage, recognize, and report IC in order to fulfill its maximum potential (Cronje & Moolman, 2013; Hejazi et al., 2016; Roslender & Fincham, 2001). Since traditional accounting systems fail to recognize it (they only recognize some intangibles assets in the balance sheet and, consequently, the book value of an organization tends to be different from its market value) (Abeysekera, 2006; Duff, 2018; Guthrie, 2001), it is goal of the management accounting to contribute to the identification, measurement, management, and reporting of resources that constitute

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