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BEHAVIOR OF FINANCIAL REPORTING PRACTICES AMONG INDONESIAN MSMEs IN THE CONTEXT OF THE GREEN ECONOMY AND BUDGET EFFICIENCY
(A Survey Study of 137 Micro, Small, and Medium Enterprises in the Aceh and North Sumatra Regions)

Hendra Raza[1], Marzuki[2], Husaini[3], Aiyub Yahya[4], Rico Nur Ilham[5], Dea Amanda[6], Riski Rahmawati[7]
[1,2,3,4,5,6,7] Faculty of Economics and Business, Universitas Malikussaleh, Aceh, Indonesia
Corresponding Author: hendra.raza@unimal.ac.id

Abstract

The transition toward a green economy requires Micro, Small, and Medium Enterprises (MSMEs) to adapt their accounting and financial reporting practices to account not only for profit but also for environmental impact and budget efficiency. This study aims to analyze the financial reporting behavior of Indonesian MSMEs within the context of the green economy and to formulate budget-efficiency patterns that can be implemented to support this transition. A descriptive quantitative approach was employed through a survey of 137 MSME actors spread across the Aceh and North Sumatra regions. Data were collected using a questionnaire covering accounting-practice characteristics, key factors in sustainable accounting models, willingness to adopt new reporting systems, and preferences toward a simple financial-reporting software integrating environmental and social aspects. The results show that the majority of MSMEs (70.1%) still keep records at a very basic level, only 37.2% report having applied green-economy principles in their business, and 38.7% have never recorded environmentally related costs or activities in their bookkeeping at all. Nevertheless, awareness of the importance of environmental aspects is relatively high: 59.1% of respondents consider environmental impact important to their business, and 94.2% expressed interest in a simple accounting software that integrates financial, environmental, and social reporting. As many as 93.4% of respondents were willing to use such software if provided for free or at low cost, and 78.1% were willing to become early (pilot) users. These findings indicate a gap between awareness and actual practice that can be bridged through a simple, mobile-based sustainable accounting model equipped with automated guidance and reinforced by direct mentoring/training. This study offers practical implications for the formulation of policies to empower green MSMEs, as well as academic contributions to the development of a sustainable accounting model contextualized to the characteristics of Indonesian MSMEs.

Keywords: MSMEs, green accounting, green economy, budget efficiency, sustainable financial reporting

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the Indonesian economy, contributing more than half of national gross domestic product and absorbing a large share of employment across various sectors. Amid this strategic role, global pressure to move toward a green economy is becoming increasingly evident, driven by rising awareness of climate change, environmental degradation, and demands for business sustainability. The green economy requires business actors, including MSMEs, to no longer view economic activity solely as a profit-generating process, but also as a process that is responsible toward the environment and resources.

One important instrument in supporting the green-economy transition at the MSME level is accounting and financial reporting practice capable of integrating the environmental dimension into the recording of business costs and activities, more commonly known as green accounting. In addition, budget efficiency is an equally important factor, given that the limited financial resources of MSMEs demand well-targeted budget allocation in order to balance operational needs, environmentally friendly investment, and long-term business sustainability.

However, various prior studies show that the accounting practices of MSMEs in Indonesia are generally still very simple, with most not yet applying orderly bookkeeping, and understanding of the concepts of green accounting and environmentally based budget efficiency remains limited. It is precisely this gap between the demands of the green-

economy transition and the real capacity of accounting practice on the ground that underlies the importance of empirical research to directly map how Indonesian MSMEs behave in practicing financial reporting within the context of the green economy and budget efficiency, while also exploring their needs regarding a realistic sustainable accounting model that can be implemented. Based on the above description, this study aims to analyze the behavior of green-economy financial reporting practices among MSMEs in Indonesia and the budget-efficiency patterns that can be implemented by Indonesian MSMEs to support the transition toward a green economy. More specifically, this study seeks to answer: (1) what are the current characteristics of MSME accounting practices in the context of the green economy and budget efficiency; (2) what key factors should be considered in designing a sustainable accounting model that is responsive to green-economy principles and budget-efficiency policy; (3) how should a sustainable accounting model be designed so that it can be effectively implemented by MSMEs; and (4) how can that model design be realized in the form of a simple MSME financial-reporting software. This research was funded by BIMA, the Directorate of Research and Community Service, Directorate General of Research and Development, Ministry of Higher Education, Science, and Technology (Kemendiktisaintek), Fiscal Year 2025.

