

THE IMPACTS OF INTELLECTUAL CAPITAL  
ON COMPETITIVE ADVANTAGE MEDIATED  
BY ORGANIZATIONAL PERFORMANCE IN  
SELECTED MALAYSIA RESEARCH  
UNIVERSITIES

ABDULLAH NIHAD ALKHATEEB

DOCTOR OF PHILOSOPHY

UNIVERSITI MALAYSIA PAHANG



## **SUPERVISOR'S DECLARATION**

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Doctor of Philosophy.

---

(Supervisor's Signature)

Full Name : DR. CHENG JACK KIE

Position : SENIOR LECTURER

Date :



## **STUDENT'S DECLARATION**

I hereby declare that the work in this thesis is based on my original work except for quotations and citations which have been duly acknowledged. I also declare that it has not been previously or concurrently submitted for any other degree at Universiti Malaysia Pahang or any other institutions.

---

(Student's Signature)

Full Name : ABDULLAH NIHAD ALKHATEEB

ID Number : PPT15008

Date :

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Thesis submitted in fulfillment of the requirements  
for the award of the degree of  
Doctor of Philosophy

Faculty of Industry Management  
UNIVERSITI MALAYSIA PAHANG

OCTOBER 2019

## ACKNOWLEDGEMENTS

First and foremost, thanks to Allah, for blessings and granting me the strength to bring this Ph.D. thesis to its completion.

I would not be able to complete my thesis without the guidance and inspiration from my supervisors, continuous support from my family and friends.

My utmost and sincere gratitude goes to my principal supervisor, Dr. Liu Yao who has been a great mentor of my Ph.D. work. Her endless support, patience, assistance and counsel throughout my work as well as his vast research experience have been invaluable in the completion of this work. I would also like to thank my co-supervisor, Dr. Cheng Jack Kie, for her helping to make my way easier. My deepest acknowledgements also go to the rest of my Ph.D. committee, Prof. Dato' Hasnah Haron, Associate Professor Dr. Mohd Ghani Bin Awang and Dr. Puteri Fadzline Bt Muhamad for all their insightful inputs and motivations. Without their precious encourage it would not be possible for me to be at this stage now.

To my beloved father, Mr Nihad Alkhateeb who has been the most important person behind of my success thanks for your love, encouragement and constant prayer. You are my inspiration and the backbone of my life. To my dearest mother, Mrs Mayada Tariq, you are a very great mother and thank you for everything. Thanks are also to my wife, Mrs Linda Talal, I am very indebted for her deep understanding and untiring support throughout my study.

Thanks to all of my family and friends for their support and love. Not forgotten, my grandparents who were praying for me to complete this PhD degree when I was still at the secondary school.

My appreciation also extended to the others who have contributed directly and indirectly in my attainment in the doctoral study. In particular, I would like to express my gratitude to the University Malaysia Pahang; Institute Of Postgraduate Studie and all staffs of UMP who were very helpful during my study. Special thanks to Dr. Dato, Mahmood Almsafir and Dr. Ahamed Najm for all encourage and support that has helped me a lot throughout my study.

Lastly, all your help made all this possible and thank you again.

## ABSTRAK

Kini, modal nyata tradisional seperti wang tunai, bangunan, inventori dan sebagainya yang dianggap senjata efektif untuk kelestarian organisasi tidak boleh lagi di lihat secara terpencil. Sejak pengetahuan menjadi penting dalam meneraju ekonomi masa kini, kepentingan modal tidak nyata atau modal intelektual mula muncul. Salah satu kepentingan modal intelektual yang dikenali dalam literatur adalah kelebihan daya saing yang diperolehi. Walau bagaimanapun, penyelidikan berkenaan dengan kesan modal intelektual terhadap kelebihan daya saing di universiti adalah terhad. Oleh itu, kajian ini bertujuan untuk mengisi jurang penyelidikan. Kajian ini di sokong oleh teori *Resource-based View* dan *Knowledge-based View* dan bertujuan untuk mengenalpasti hubungan antara komponen modal intelektual dan kelebihan daya saing universiti penyelidikan atau *research universities* di Malaysia dengan prestasi organisasi sebagai pemboleh ubah pengantara. Kaedah kuantitatif telah digunakan dan sampel kajian terdiri daripada 473 orang pekerja universiti penyelidikan awam di Malaysia. Hipotesis yang dirumuskan telah diuji dengan menggunakan *PLS structural equation modelling*. Keputusan menunjukkan bahawa *human capital, relational capital, social capital, renewal capital, trust capital* dan *entrepreneurial capital* merupakan ramalan yang signifikan dalam komponen modal intelektual ke atas kelebihan daya saing universiti penyelidikan di Malaysia, manakala *structural capital* dan *technological capital* merupakan ramalan yang kurang signifikan. Kedua, komponen modal intelektual mempunyai ramalan yang signifikan terhadap prestasi organisasi kecuali *structural capital, relational capital, technological capital, trust capital* dan *entrepreneurial capital*. Ketiga, prestasi organisasi diramalkan secara signifikan pada kelebihan daya saing. Akhir sekali, dalam kajian ini, prestasi organisasi mengantarkan atau *mediated* hubungan antara *human capital, social capital, spiritual capital, renewal capital* and kelebihan daya saing. Oleh itu, kajian ini menyumbang kepada literatur modal intelektual di universiti. Khususnya, kajian ini telah meningkatkan pemahaman teori modal intelektual dengan membangun dan mengesah secara empiris, model konseptual yang terdiri daripada sembilan dimensi modal intelektual di samping menawarkan perspektif baru bagi universiti penyelidikan di Malaysia yang berhasrat untuk membangunkan strategi untuk mengurus modal intelektual secara efektif.

