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EDITOR

CRITICAL FACTORS IN INDUSTRY 4.0

A Multidisciplinary Perspective



El Colegio de
Chihuahua
Institución Pública de Investigación y Posgrado

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Texto sometido a doble proceso ciego por académicos externos a esta institución.

Primera edición publicación electrónica 2021
ISBN: 978-607-8214-64-8

Coordinación editorial: E. Liliana Chaparro Vielma
Corrección: Carolina Caballero Covarrubias
Cubierta y diagramación: Karla María Rascón González

Editado en México/Edited in Mexico

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CHAPTER 10

Essential Factor in the Survival of High-Tech SMEs: Relational Capital in the Machining Industry of the Juarez, Chihuahua

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Abstract. This chapter has a focus on Relational Capital as one of the principal elements that compose Intellectual Capital, which is made up of intangible assets related to the administration of high technologies along with the companies' interaction with its customers, suppliers and competition. Relational Capital consents companies to clearly identify the areas of opportunity that can be improved in organizations dedicated to technological development since it allows an assessment of the company's relations with its environment, ensuring permanence in the market and consequently decreasing its mortality rate. The Machining Industry in Ciudad Juarez, Chihuahua, Mexico is a clear example of under-management since it has high-level technology, but does not generate patents or have an expense in Research and Development. Moreover, its personnel are not specialized in engineering studies. In this way, it is comprehensible

that the use of knowledge has intensified. Knowledge alone does not generate any competitive advantage, as it arises through the company's use of it, mainly those applications in the field of innovation.

Keywords: Relational capital, Intangible Assets, Machining Industry

Introduction

It is widely accepted that Relational Capital (CR) is a basic intangible asset given that it contributes to the development of the competitiveness of companies when it is managed and efficiently developed in companies that operate high-level technologies. However, it is difficult to identify the CR in organizations and it is complicated to achieve development and efficient administration. The CR is measured as part of the Intellectual Capital although, due to the importance it has in the results of the operation of the companies, a separate measurement is required to identify the areas of opportunity that threaten the permanence in the organization's market; There are models and methodologies that seek to identify the value of Intellectual Capital as a whole within organizations but it is difficult to find methods that specifically measure this intangible asset generating competitiveness. To study this measurement problem, the industrial machining sector of Cd. Juarez, Mexico was selected, as it is the national capital industry with the highest level of technological development and therefore, more suitable for measuring CR, especially since it has had a little significant progress, although they have a valuable content in fixed and intangible assets, highly qualified personnel, with extensive skills, skills and technical knowledge, so it is considered necessary to study the administration of these intangible assets, which are not visible, not they are identified in the financial statements and as a consequence it is difficult to manage and develop them in a way that increases competitiveness and decreases the death rate of these companies.

Every company with customers has a CR, which Saint Onge (1996) defines as the value of its representation, its progressive relationship with the people or organizations to which it offers its product. Out of the three categories of Intellectual Capital, CR is the most valuable. Customers pay bills and, therefore, the traces left by customers in financial statements are easier to follow than those of people, systems and skills (Stewart, 1997). Relational Capital refers to the "valuation of customer relationships." Historically, when mentioning the elements that integrate the key value, refers to customers and based on this inclusion, future expectations are reflected in the comparative advantages. Cañibao (1999) defines it as one that "has to do with customers, customer loyalty and satisfaction, distribution relationships and agreements, franchises, licenses, etc." Several studies show a direct link between intangible management and sustainable business