

**MEDIATING ROLE OF GREEN INNOVATION ON
THE EFFECT OF INTELLECTUAL CAPITAL ON
FINANCIAL PERFORMANCE IN INDONESIAN
PUBLIC LISTED MANUFACTURING
COMPANIES**

THESIS

**SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE OF BACHELOR OF
ACCOUNTING**



By:

**MICHELLE CHRISTINE ANWAR
NIM. 041711333190**

**ACCOUNTING STUDY PROGRAM
FACULTY OF ECONOMICS AND BUSINESS
AIRLANGGA UNIVERSITY
SURABAYA
2020**

**PERAN MEDIASI INOVASI HIJAU DALAM PENGARUH
MODAL INTELEKTUAL TERHADAP KINERJA KEUANGAN
PADA PERUSAHAAN MANUFAKTUR YANG
TERDAFTAR DI BEI INDONESIA**

SKRIPSI

**DIAJUKAN UNTUK MEMENUHI SEBAGIAN
PERSYARATAN DALAM MEMPEROLEH GELAR SARJANA
AKUNTANSI**



Oleh:

**MICHELLE CHRISTINE ANWAR
NIM. 041711333190**

**PROGRAM STUDI S1 AKUNTANSI
FAKULTAS EKONOMI DAN BISNIS
UNIVERSITAS AIRLANGGA
SURABAYA
2020**

THESIS

MEDIATING ROLE OF GREEN INNOVATION ON THE EFFECT OF
INTELLECTUAL CAPITAL ON FINANCIAL PERFORMANCE IN INDONESIAN
PUBLIC LISTED MANUFACTURING COMPANIES

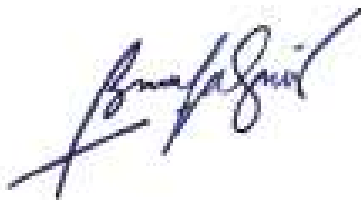
SUBMITTED BY:

MICHELLE CHRISTINE ANWAR

NIM: 041711333190

HAVE BEEN PROPERLY APPROVED AND ACCEPTED BY:

THESIS SUPERVISOR,



Prof. Dr. BAMBANG TJAHJADI, SE., MBA, Ak.
NIP. 195702041986011001

DATE 4 April 2021

COORDINATOR OF STUDY PROGRAM,



ALFIYATUL QOMARIYAH, S.Ak., MBA, Ph.D.
NIP. 198909142016113201

DATE 5 April 2021

DECLARATION

I, (Michelle Christine Anwar, 041711333190), declare that:

1. My thesis is genuine and truly my own creation, and is not another's person work made under my name, nor a piracy or plagiarism. This thesis has never been submitted to obtain an academic degree in *Universitas Airlangga* or in any other Universities/Colleges.
2. This thesis does not contain any work or opinion written or published by anyone, unless clearly acknowledged or referred to by quoting the author's name and stated in the references.
3. This statement is true; if on the future this statement is proven to be fraud and dishonest, I agree to receive an academic sanction in the form of removal of the degree obtained through this thesis, and other sanctions in accordance with the prevailing norms and regulations in *Universitas Airlangga*.

Surabaya, 23rd December 2020

Declared by,



Michelle Christine Anwar
NIM. 041711333190

FOREWORDS

All praise and thanks to God Almighty. Through His grace during the process of writing this thesis entitled "Mediating Role of Green Innovation on the Effect of Intellectual Capital on Financial Performance in Indonesian Public Listed Manufacturing Companies," the author was able to complete it smoothly and on time. This thesis aims to fulfill one of the requirements for the degree of bachelor of accounting at Airlangga University.