## ABSTRACT

Nowadays, the traditional tangible capitals like cash, buildings, and inventories are the effective weapons for organizational survival can not longer be counted in alone. Since knowledge becomes vital in leading economy currently, the importance of the intangible assets or the so-called intellectual capital has emerged. One of such importance identified in intellectual capital literature is gained competitive advantage. However, researches testing the effects of intellectual capital on competitive advantage in universities is limited. Therefore, this study sought to address this research gap. Underpinned by resource-based view theory and knowledge-based view theory, this study examined the relationships between intellectual capital components and competitive advantage of Malaysia research universities with organizational performance as a mediating variable embedded in the framework. The quantitative methods were adopted and the survey data collection method was used. Further, the study sample comprised 473 management employees of public research universities in Malaysia were taken by sample random technique. The formulated hypotheses were tested using Partial Least Squares - structural equation modelling. The results showed that human capital, relational capital, social capital, renewal capital, trust capital, and entrepreneurial capital had a significant prediction as the components of intellectual capital on the competitive advantage in Malaysia research universities, while the structural capital and technological capital showed insignificant prediction. Secondly, the intellectual capital components had a significant prediction on organizational performance, except structural capital, relational capital, technological capital, trust capital, and entrepreneurial capital. Thirdly, the organizational performance significantly predicted on competitive advantage. Lastly, in this study, the organizational performance mediated the relationship between human capital, social capital, spiritual capital, renewal capital and competitive advantage. Thus, this study contributes to the literature on intellectual capital in Malaysian research universities. Specifically, this study believed that the conceptual relationship proposed provided a useful and robust framework that can offer universities management valuable information on the factors that influence the competitive advantage of the university. Thus, the ministry of higher education has to be reviewed education, training, and employment policies, particularly to recruit staffs that have the skills necessary for the development of research activities, and develop effective strategies that will achieve the universities goals, to be on par with the other world-class universities, as well as to achieve significant for Malaysia in higher education in the process of discovery and creation of new knowledge.

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## LIST OF ABBREVIATIONS

A	Agree
ABC	Activity-Based Costing
AVE	Average Variance Extracted
BCA	Bias-Corrected and Accelerated
CA	Competitive Advantage
CI	Confidence Interval
CIV	Calculated Intangible Value
D	Disagree
DV	Dependent Variables
EFA	Exploratory Factor Analysis
ENC	Entrepreneurial Capital
FNP	For Non-Profit
FP	For-Profit
HC	Human Capital
HEI	Higher Education Institutions
HTMT	Heterotrait-Monotrait Ratio
IT	Information Technology
IV	Independent Variables
KBV	Knowledge-Based View
KM	Knowledge Management
MA	Moderate Agree
MOOCS	Massive Online Offered Courses
OP	Organizational Performance
ORCI	Organizational Renewal Capital Inventory
PLS-SEM	Partial Least Square-Structural Equation Modelling
POP	Percent of Population
RBA	Resource-Based Accounting
RBV	Resource-Based View
RC	Relational Capital
RD	Research and Development
REOI	Residual Operating Income

RMSR	Root Mean Square Residual
RNC	Renewal Capital
SA	Strongly Agree
SC	Structural Capital
SC	Social Capital
SD	Strongly Disagree
SD	Standard Deviation
SE	Standard Error
SPSS	Statistical Package for the Social Sciences
TC	Technological Capital
TRC	Trust Capital
UKM	University Kebangsaan Malaysia
UM	University Malay
UPM	University Putra Malaysia
VAF	Variance Accounted For
VIF	Variance Inflation Factor
VRIN	Valuable, Rare, Inimitable and Non-substitutable

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