2. LITERATURE REVIEW

2.1 MSME Accounting and Financial Reporting

Accounting is a systematic process for producing financial information used as a basis for decision-making. For MSMEs, accounting provides benefits including helping to understand business financial performance, separating business assets from personal assets, understanding fund position and flow, preparing appropriate budgets, and fulfilling tax obligations. Although these benefits are widely known, the implementation of orderly bookkeeping among MSMEs in Indonesia remains a distinct challenge, generally caused by limited accounting knowledge, a shortage of human resources, and the perception that formal record-keeping adds to operational burden.

2.2 Green Economy and Green Accounting

The green economy is a development paradigm that seeks to improve human well-being and social equity while significantly reducing environmental risks and ecological scarcity. In the accounting context, this idea is translated through the concept of green accounting, an accounting approach that identifies, measures, and discloses environmental costs within a company's accounting information system (Lako, 2018). Green accounting enables business actors to incorporate environmental costs — such as waste-management, energy, and water costs — as part of the accounting system used, thereby encouraging businesses' ability to minimize negative environmental impact while enhancing their business-ethics value (Kusumawardhany, 2022).

Various studies on MSMEs in the food, handicraft, and services sectors in Indonesia show that business actors' understanding of and concern for environmental issues is actually fairly good, but has not yet been translated in detail into the recording of environmental costs due to limited technical accounting knowledge (Herlindawati et al., 2022; Ridwan & Sisdianto, 2025). Saputra et al. (2022) further affirm that the application of environmental management accounting and green accounting among MSMEs in Indonesia remains a continually developing research agenda, given the great potential of MSMEs to support environmental sustainability if supported by an appropriate recording system.

2.3 Budget Efficiency in MSME Financial Management

MSME financial management encompasses planning, budgeting, expenditure control, and evaluation of budget realization against established plans. Budgetary accounting enables MSMEs to manage cash flow more effectively, identify opportunities for cost efficiency, and optimize the use of working capital, which ultimately forms the foundation of trust for financing institutions. The implementation of a reliable accounting information system also contributes to improving MSME operational efficiency through the automation of record-keeping, reduction of human error risk, and

faster response to market changes. Within the context of the green economy, budget efficiency is directed not only at cost savings alone, but also at reallocating the budget toward more environmentally friendly and sustainable activities.

2.4 Sustainable Accounting Models Based on Simple Technology

The development of digital technology opens opportunities for MSMEs to adopt simpler yet still comprehensive financial record-keeping systems, including ones that integrate sustainability reporting. Prior studies show that the use of mobile- or cloud-based accounting applications can improve the accuracy and speed of MSME financial management, while also serving as a bridge for business actors with limited formal accounting literacy to still be able to prepare financial reports in an orderly manner. A sustainable accounting model responsive to MSME characteristics should ideally be simple, easy to understand, equipped with automated guidance, and accessible through devices commonly used by business actors in their daily activities.

RESEARCH METHODOLOGY

This study uses a quantitative approach with a descriptive method to map the behavior of MSME financial-reporting practices in the context of the green economy and budget efficiency. Primary data were collected through a structured questionnaire distributed to MSME actors in the Aceh and North Sumatra regions, with a total of 137 business actors as respondents whose data had been verified and processed (100% valid data). The questionnaire consisted of four main groups of questions: (1) characteristics of MSME accounting practices in the context of the green economy and budget efficiency; (2) key factors in designing a sustainable accounting model; (3) willingness and preferences regarding the design of an implementable sustainable accounting model; and (4) preferences regarding the implementation design of that model in the form of a simple MSME financial-reporting software. Most items were arranged on an ordinal scale from 1 (lowest/not at all) to 5 (highest/very much), along with categorical-choice items (including several items allowing more than one answer/multi-response). The collected data were processed using descriptive statistics in the form of frequency distributions and percentages for each question item, then interpreted to obtain a picture of the tendency (skewness) of respondents' answers on each dimension. The analysis was carried out in stages, starting from respondents' demographic characteristics, characteristics of existing accounting practice, key factors of the sustainable accounting model, through to preferences regarding the design of sustainable financial-reporting software, as a basis for formulating applicable model recommendations for MSMEs in Indonesia.