Likewise, thanks to the guidance and assistance of various parties, this thesis can finish properly, after going through a lot of obstacles and hurdles. All the author's gratitude goes to:

1. Prof. Dr. Hj. Dian Agustia, SE., M.Sc., Ak. As Dean of the Faculty of Economics and Business, Airlangga University
2. Alfiyatul Qomariyah, S.Ak, MBA., Ph.D. as Head of the Accounting Study Program, Faculty of Economics and Business, Airlangga University
3. Prof. Dr. Bambang Tjahjadi, SE., MBA., Ak. As a supervisor who patiently guides and creates a comfortable environment for writers during the online thesis writing process
4. Yani Permatasari S.Ak, MBA., Ak., CA. As a guardian lecturer who encourages the author on pursuing the study in accounting passionately
5. All lecturers at the Faculty of Economics and Business, Airlangga University for all the knowledge that has been given to the author during the study period
6. The author's family for every prayer, support, and facilities provided during the education in college
7. Author's friends, namely *Mbak* Adinda, Adel, Dhea, and *Kak* Dita who help and pray for each other in working on the thesis.
8. EC-AK 2017 class always shows solidarity and a high sense of kinship during the author's study.

Finally, the writing of this thesis is not free from the errors and limitations of the writer. Therefore, all criticism and constructive input from various parties will be tamping the authors for the improvement of this thesis in the future, so that it can be useful for many interests.

ABSTRACT

The goal of this study is to investigate the effect of intellectual capital on financial performance while introducing green innovation as a mediating variable. This study employs quantitative analysis with an explanatory research approach using SEM-PLS (Structural Equation Modeling of Partial Least Squares) software, which is WarpPLS 7.0 for analyzing the unbalanced panel data of the Indonesian manufacturing industry listed in IDX from 2015-2019. Applying a purposive sampling approach, this research sorts out 598 sample data of 171 manufacturing companies obtain from the secondary data. The results are as follow: first, there is a significant effect of intellectual capital on financial performance; second, there is a significant effect of intellectual capital on green innovation; third, there is no significant effect of green innovation on financial performance; fourth, green innovation doesn't mediate the effect of intellectual capital on financial performance. The limitation of this research takes place on the measurement of green innovation variable is considered to be subjective. Other than that, this research focuses only on the manufacturing industry. This research looks forward to the applications of intellectual capital to create better financial performance. Moreover, this research expects manufacturing companies in Indonesia to consider putting green innovation as an act of firm sustainability in the long-run.

Keywords: Intellectual Capital, Financial Performance, Green Innovation, Manufacturing Industry, Sustainability, SEM-PLS

ABSTRAK

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh modal intelektual terhadap kinerja keuangan sambil memperkenalkan inovasi hijau sebagai variabel mediasi. Penelitian ini menggunakan analisis kuantitatif dengan pendekatan penelitian eksplanatori menggunakan software SEM-PLS (Structural Modeling Equation of Partial Least Square) yaitu WarpPLS 7.0 untuk menganalisis data panel tidak seimbang industri manufaktur Indonesia yang terdaftar di BEI tahun 2015-2019. Dengan menggunakan pendekatan purposive sampling, penelitian ini memilah 598 data sampel dari 171 perusahaan manufaktur yang diperoleh dari data sekunder. Hasilnya adalah sebagai berikut: pertama, terdapat pengaruh yang signifikan modal intelektual terhadap kinerja keuangan; terdapat pengaruh yang signifikan modal intelektual terhadap inovasi hijau; ketiga, tidak terdapat pengaruh signifikan inovasi hijau terhadap kinerja keuangan; keempat, inovasi hijau tidak memediasi pengaruh modal intelektual terhadap kinerja keuangan. Batasan penelitian ini terjadi pada pengukuran variabel inovasi hijau yang dianggap subjektif. Selain itu, penelitian ini hanya berfokus pada industri manufaktur. Penelitian ini mengharapkan penerapan modal intelektual untuk menciptakan kinerja keuangan yang lebih baik. Selain itu, penelitian ini mengharapkan perusahaan manufaktur di Indonesia untuk mempertimbangkan menempatkan inovasi hijau sebagai tindakan keberlanjutan perusahaan dalam jangka panjang.

