



UNIVERSITAS  
**MERCU BUANA**

**ONLINE TRANSPORTATION: RELATIONSHIP  
FRAMEWORK MODEL FOR TRUSTWORTHINESS  
ANALYSIS IN VIRTUAL ASSOCIATIONS IN MOGADISHU  
SOMALI**

**THESIS**

**Hussein Ali Abdi**

**55323110018**

UNIVERSITAS  
**MERCU BUANA**

**PROGRAM STUDY MASTER OF INDUSTRIAL ENGINEERING**

**FACULTY OF ENGINEERING**

**UNIVERSITAS MERCU BUANA**

**2024**



UNIVERSITAS  
**MERCU BUANA**

**ONLINE TRANSPORTATION: RELATIONSHIP  
FRAMEWORK MODEL FOR TRUSTWORTHINESS  
ANALYSIS IN VIRTUAL ASSOCIATIONS IN MOGADISHU  
SOMALI**

**THESIS**

**Submitted as one of the Requirements for Completing Master Program in Postgraduate  
Study of Industrial Engineering**

**Hussein Ali Abdi**

UNIVERSITAS  
55323110018  
**MERCU BUANA**

**PROGRAM STUDY MASTER OF INDUSTRIAL ENGINEERING**

**FACULTY OF ENGINEERING**

**UNIVERSITAS MERCU BUANA**

**2024**


## SUPERVISOR'S DECLARATION

TITLE: ONLINE TRANSPORTATION: RELATIONSHIP FRAMEWORK  
MODEL FOR TRUSTWORTHINESS ANALYSIS IN VIRTUAL  
ASSOCIATIONS IN MOGADISHU SOMALI

Name : Hussein Ali Abdi  
NIM : 55323110018  
Program Study : MASTER OF INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING  
Date : April, 18 2024

APPROVED BY  
THE BOARD OF SUPERVISORS

Supervisor

UNIVERSITAS  
  
MERCU BUANA  
(Dr. Sawarni Hasibuan, M.T)

ACKNOWLEDGE BY

Dean of The Faculty of Engineering



(Dr. Zulfa Fitri Ikatrinasri, M.T)

Head of Master Study Program  
of Industrial Engineering



(Dr. Sawarni Hasibuan, M.T)

## STATEMENT OF ORIGINALITY

I'm the undersigned declare truthfully that all the writings and statements in this thesis:

TITLE: ONLINE TRANSPORTATION: RELATIONSHIP FRAMEWORK  
MODEL FOR TRUSTWORTHINESS ANALYSIS IN VIRTUAL  
ASSOCIATIONS IN MOGADISHU SOMALI

Name : Hussein Ali Abdi  
NIM : 55323110018  
Program Study : MASTER OF INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING  
Date : April, 18 2024

Is result of literature study, research and my own work with the direction of the supervisors determined by the Decision Letter of the Head of Industrial Engineering of master study program in Universitas Mercu Buana.

This thesis with same topic has never been submitted for to obtain a Master Degree (S2) in similar program at another universities. all information, data, and processing results written in this thesis have clearly stated their source and can be checked for correctness.

Jakarta , 18 April 2024



(Hussein Ali Abdi)


## STATEMENT OF SIMILARITY CHECK

I'm the undersigned declare that the scientific research written by:

Name : Hussein Ali Abdi  
NIM :55323110018  
Program Study : MASTER OF INDUSTRIAL ENGINEERING  
FACULTY OF ENGINEERING

With Title: **“online transportation: relationship framework model for trustworthiness analysis in virtual associations in Mogadishu Somalia”**, a similarity test has been conducted with the Turnitin system on 18/04/2024, a percentage value of 14%

Jakarta, 18 April 2024  
Administrator of Turnitin

UNIVERSITAS  
  
MERCU BUANA  
Miyono, S. Kom

## **GUIDELINES FOR USING THE THESIS**

The unpublished master thesis (S2) is submitted to and available in the library of Universitas Mercu Buana at Meruya Campus and is open to the public provided that copyright with the author following the *HaKI* rules that apply at Universitas Mercu Buana. Bibliographic references are permitted to be recorded, but citing or summarizing can only be done with the permission of the author and must be accompanied by the scientific habit of citing the source.

