

UNIVERSITI TEKNOLOGI MARA

**THE LONGITUDINAL STUDY OF
INTELLECTUAL CAPITAL
EFFICIENCY AND FIRM
PERFORMANCE: THE
MODERATING EFFECT OF
INNOVATION**

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ABSTRACT

In the knowledge economy, intellectual capital (IC) has become one of the primary sources of competitive advantage for a firm. Intellectual capital which consists of a set of intangibles drives the organizational performance and value creation. Therefore, it is important to understand whether the resource is being efficiently utilized by the companies to their advantage, especially in creating the value over time. The main objective of this thesis is to empirically examine the relationship between intellectual capital efficiency and its components namely human capital efficiency, structural capital efficiency and capital employed efficiency of the Malaysian companies. Intellectual capital efficiency is measured using Pulic's Value Added Intellectual Coefficient (VAIC) through quantitative approach. The empirical data were drawn from a panel consisting of 767 firms-year observation companies listed in the Bursa Malaysia Main Market, from several different industries, observed over the thirteen-year period from 2002 to 2012. In addition, this study also investigates the moderating effect of innovation on the intellectual capital efficiency and firms' performance. This study used statistical methods such as correlation and regression to analyze the data. Direct and moderating relationships between value added intellectual coefficient, human capital efficiency, structural capital efficiency and capital employed efficiency and five measures of performance are statistically analysed. The regression models were constructed to examine the relationship between intellectual capital efficiency and firms' market-to-book value ratios, and explore the relation between intellectual capital and firms' performance. The results obtained through testing the research hypotheses show that there is a positive and meaningful relationship between the variables. It suggests that there is a direct relationship between intellectual capital efficiency and performance of Malaysian publicly listed firms. It is revealed that intellectual capital efficiency of Malaysian companies is contributed by human capital efficiency followed by structural capital efficiency and capital employed efficiency. The results also suggest the possibility of a moderating relationship of innovation which impacts on firm performance. In addition, the results reveal that there is significant difference in the intellectual capital efficiency among different industries in Malaysia. The empirical investigation of these relationships in the context of the Malaysian economy enriches the literature. The results of the study also provide useful insights to regulators, professional bodies, policy makers, practitioners and academics that are relevant to their future decisions. In addition, the findings help companies reallocate intellectual resources properly since it is a way to enhance superior performance and building sustainable advantages in emerging economies.

TABLE OF CONTENTS

	Page
CONFIRMATION BY PANEL OF EXAMINERS	ii
AUTHOR'S DECLARATION	iii
ABSTRACT	iv
ACKNOWLEDGMENT	v
TABLE OF CONTENTS	vi
LIST OF TABLES	xii
LIST OF FIGURES	xv
LIST OF ABBREVIATIONS	xvi
CHAPTER ONE: INTRODUCTION	1
1.1 Preamble	1
1.2 Background of the Study	5
1.3 Statement of the Problem	10
1.4 Research Questions	15
1.5 Research Objectives	16
1.6 Significance of the Study	17
1.7 Scope of Study	19
1.8 Definition of Terms	19
1.9 Organisation of the Thesis	20
CHAPTER TWO: LITERATURE REVIEW	22
2.1 Introduction	22
2.2 Underlying Theory	22
2.2.1 Resource-based theory	23
2.3 Intellectual capital	25

2.3.1	Definition of Intellectual Capital	25
2.3.2	Components of Intellectual Capital	27
2.3.2.1	<i>Human Capital</i>	27
2.3.2.2	<i>Structural Capital</i>	30
2.3.2.3	<i>Customer Capital</i>	31
2.3.3	Intellectual Capital Models	33
2.3.3.1	<i>Saint-Onge's Model</i>	33
2.3.3.2	<i>Sveiby's Model</i>	34
2.3.3.3	<i>Wiig's Model</i>	35
2.3.3.4	<i>Sullivan's Model</i>	35
2.3.3.5	<i>The Skandia's IC Scheme</i>	36
2.3.3.6	<i>Brooking's Model</i>	37
2.4	Intellectual Capital Measurements	38
2.4.1	The Market Capitalization Approach (MCA)	41
2.4.1.1	<i>Market-to-Book Value</i>	41
2.4.1.2	<i>Tobin's Q</i>	42
2.4.2	Direct Intellectual Capital Approach (DIC)	43
2.4.2.1	<i>Technology Broker</i>	43
2.4.2.2	<i>Citation Weighted Patents</i>	44
2.4.3	The Return on Assets Approach	44
2.4.3.1	<i>Economic Value Added</i>	44
2.4.3.2	<i>Calculated Intangible Value</i>	45
2.4.3.3	<i>Value Added Intellectual Coefficient</i>	45
2.4.4	The Scorecard Approach	46
2.4.4.1	<i>Balanced Scorecard</i>	46
2.4.4.2	<i>Skandia Navigator</i>	47
2.4.4.3	<i>Intangible Assets Monitor</i>	48

CHAPTER ONE

INTRODUCTION

1.1 Preamble

In the knowledge based economy, intellectual capital (IC) has become the most important business success factor in sustaining competitive advantage and creating value of firms (Madininos, Chatzoudes, Tsairidis, & Theriou 2011). In this new economy the organizations will give greater recognition to their knowledge assets/intangible assets for survival and growth. According to OECD (2005), the knowledge based economy is an expression coined to describe trends in advanced economies towards greater dependence on knowledge, information and high skill levels, which access by the business and public sectors.

The knowledge based economy is where the economy is directly based on production, distribution and use of knowledge and information. The vital role of knowledge is emphasized in the World Bank Institute's Knowledge for Development (2007) where knowledge has clearly become the key driver of competitiveness and is now profoundly reshaping the patterns of the world's economic growth and activity.

Economic managers of many countries feel that it is inevitable to transform the production-based economy to knowledge-based economy so as to maintain the pace of economic development (Abdul Majid Makki and Lodhi, 2005). Hence, intellectual capital has become a most powerful factor for all companies, especially those in the knowledge based economy, in generating their competitive competence and achieving corporate success (Wang, 2008).

Intellectual capital plays a key role in innovation, productivity as well as the performance of an organization (Zehri, Abdelbaki and Bouabdellah, 2012). Intellectual capital consists of non-physical sources of value related to employees' capabilities, organizations' resources and the way of operating relationships with their stakeholders (Kujansivu and Lonnqvist, 2007). Intellectual capital has become the object of particular attention by managers, investors, economic institutions and governments; as they are also the object of several studies recently realised in academic and professional environments (Zeghal and Maaloul, 2010).