Kata Kunci: Modal Intelektual, Kinerja Keuangan, Inovasi Hijau, Industri Manufaktur, Keberlanjutan, SEM-PLS

TABLE OF CONTENTS

TITLE PAGE	i
STATEMENT OF APPROVAL	ii
DECLARATION	iii
PREFACE	iv
ABSTRACT	v
<i>ABSTRAK</i>	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDIX	xii
CHAPTER 1 INTRODUCTION	1
1.1 Background.....	1
CHAPTER 2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT	5
2.1 Literature Review	5
2.1.1 Resource-based View	5
2.1.2 Sustainability Theory	5
2.1.3 Intellectual Capital.....	6
2.1.4 Green Innovation	7
2.1.5 Financial Performance	7
2.2 Hypothesis Development.....	8
2.3.1 Effect of Intellectual Capital on Financial Performance	8
2.3.2 Effect of Intellectual Capital on Green Innovation.....	9
2.3.3 Effect of Green Innovation on Financial Performance.....	10
2.3.4 Effect of Mediating Variable of Green Innovation.....	11
2.3 Research Framework	12
CHAPTER 3 RESEARCH METHODOLOGY	14
3.1 Research Design	14
3.2 Data Collection	14
3.3 Population and Sample	14

3.4 Periodic Data Research.....	15
3.5 Operational Definition and Variable Measurement	15
3.5.1 Intellectual Capital.....	15
3.5.2 Green Product Innovation.....	16
3.5.3 Green Process Innovation	17
3.5.4 Financial Performance	17
3.5.5 Control Variable	18
3.6 Technique and Model Analysis	18
CHAPTER 4 RESULTS AND DISCUSSION.....	21
4.1 Descriptive Statistics	21
4.2 Pearson Correlation	22
4.3 Measurement Model Analysis	23
4.4 Structural Model Analysis	25
4.4.1 Inner Model Testing	25
4.4.2 Goodness of Fit.....	25
4.5 Results and Interpretation	26
4.5.1 Effect of Intellectual Capital on Financial Performance	27
4.5.2 Effect of Intellectual Capital on Green Innovation.....	27
4.5.3 Effect of Green Innovation on Financial Performance.....	28
4.5.4 Mediating Effect of Green Innovation.....	28
4.6 Discussion.....	28
4.6.1 Effect of Intellectual Capital on Financial Performance	28
4.6.2 Effect of Intellectual Capital on Green Innovation.....	29
4.6.3 Effect of Green Innovation on Financial Performance.....	29
4.6.4 Mediating Effect of Green Innovation.....	30
CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS	31
5.1 Conclusions	31
5.2 Research Implications	31
5.3 Research Limitations	32
5.4 Recommendations	32
REFERENCES.....	33

LIST OF TABLES

Table 3.1 The Research Sample	15
Table 3.2 PROPER Scores according to Its Color Indicators	17
Table 4.1 Output of Descriptive Statistics	21
Table 4.2 Output of Pearson Correlation	23
Table 4.3 Output of Reliability Test and Convergent Validity	24
Table 4.4 Output of Discriminant Validity	24
Table 4.5 Output of Inner Model Test	25
Table 4.6 Output of Goodness of Fit.....	26
Table 4.7 Output of Hypothesis Testing	26

LIST OF FIGURES

Figure 2.1 Triple Bottom Line	6
Figure 2.2 Research Framework	13
Figure 4.1 Full model of Indirect Effect	27

LIST OF APPENDIX

Appendix 1: Research Map on the Effect of Intellectual Capital on Financial Performance	38
Appendix 2: Research Map on the Effect of Intellectual Capital on Green Innovation	45
Appendix 3: Research Map on the Effect of Green Innovation on Financial Performance	50
Appendix 4: Data Processing in WarpPLS 7.0	57
Appendix 5: Output of Indirect Effect before Measurement Model Analysis.....	201
Appendix 6: Output of Factor Loadings before Measurement Model Analysis..	202
Appendix 7: Output of Composite Reliability and AVE before Measurement Model Analysis	203
Appendix 8: Output of Indirect Effect after Measurement Model Analysis.....	204
Appendix 9: Output of Factor Loadings after Measurement Model Analysis.....	205
Appendix 10: Output of Composite Reliability and AVE after Measurement Model Analysis	206
Appendix 11: Output of Discriminant Validity after Measurement Model Analysis.....	207
Appendix 12: Output of Inner Model Testing for Structural Model Analysis	208
Appendix 13: Output of Goodness of Fit for Structural Model Analysis	209
Appendix 14: Output of Direct Effect in Panel A.....	210