Duplicating or publishing as or all of the thesis must be permitted by the Dean of the faculty of engineering at Universitas Mercu Buana.





## PREFACE

Praise be to Allah SWT who has given his grace and grace so that the writer can finish this thesis proposal with the title "**Online Transportation: Relationship Framework Model for Trustworthiness Analysis Virtual Associations in Mogadishu Somali**". One of the prerequisites for the Master of Studies in Industrial Engineering Studies program at the Faculty of Engineering Universitas Mercu Buana is the completion of this thesis.

considering my limited experience and knowledge, the author acknowledges that, as human beings, cannot be completely free from mistakes and inadequacies in this research. It would not impossible to separate the direction, help, and encouragement of several important people from the preparation of this thesis, supervisors among them: Head of Industrial Engineering Department of Master Dr. Sawarni Hasibuan, M.T. , Dr. Lien Herliani Kusmah.,M.T and Secretary of Industrial Engineering Department of Master Dr. Humiras Hardi Purba,S.,T,M.T who oversaw the thesis and gave the author time, guidance, spirit, knowledge, and invaluable advice. Thus, on this particular occasion, the author, as a result, the author expressed gratitude to Allah SWT for his ability to offer his grace on this occasion and thanked everyone who had assisted in the production of this thesis, in particular:

1. Prof. Dr. Ir. Andi Adriansyah ,M.Eng as the Rector of Universitas Mercu Buana
2. Dean of The Faculty of Engineering Dr. Zulfa Fitri Ikatrinasri,M.T
3. Head of Industrial Engineering Department Master Dr. Sawarni Hasibuan,M.T
4. All lecturers and staff of Postgraduate Faculty of Engineering, Department of Industrial Engineering Universitas Mercu Buana who have given all their knowledge.
5. The blessing in my life, My Mother Sahra and My Father Ali and My Sisters and My Brothers, who always provide supports, motivation, advices and who never me leave under any circumstances
6. As well as all those who have assisted in this research.

The author is fully aware that this thesis is still far from perfect due to the limited experience and knowledge of the author. Therefore, the authors expect all forms of advice and input and even constructive criticism from various parties. Hopefully, this thesis is useful and can increase knowledge especially for writers and readers in general. Final words with all sincerity and humility, the authors apologize if there are errors and weaknesses in this thesis

## Table of Contents

Cover.....	i
Title Page.....	ii
SUPERVISOR'S DECLARATION .....	iii
STATEMENT OF ORIGINALITY .....	iv
STATEMENT OF SIMILARITY CHECK.....	v
GUIDELINES FOR USING THE THESIS.....	vi
PREFACE.....	vii
LIST OF FIGURES .....	xi
LIST OF TABLES .....	xii
LIST OF APPENDIX .....	xiii
ABSTRACT.....	xiv
ABSTRAK .....	xv
CHAPTER I INTRODUCTION .....	1
1.1 Background.....	1
1.2 Problem Formulation .....	6
1.3 Research Objective .....	6
1.4 Research Limitations .....	7
CHAPTER II LITERATURE REVIEW.....	8
2.1 Theoretical Analysis.....	8
2.1.1 TIC.....	8
2.1.2 Shared Objective Value.....	8
2.1.3 Trustworthiness.....	9
2.1.3.1 Ability.....	11
2.1.3.2 Benevolence .....	12
2.1.3.3 Integrity .....	12
2.1.4 Participation .....	12
2.2 Online Transportation.....	13
2.3 Virtual Association (VA) .....	14
2.6 SEM.....	14
2.6.1 Measurement Model Test.....	15
2.6.2 Construct Validity Test .....	19
2.6.3 Structural Model Test.....	20
2.7 Previous Research .....	20
2.7.1 Mapping and Research Position .....	22
2.8 Thinking Framework.....	27



