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Evaluation of intangible assets and best practices in a medium-sized port community

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Abstract

This paper analyses the main factors involved in the knowledge management of different actors participating in a Chilean port community. The intangible assets participating in the creation of value of the port community, which are expressed in ideas, attitudes, perceptions, experiences, information and knowledge management, are evaluated and classified according to community members' core competencies. Then, the current situation of public institutions and companies participating in the port community is diagnosed utilizing interviews to experts and relevant actors. The role of the intellectual, structural, and social capital is examined in relation to strategic statements present in the missions of public and private port system companies. The results of the assessment enable to identify the main critical factors in knowledge management, transference, dissemination, collaboration and team work, storage, and best practices. In particular, the Conversation System stage of the Primary Model is analyzed and evaluated, as well as its causes, by actors of the port community and experts. Initiatives fostering collective work and encouraging conversations are proposed. Some of the best practices developed by the port community to create and disseminate stakeholders' knowledge are presented. Also, a set of knowledge management indicators and indexes is developed and presented.

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Keywords: Knowledge Management; Medium-sized Ports; KM Model; KM Measurement; Indicators

1. Introduction

With globalization and continuous technological advances, it is increasingly more necessary to deal with the knowledge society. Currently, organizations are embedded in political, economic, social, technological and environmental settings continually changing; therefore, they are forced to adapt quickly [1]. To adapt to the environment, each actor must incorporate in his/her own factors knowledge, strategies that allow him/her to manage his/her social, intellectual and structural capital [2-4].

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It is necessary to observe Chilean ports as systems with mixed networks permanently improving, composed of tangible and intangible assets that are more complex to measure. Non-explicit intangible assets represented in ideas, perceptions, experiences, information management, and attitudes are important to evaluate and classify. On the other hand, port relationships with society show the importance of the social and relational capital. The port - city interaction generates positive and negative externalities since ports are built in physical spaces and citizens who make an economic impact become a concern for public organizations [4-6]. In addition, the discussion topics generated between public and private actors of the port system during their informal relationships can be represented by those concerns and negotiations coming from private businesses, social groups, trade associations and public organizations. It is noteworthy that public or private union leaders are constantly conversing with port stakeholders and, in case of not setting an agreement; they paralyze port activities generating shortages in markets to halt the import and export of goods. This situation causes micro and macro-economic problems since the quantity of goods is reduced in some markets and the country's economy decreases (the GDP decreases) [7-11]. This work aims to identify some intangible assets related to the existing tacit knowledge in the Chilean port system. Informal relationships that turn knowledge into action are translated into explicit indicators and indices and later analysed to make the social and relational capital, managed by each actor of the medium-sized Chilean port system, a useful tool.

2. State of the Art

Knowledge plays an important role in the development of communities. Different authors conclude that it is personal; it originates and resides in people, as a result of their own experience. Knowledge use allows us to understand those phenomena perceived by people and also to evaluate them; it serves as a guide for people's action [4-7], [12]. In more recent times we can find references to knowledge characterization from a business perspective, under the heading of explicit knowledge, which can be found directly in instructions, manuals and standard operating procedures; and tacit knowledge, learned and acquired indirectly through experience and values [13]. The strategic plans port companies develop favor the design and implementation of port business platforms and Knowledge Management, in order to promote foreign trade and the creation of new businesses, also providing a higher quality of port services, and the growth of the structural capital of the companies [4-10].

Some authors have identified different mechanisms and operations of subsystems, as well as ICT systems required for the port connectivity systems [8-14]. Also, it is possible to associate the development of knowledge synergy to the network of organizations participating in the community that make use of ITC [8-10]. On the other hand, knowledge creation plays an important role in the innovation processes developed by the members of a community, using phases of socialization, externalization, combination and internalization [8], [13-14]. Companies participating in the port community develop appropriate strategies to achieve a proper choice for the integration of special technologies and the development of learning capacities [7-8], [15-16].

Several authors favour the idea that it should be the port authority who should lead the port community under collaborative management, allowing the various actors to move forward together toward common goals, to improve the port competitiveness and innovation activities [17]. Public and private community companies invest in networks of knowledge innovation and transfer, improving the intellectual and structural capital of all actors including their supply chains [4], [18]. It is recognized by different authors that when organizations share knowledge, are better prepared to learn together and collaborate in joint activities, acquiring new skills and abilities in knowledge management [4]. Some KM-enabling skills include: business process identification and analysis; knowledge asset identification, creation, maintenance and exploitation; knowledge mapping and flow; change management; project management and Information structuring and architecture. In this context, it is necessary to go deeper in the primary model of knowledge management of the port community, and in particular in the factors that promote collaboration and coordination among actors [19]. KM measurement is directly related to the success achieved by organizations and they are made explicit through the Balanced ScoreCard [20]. Other assessments may give an account for the intellectual, structural and social capital [21].