RESULTS AND DISCUSSION

4.1 Respondent Characteristics

The study respondents numbered 137 MSME actors spread across various regencies/cities in the Aceh and North Sumatra regions, with the largest distributions in Langkat, Aceh Tamiang, Lhokseumawe, Bener Meriah, Medan, Bireuen, and East Aceh. In terms of gender, the majority of respondents were women, numbering 97 people (70.8%), while men numbered 40 people (29.2%), indicating the dominant role of women as MSME actors in the study area. Respondents' ages ranged from 17 to 77 years with an average age of 36.3 years, with the productive age group under 45 years dominating the respondent distribution.

Table 1. Age Distribution of Respondents (n = 135)

Category	f	%
< 25 years	33	24.4%
25–34 years	30	22.2%
35–44 years	32	23.7%
45–54 years	27	20.0%
≥ 55 years	13	9.6%
Total	**135**	**100.0%**

Viewed from the business profile, 115 MSMEs (83.9%) had been operating for more than one year, while 22 MSMEs (16.1%) were still under one year old. In terms of bookkeeping practice, 88 MSMEs (64.2%) reported already having business bookkeeping, while 49 MSMEs (35.8%) had none at all. The use of social media for business activities was relatively balanced, with 68 MSMEs (49.6%) already using it and 69 MSMEs (50.4%) not yet. Regarding the application

of the green economy, only 51 MSMEs (37.2%) stated that they had applied green-economy principles in their business, while the majority — 86 MSMEs (62.8%) — reported not yet having done so. These findings confirm that although most MSMEs already have a basic bookkeeping foundation, explicit application of the green economy remains a minority practice.

Table 2. Business Practice Profile of Respondents (n = 137)

Category	f	%
Has business bookkeeping	88	64.2%
Uses social media for business	68	49.6%
Has applied the green economy	51	37.2%
Business age ≥ 1 year	115	83.9%
Total	**322**	**235.0%**

4.2 Characteristics of MSME Accounting Practices in the Context of the Green Economy and Budget Efficiency

On the dimension of the financial record-keeping system currently applied, the majority of respondents (70.1%) fell into the second-lowest scale (score 2), indicating that most MSMEs still apply very simple, systematically un-organized financial record-keeping, far from comprehensive accounting practice.

Table 3. Financial Record-Keeping System Currently Applied

Category	f	%
Score 1	26	19.0%
Score 2	96	70.1%
Score 3	8	5.8%
Score 4	5	3.6%
Score 5	2	1.5%
Total	**137**	**100.0%**

Regarding consideration of budget efficiency in business activities, respondents' answers were centered on the middle scale (score 3 at 61.3%), indicating that awareness of the importance of budget efficiency already exists to a fair degree but has not yet become a truly structured practice in day-to-day business management.

Table 4. Consideration of Budget Efficiency in Business Activities

Category	f	%
Score 1	4	2.9%
Score 2	27	19.7%
Score 3	84	61.3%
Score 4	18	13.1%
Score 5	4	2.9%
Total	**137**	**100.0%**

Meanwhile, consideration of the environmental impact of business activities actually shows a high tendency, with 59.1% of respondents at score 4–5. Nevertheless, this awareness is not matched by recording practice: as many as 69.4% of respondents were at score 1–2 for the item on recording environmentally friendly costs or activities in their bookkeeping, with 38.7% of them even at the lowest score (never recording at all). This condition reveals a fairly wide gap between environmental awareness and its actual implementation in the recording of MSME financial reports.

Table 5. Consideration of the Environmental Impact of Business Activities

Category	f	%
Score 1	2	1.5%
Score 2	21	15.3%
Score 3	33	24.1%
Score 4	34	24.8%
Score 5	47	34.3%

Category	f	%
Total	**137**	**100.0%**

Table 6. Recording of Environmentally Friendly Costs/Activities in Bookkeeping

Category	f	%
Score 1	53	38.7%
Score 2	42	30.7%
Score 3	21	15.3%
Score 4	10	7.3%
Score 5	11	8.0%
Total	**137**	**100.0%**

The main obstacles faced by MSMEs in carrying out more orderly and sustainable financial record-keeping were centered on the lower-middle scores (scores 2–3 at a combined 61.3%), indicating that the barriers are fairly dominant but vary among respondents, generally relating to limited time, knowledge, and resources for keeping records consistently.

