
CHAPTER 5 : CONCLUSION AND RECOMMENDATIONS

In conclusion it is clear that Indonesian waste management organizations cannot use the CarbTrade platform without integrating governance frameworks, technological acceptability considerations, and environmental awareness and the governance skills help firms keep up with changes in the environment and rules, as stakeholder expectations may change quickly. To be competitive, businesses need to be able to identify, grab, and manage opportunities in the environment and this waste management companies can't stay in business in this digital age without switching to environmentally friendly platforms to suit the needs of sustainability. Organizations will be able to differentiate out from their competition by how they apply governance, manage the adoption of new technologies, and incorporate environmentally friendly practices. So, this research was able to find out how cultural characteristics, environmental awareness, the quality of governance, and the acceptance of technology affect the use of the CarbTrade platform in Indonesian garbage management.



Table 5.1 Research Findings Summary, Research Gap and Questions

Constructs	Research Gap	Research Questions	Hypothesis Testing
Technology Acceptance Model (TAM)	Lack of empirical evidence of TAM in environmental platform context	Is there a relationship between performance expectancy and behavioral intention?	Performance Expectancy has a positive relationship with Behavioral Intention H1a: Supported
Unified Theory of Acceptance and Use of Technology (UTAUT)	Lack of empirical evidence of UTAUT in waste management context	Is there a relationship between effort expectancy and behavioral intention?	Effort Expectancy has a negative relationship with Behavioral Intention H1b: Not Supported
Digital Platform Economics Theory (DPET)	Lack of empirical evidence of DPET in environmental context	Is there a relationship between governance quality and adoption intention?	COBIT Governance Quality positively moderates Performance Expectancy and Behavioral Intention H1c: Supported
Cultural Adoption Theory (CAT)	Lack of empirical evidence of cultural factors in environmental technology	Is there a relationship between social influence and behavioral intention?	Social Influence has a negative relationship with Behavioral Intention H2a: Not Supported
Environmental Technology Adoption (ETA)	Lack of empirical evidence of ETA in Indonesian context	Is there cultural moderation effect on technology adoption?	Cultural factors do not moderate technology adoption relationships H2b: Not Supported
Waste Management Hierarchy Model (WMHM)	Lack of empirical evidence of WMHM and platform adoption	Is there a relationship between facilitating conditions and usage?	Facilitating Conditions have negative relationship with Usage H2c: Not Supported
COBIT Governance Assessment (CGA)	Lack of empirical evidence of governance in environmental platforms	Is there a relationship between COBIT implementation and platform trust?	COBIT Implementation has positive relationship with Platform Trust H3a: Supported

Platform Trust and Reliability	Lack of empirical evidence of trust factors in environmental platforms	Is there a relationship between environmental consciousness and behavioral intention?	Environmental Consciousness has no significant relationship with Behavioral Intention H3b: Not Supported
Operational Framework Integration	Lack of empirical evidence of operational alignment and platform adoption	Is there a relationship between waste management hierarchy and behavioral intention?	Waste Management Hierarchy has positive relationship with Behavioral Intention H3c: Supported

5.1. Research Limitations

This work is based on real-world data, thus it has certain problems that should be taken into account while planning future research. First, environmental technology platforms are still quite new in the area of waste management in Indonesia. Because people don't always agree on what governance integration means, the results from real-world studies may only be useful in certain situations. This study only looked at the Jakarta metropolitan region and had 48 respondents, which isn't enough to encompass the whole waste management industry in Indonesia. This study didn't look at a lot of other parts of environmental technology, such as IoT sensors and AI analytics. Because of this, the results only show what the waste management business was like at the time of the study.

5.2. Future Research

So, future research should make it clear how technologies like AI, IoT sensors, blockchain, and automated carbon tracking systems can be used. This will allow researchers to test how governance frameworks, cultural factors, and environmental awareness affect platform adoption. Second, further study should include other factors that might affect the adoption of environmental platforms, such as support from senior management, confusion about regulations, absorptive capacity, and sustainability competency. Also, it's not obvious whether the firms that were evaluated have completely integrated environmental platforms into their operations for making money. For this reason, we suggest that results be checked by actually using the platform when environmental technologies become popular in the market. More study should help us better separate companies that are likely to succeed in adopting environmental platforms from those that have already done so. Some organizations that deal with trash are still trying to figure out what "digital environmental management" means.