TABLE OF CONTENTS

THESIS APPROVAL ii
THESIS EXAMINATION APPROVAL iii
DECLARATION: BACHELOR'S THESIS ORIGINALITY iv
ABSTRACT v
ABSTRAK vi
TABLE OF CONTENTS vii
CHAPTER 1: INTRODUCTION 1
1.1 Background 1
1.2 Problem Statement 3
1.2.1 Management Problem 3
1.2.2 Research Problem 4
1.3 Research Question 6
1.3.1 Main Question 6
1.3.2 Sub-questions 6
1.4 Objectives of the study 6
CHAPTER 2: THEORETICAL FRAMEWORK 8
2.1 Key concepts 8
2.1.1 Qualitative Research Theory in Understanding AI's Impact on Accounting 8
2.1.2 The Role of Artificial Intelligence in Accounting 9
2.1.3 Automation of Routine Tasks 10
2.1.4 Changing Skill Requirements in an AI-Driven Landscape 10
2.1.5 Human-AI Collaboration: A New Paradigm in Accounting 11
2.1.6 Ethical and Social Implications of AI in Accounting 12
2.2 Literature review 13
2.3 Summary 15
CHAPTER 3: METHODOLOGY 17
3.1 Research Approach 17
3.2 Research Design 17
3.2.1 Descriptive Component 17
3.2.2 Exploratory Component 18

3.3 Data Collection Methods 18
3.3.1 Document Analysis 18
3.3.2 Case Studies 18
3.3.3 Secondary Data Sources 19
3.4 Data Analysis Methods 19
CHAPTER 4: FINDINGS 21
4.1 Previous Process of Data Entry 21
4.1.1 Early Methods and Manual Entry 21
4.1.2 The Role of Early Accounting Clerks in Data Entry 22
4.1.3 The Impact of Mechanical Calculators on Data Entry 22
4.1.4 Punch Card Systems and Early Computing 22
4.1.5 Time Taken to Process the Data Entry 22
4.2 Current Process of Data Entry 23
4.2.1 Transition to Digital Data Entry and Early Accounting Software 23
4.2.2 The Rise of Spreadsheets and Computerized Data Entry 23
4.2.3 Cloud-Based Data Entry Systems 23
4.2.4 Optical Character Recognition (OCR) and Automated Data Entry 23
4.2.5 Artificial Intelligence and Machine Learning in Data Entry 24
4.2.6 Robotic Process Automation (RPA) in Data Entry 24
4.2.7 Integration with Enterprise Resource Planning (ERP) Systems 24
4.2.8 Time Taken to Process the Data Entry 24
4.3 Future Process of Data Entry with AI 25
4.3.1 Future Prospects and Emerging Innovations 25
4.3.2 Step-by-Step Future Predictions for AI-Driven Data Entry 26
Phase 1: Near-Term (2025–2030) 26
Phase 2: Mid-Term (2030–2035) 27
Phase 3: Long-Term (2035+) 27
4.3.3 Time and Cost Comparison: Manual vs. Current vs. Future AI 28
4.3.4 Cost-Benefit Analysis of AI Adoption 29
Implementation Costs 29
Long-Term Savings 29
4.3.5 Workforce Transformation 29

4.4 Diagram of Data Entry Process Differences Time-to-Time 30
Old Way (Manual Process) 30
Current Way (Semi-Digital Process) 31
Future Way (AI-Driven Automation) 31
4.4.1 Strategy for the Future Way to Enable Faster Data Entry with AI 32
1. System Integration 32
2. Implementation of Advanced AI and Machine Learning Models 32
3. Real-Time Data Capture Technologies 32
4. Human-AI Collaboration 33
5. Cybersecurity and Data Governance 33
6. Continuous Learning and System Updates 33
4.5 Summary of Findings 33
CHAPTER 5: CONCLUSION AND RECOMMENDATIONS 35
5.1 Conclusion 35
5.2 Recommendations 37
BIBLIOGRAPHY 39

UNIVERSITAS DIPONEGORO
SEMARANG
FEB UNDIP