Table 7. Main Obstacles to Orderly and Sustainable Financial Record-Keeping

Category	f	%
Score 1	25	18.2%
Score 2	40	29.2%
Score 3	44	32.1%
Score 4	13	9.5%
Score 5	15	10.9%
Total	**137**	**100.0%**

4.3 Key Factors in Designing a Sustainable Accounting Model

On the aspect of feature needs for a new record-keeping system, the majority of answers were concentrated at the low scores (score 1 at 58.4% and score 2 at 38.0%), indicating a strong preference for basic, simple features over complex ones. This is consistent with the bimodal level of understanding of digital reporting systems — most respondents fell at score 2 (36.5%) and score 4 (40.1%) — indicating two groups of MSMEs with fairly widely differing levels of digital literacy.

Table 8. Feature Needs for the New Record-Keeping System

Category	f	%
Score 1	80	58.4%
Score 2	52	38.0%
Score 3	4	2.9%
Score 4	1	0.7%
Score 5	0	0.0%
Total	**137**	**100.0%**

Table 9. Ease of Understanding the Digital Reporting System

Category	f	%
Score 1	11	8.0%
Score 2	50	36.5%
Score 3	18	13.1%
Score 4	55	40.1%
Score 5	3	2.2%
Total	**137**	**100.0%**

Preferences for the form of training also showed a bimodal pattern between score 1 (49.6%) and score 5 (34.3%), indicating two fairly different training-preference tendencies among MSME actors — some wanted practical, direct/face-

to-face mentoring, while others preferred self-directed learning through digital media. As for the factor considered to make a new system successfully implementable in MSMEs, this was dominated by score 1 (54.0%), pointing to the importance of ease of use (usability) as the primary success factor.

Table 10. Most Effective Form of Training

Category	f	%
Score 1	68	49.6%
Score 2	5	3.6%
Score 3	11	8.0%
Score 4	6	4.4%
Score 5	47	34.3%
Total	**137**	**100.0%**

Table 11. Success Factors for Implementing a New System in MSMEs

Category	f	%
Score 1	74	54.0%
Score 2	24	17.5%
Score 3	11	8.0%
Score 4	27	19.7%
Score 5	1	0.7%
Total	**137**	**100.0%**

For the aspect of interest in a system that pays attention to environmental factors and willingness to try a new reporting system, respondents' answers were concentrated at score 2 (48.9% and 63.5%, respectively), which generally shows a moderate level of interest in system change, with a fairly visible proportion of firm rejection (score 1) on both items as well.

Table 12. Interest in a System That Pays Attention to Environmental Aspects

Category	f	%
Score 1	37	27.0%
Score 2	67	48.9%
Score 3	31	22.6%
Score 4	1	0.7%
Score 5	1	0.7%
Total	**137**	**100.0%**

Table 13. Willingness to Try a New Financial-Reporting System

Category	f	%
Score 1	33	24.1%
Score 2	87	63.5%
Score 3	10	7.3%
Score 4	5	3.6%
Score 5	2	1.5%
Total	**137**	**100.0%**

On the dimension of the importance of recording environmental aspects such as waste, energy, and water, the results show that the majority of respondents (94.2%) consider this important (score 3–5), reaffirming the high environmental awareness of MSME actors, even though it has not yet been followed by adequate recording practice as found in Section 4.2.

Table 14. Importance of Recording Environmental Aspects (Waste, Energy, Water)

Category	f	%
Score 1	1	0.7%
Score 2	7	5.1%
Score 3	59	43.1%
Score 4	42	30.7%
Score 5	28	20.4%
Total	**137**	**100.0%**

4.4 Design of a Sustainable Accounting Model That Can Be Effectively Implemented

On the dimension of readiness to adopt a sustainable accounting model, the medium considered most suitable for business reporting was dominated by score 1 (38.7%), while the main obstacle to implementing a new system was also concentrated at score 1 (51.8%), showing that MSME preferences consistently lean toward the simplest and most familiar media and systems. This result reinforces the need for a sustainable accounting model that is uncomplicated, easily accessible, and does not add to the daily operational burden of business actors.