2.8.1 Previous Research Models.....	28
2.9 Research Hypothesis.....	31
CHAPTER III METHODOLOGY .....	33
3.1 Types and Design of Research .....	33
3.2 Data and Information .....	33
3.3 Data Collection Techniques.....	36
3.4 Population and Sample.....	36
3.4.1 Hoelter's (N) .....	37
3.5 Data Analysis Techniques .....	37
3.5.1 Determination of Sample Size.....	37
3.5.2 Normalities Data .....	38
3.5.3 Testing of Measuring Instruments .....	39
3.5.4 Validity Test.....	39
3.5.5 Reliability Test .....	39
3.6 Research Flow .....	40
3.7. Structural Equation Modelling (SEM).....	42
3.7.1 SEM Analysis Stages.....	42
CHAPTER IV RESULTS AND DISCUSSION .....	43
4.1 Respondent Demography .....	43
4.2 Data Processing and Analysis .....	44
4.2.1 Validity Test.....	44
4.2.2 Structural Equation Modelling (SEM) Test.....	46
4.2.3 SEM Results Model Framework.....	46
4.2.4 Measurement Model Test.....	48
4.2.5 Construct Validity Test .....	49
4.2.6. Discriminant Validity Test.....	50
4.2.7 Hypothesis Test .....	51
4.2.8 Structural Model Test.....	52
4.2.9 Descriptive analysis Mean .....	53
4.3 Discussion.....	55
4.3.1 Mean Discovery .....	55
4.3.2 Comparison of Previous Research.....	58
4.3.3 Research implications .....	59
4.3.4 Researcher Limitations.....	60
CHAPTER V CONCLUSIONS AND SUGGESTIONS.....	61
5.1 Conclusion .....	61

<b>suggestion</b> .....	62
<b>REFERENCE</b> .....	63
<b>APPENDIX</b> .....	67



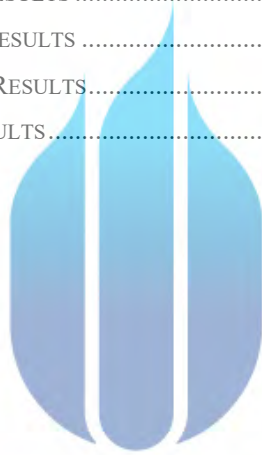
## LIST OF FIGURES

FIGURE 2.1 RESEARCH MODEL FRAMEWORK.....	28
FIGURE 2.2 RESEARCH MODEL FRAMEWORK MAYER ET AL. ....	29
FIGURE 2.3 RESEARCH MODEL FRAMEWORK MUKHERJEE ET AL. ....	30
FIGURE 2.4 RESEARCH MODEL FRAMEWORK WONG'S .....	31
FIGURE 3.1 RESEARCH FLOW .....	41
FIGURE 4.1 TRUST MODEL FRAMEWORK IN VIRTUAL ASSOCIATION IN SERVICE PROVIDERS .....	47



## LIST OF TABLES

TABLE 2.1 INDICATORS OF TRUST DIMENSIONS .....	11
TABLE 2.2 MEASURES OF GOODNESS OF FIT .....	18
TABLE 2.3 MAPPING RESEARCH.....	23
TABLE 2.4 STATE OF THE ART (SOTA).....	27
TABLE 3.1 OPERATIONAL DEFINITION OF RESEARCH CONSTRUCTS.....	34
TABLE 4. 1 RESPONDENT DEMOGRAPHY OF ONLINE .....	44
TABLE 4. 2 VALID TEST.....	44
TABLE 4. 3 VALIDITY TEST .....	45
TABLE 4. 4 MEASUREMENT MODEL TEST RESULTS .....	48
TABLE 4. 5 CONVERGENT VALIDITY TEST RESULTS .....	49
TABLE 4. 6 DISCRIMINANT VALIDITY TEST RESULTS.....	50
TABLE 4. 7 STRUCTURAL MODEL TEST RESULTS.....	52



