

# Chapter 1

## A Descriptive Study of Intellectual Capital in SMEs Operating in Electrical and Electronics Manufacturing Sector in Malaysia

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### ABSTRACT

*The aim of this chapter is to find the existence of the components of intellectual capital in SMEs operating in the electrical and electronics manufacturing sector in Malaysia. To find the objective of this study, a valid research instrument was established to conduct a survey of 237 from 77 SMEs operating in Penang and Selangor. A descriptive statistical analysis was conducted to explore the existence of the six components of intellectual capital, namely human capital, customer capital, structural capital, social capital, technological capital, and spiritual capital in SMEs operating in the electrical and electronics manufacturing sector. The results reveal that the respondents of Malaysian SMEs perceive that the six components of intellectual capital play a pivotal role in competitive advantage and superior performance.*

### 1. INTRODUCTION

In the beginning of the 21<sup>st</sup> century intellectual capital appeared to be one of the most important

and a critical strategic asset for the success and survival of the organization in a knowledge-based economy. Intellectual capital refers to the soft assets of the organizations such as knowledge, skills,

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experiences, databases, customer loyalty, social bonding, copy rights, technological knowledge, honesty and ethical values. Research in this area has shown that the human capital is a vital ingredient of success of organization but in a knowledge-based economy other intangible assets such as customer capital, structural capital, social capital, technological capital and spiritual capital also play a very crucial role in the success of organizations. Therefore, accumulated soft assets or intangible assets of the organization actually represent the intellectual capital of the organization.

In the modern age, which has been characterized by speed, advancement, research and innovations, the world economy is quickly shifting from production-based economy to a knowledge-based economy (Huang & Wu 2010; Hsu & YH, Fang, 2009). A knowledge-based economy is mainly based on the intellectual capital. Many leading researchers, academicians, business professionals and practitioners have recognized that intellectual capital is a major and prime factor for the success of the organization Khalique (2012). Pulic and Bornemann (1999) stated that in “this new economy intellectual capital has become the one and only competitive advantage of a firm”. Stewart (1997, 2002), who is one of the leading researcher in the field of intellectual capital, acknowledged that “information and knowledge are the thermonuclear competitive weapons of our time; success will go to those who manage their intellectual capital wisely”. Therefore, we can say that intellectual capital is a strong driving force which can shift an organization from a production-based economy to a real knowledge-based economy.

In addition, Marr (2005) argued that in the present age, intellectual capital has been extensively recognized as an important catalyst for both the private and government sectors to achieve effective and efficient performance. Nowadays, particularly in modern organizations, intellectual capital has become the most proficient resource for the generation of wealth. Organizations with intellectual capital who utilize it effectively and

efficiently enjoy valuable positions in a competitive environment (Zhang & Li, 2007). Therefore, in a knowledge-based economy it is prerequisite for organizations to develop, monitor and leverage their intellectual capital in order to enhance the organizational performance and gain the competitive advantages.

## **2. INTELLECTUAL CAPITAL CONCEPT: MAIN COMPONENTS**

The term “intellectual capital” was first introduced by John Kenneth Galbraith in 1969. Intellectual capital represents more than just “intellect as pure intellect” but also includes a degree of “intellectual action”. According to this concept, intellectual capital is not only a fixed intangible asset but also ideological progression as a means to an end (Feiwal, 1975; Ding & Li, 2010). Stewart (1997) argued that intellectual capital is a package of intellectual material, like education, knowledge, information, expertise, intellectual property and experience that can be put to use to create wealth in an organization.

Stewart (1997) argued that intellectual capital represent human capital, customer capital and structural capital. Bontis et al., (2000) used three components of intellectual capital namely human capital, customer capital and structural capital and found that intellectual capital has significant contribution to enhance the performance of organizations in Malaysia. McElroy (2002) reported that intellectual capital is mainly based on human capital, structural capital and based on social capital. Juani (2005) proposed intellectual capital model based on human capital, social capital, structural capital and customer capital. In the same year Ismail (2005) introduced intellectual capital model which is based on human capital, structural capital, relational capital and spiritual capital. Bueno et al., (2006) came up with another development in intellectual capital field and proposed Intellectus Model. Intellectus Model is based on five compo-

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