Chapter 12
How to Value and Monitor the Relational Capital of Knowledge-Intensive Organizations

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ABSTRACT

Knowledge management systems are a way to help tracking and keeping organizational knowledge. Typically, organizations value is greater than their tangible assets value. Human, structural, and relational capital is essential knowledge but difficult to evaluate because it tends to be tacit and spread in different organizational elements. The relational capital, as tacit knowledge, is not possible to capture its value as from accounting systems. There is a lack of models to evaluate the relational capital of organizations in a network perspective and this research question is: What is the value of this social network? SNARE (Social Network Analysis and Reengineering Environment) is a framework with engineering artifacts that can answer this question. With the aim of evaluating the relational capital of organizations, the authors develop three SNARE components: (1) SNARE-Language – a descriptive UML-based method that provides a representation of an abstract social network structure able to be extended and applied to organizations; (2) SNARE-RCO – a model to determine the relational capital of organizations; and (3) SNARE-Explorer – based on SNARE-Language, is a tool for social networks visualization able to simulate or use real social network scenarios. It also uses SNARE-RCO model to compute the value of the organizational relational capital. The chapter presents an approach for the measurement of the value of organizations' networks.

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INTRODUCTION

Knowledge may be tacit or explicit. It can refer to an object, a cognitive state or a capability. Knowledge may reside in individuals, social groups, social systems, documents, processes, policies, physical settings, or computer repositories (Alavi & Leidner, 2001).

Knowledge Management (KM) refers to identifying and leveraging the collective knowledge in an organization to help the organization compete (Krogh, 1998). Knowledge Management Systems (KMS) relate to a class of information systems applied to managing organizational knowledge, and are developed to support and enhance the organizational processes of knowledge creation, storage/retrieval, transfer, and application (Alavi & Leidner, 2001).

Typically, the value of organizations tends to be greater than their tangible assets, and so KM and KMS are a way to help tracking and keeping tacit knowledge inside organizations. Human, relational and structural capitals are essential knowledge assets of organizations (Anklam, 2007). Human capital is the knowledge, skills and experience of individuals. Structural capital is the set of procedures, processes, and internal structures that contribute to the implementation of organization's objectives. Finally, the relational capital is the value of social relationships in a given organization, which contributes to achieve its objectives; i.e., it is the value of internal and external relationships of an organization.

The intangible value of the organization is mostly generated from informal, non-contractual activities that help build business relationships and contribute to operational effectiveness (ValueNetworks, 2010). Intangible assets can result from these non-contractual activities. Intangible assets can be seen as the knowledge and benefits extended or delivered by an individual or group, which are non-contractual, but still have value for the organization. The combination of all intangibles—i.e. human, structural, and relational capital—is called intangible or intellectual capital (Adams & Oleksak, 2010).

Although the value of intangibles can be difficult to identify through financial transactions, the use of nonfinancial indicators is a way to provide intellectual capital measurement (Adams & Oleksak, 2010). However, it is not always possible to capture the intellectual capital in accounting systems of organizations, because the intellectual capital is almost invisible in conventional forms of information systems (Adams & Oleksak, 2010). Also, there is a lack of standard approach to evaluate the relational capital of organizations (Zadjabbari, Wongthongtham, & Hussain, 2008).

We think of social networks as assets that are part of organizations. The value of a social network represents a contribution to satisfy a given demand. This demand is fulfilled by its social entities. In this sense, the value of a relation reflects the link between a thing (a good or service) and the social entities that are connected within a given context (Barão & Silva, 2011).

Social network systems identify relations between social entities and provide a set of automatic inferences on these relations, promoting better interactions and collaborations between these entities. Social Network Analysis (SNA) (Faust & Faust, 1994) is the foundation of several areas such as: Organizational Network Analysis (ONA) (Cross & Parker, 2004), Value Network Analysis (VNA) (Alee, 2008), and Dynamic Network Analysis (DNA) (Carley, Diesner, Reminga, & Tsvetovat, 2007). For example, they provide methodologies for studying communication in organizations with quantitative and descriptive techniques for creating statistical and graphical models of the individuals, tasks, groups, knowledge, and resources of organizational systems. In this sense, SNA methodologies are important to discover individual roles in organizations, identify social collaboration patterns, and evaluate the value of intellectual capital.