UNIVERSITAS  
MERCU BUANA

## LIST OF APPENDIX

APPENDIX 1 QUESTIONNAIRE VIEW .....	67
APPENDIX 2 QUESTIONNAIRE VIEW .....	68
APPENDIX 3 PRELIMINARY QUESTIONNAIRE DATA .....	79
APPENDIX 4 DHAWEEYE TAXI .....	80
APPENDIX 5 RIKAAB TAXI .....	81
APPENDIX 6 BIOGRAPHY .....	82



## ABSTRACT

This research was conducted on users of online transportation services in the Mogadishu city and Banaadir Region. The development of the framework, the model will be compiled based on literature studies that support the theory of trustworthiness in virtual. The relationship between variables related to Technology for information and communication, shared objectives and values and trustworthiness and Participation will be investigated to find out how strong the relationship between these variables is. Most of the behaviour of phenomena in the real world is complex and will be easily tested by using the Structural Equation Modelling (SEM) model. SEM is a multivariate statistical technique that is a combination of factor analysis and regression analysis (correlation), which aims to examine the relationships between variables that exist in a model. Based on the research results, the dimensions of the technology for information and communication variable have a real but not significant effect on virtual Association I trust in online two-wheeled transportation, while the shared objectives and values dimension has a real and significant effect on trust in online transportation. The participation of users of two-wheeled online transportation services is influenced by the integrity provided by the company. Ability and Benevolence on the dimension of trustworthiness have no relationship with the dimensions of the participation variable in the online transportation virtual organization research. The honesty and reliability of online transportation service providers in fulfilling service promises are the main factors that influence the desire of service users to participate in using the services provided.

Keywords: Technology for Information and Communication, Shared Objectives and Values, Trustworthiness, Participation





## ABSTRAK

*Pengembangan dan analisis kepercayaan assosiasi virtual akan dilakukan dalam penggunaan layanan transportasi online roda dua. Penelitian ini dilakukan terhadap pengguna jasa transportasi online di kota Mogadishu dan wilayah Banaadir Dalam pembangunan framework model akan disusun berdasarkan studi literatur yang mendukung teori mengenai trustworthiness dalam oassosiasi virtual. Hubungan antara variabel-variabel terkait TIC, Shared objective Values (SOV), Trustworthiness, dan Participation akan diteliti untuk mengetahui seberapa kuat hubungan antara variable lvariabel tersebut. Perilaku atau fenomena di dunia nyata sebagian besar bersifat kompleks akan mudah diuji dengan penggunaan model Sructural Equation Modelling (SEM). SEM adalah teknik statistik multivariat yang merupakan kombinasi antara analisis faktor dan analisis regresi (korelasi), yang bertujuan untuk menguji hubungan-hubungan antarvariabel yang ada pada sebuah model. Berdasarkan hasil peneltiian dimensi variabel TIC memiliki pengaruh yang nyata namun tidak signifikan terhadap kepercayaan organisasi virtual pada transportasi online roda dua sedangkan dimensi SOV memiliki pengaruh yang nyata dan signifikan terhadap kepercayaan transportasi online ini. Partisipasi para pengguna jasa layanan transportasi online roda dua dipengaruhi oleh integritas (integrity) yang diberikan perusahaan. Ability dan Benevolence pada dimensi trustworthiness tidak memiliki hubungan dengan dimensi variabel partisipasi pada penelitian assosiasi virtual transportasi online. Kejujuran dan kehandalan perusahaan penyedia jasa transportasi online dalam memenuhi janji pelayanan adalah faktor utama yang mempengaruhi keinginan pengguna layanan untuk berpartisipasi menggunakan jasa yang disediakan.*

*Kata Kunci: Technology Information and Communication, Shared objective and Values, Trustworthiness dan Participation*

UNIVERSITAS  
MERCU BUANA