Table 15. Most Suitable Medium for Business Reporting

Category	f	%
Score 1	53	38.7%
Score 2	23	16.8%
Score 3	35	25.5%
Score 4	11	8.0%
Score 5	15	10.9%
Total	**137**	**100.0%**

Table 16. Main Obstacles to Implementing a New System

Category	f	%
Score 1	71	51.8%
Score 2	19	13.9%
Score 3	22	16.1%
Score 4	15	10.9%
Score 5	10	7.3%
Total	**137**	**100.0%**

4.5 Implementation Design for a Simple MSME Financial-Reporting Software

This section analyzes MSME preferences regarding the design of a simple software that integrates financial record-keeping with the reporting of business environmental and social impact. The results show a very high level of interest: 94.2% of respondents stated they were interested (19.0% very interested and 75.2% interested), while only 5.8% stated they were not interested.

Table 17. Interest in an Integrated Simple Software (Financial, Environmental, Social)

Category	f	%
Very Interested	26	19.0%
Interested	103	75.2%
Not Interested	8	5.8%
Total	**137**	**100.0%**

In terms of features, transaction recording (76.6%) was the most needed sustainability feature, followed by automatic-calculation (40.9%), reporting (32.8%), charts (24.1%), and data-input (19.7%) features. This is multi-response data (respondents could select more than one feature), so the total percentage exceeds 100%, reaffirming that basic record-keeping features remain the top priority over more complex analytical features.

Table 18. Most Needed Sustainability Features (multi-response)

Category	f	%
Record-keeping	105	76.6%
Data input	27	19.7%
Reporting	45	32.8%
Calculation	56	40.9%
Charts	33	24.1%
Other features	8	5.8%
Total	**274**	**200.0%**

For the easiest-to-understand form of sustainability reporting, the majority of respondents (47.4%) chose simple numbers, far higher than the combination form (24.8%), charts and diagrams (10.9%), or short narrative (6.6%). This finding is consistent with the preference for simplicity that emerged in the preceding dimensions.

Table 19. Easiest-to-Understand Form of Sustainability Reporting

Category	f	%
Numbers	65	47.4%
Charts & Diagrams	15	10.9%
Short Narrative	9	6.6%
Combination	34	24.8%
Don't Know	14	10.2%
Total	**137**	**100.0%**

Regarding reporting frequency, respondent preferences were relatively spread out, with monthly reporting as the most chosen option (38.0%), followed by daily reporting (24.8%), not wanting to report at all (19.0%), weekly (16.1%), and quarterly (2.2%). This distribution indicates the need for flexibility in the reporting period within the software design so that it can accommodate the diversity of MSME business rhythms.

Table 20. Willingness to Report Sustainability Data Periodically

Category	f	%
Daily	34	24.8%
Weekly	22	16.1%
Monthly	52	38.0%
Quarterly	3	2.2%
Do Not Wish to Report	26	19.0%
Total	**137**	**100.0%**

On the platform aspect, respondent preference was very strongly dominated by Android-based applications (65.7%), far exceeding other options such as don't know (13.1%), web-based access (8.8%), interactive Excel (7.3%), and desktop applications (5.1%). This finding underscores the importance of developing the sustainable accounting model in the form of an Android mobile application as the primary implementation platform, given the high level of smartphone accessibility among MSME actors.

Table 21. Most Suitable Platform for Sustainable MSME Software

Category	f	%
Android Application	90	65.7%
Desktop Application	7	5.1%
Web-based access	12	8.8%
Interactive Excel	10	7.3%
Don't Know	18	13.1%
Total	**137**	**100.0%**

In terms of benefits, the majority of respondents (92.7%) believe that software integrating financial reporting and sustainability reporting would help them manage their business better, while only a small proportion viewed it as an added burden (2.2%) or as having no impact (2.9%). Furthermore, 52.6% of respondents considered automated guidance within the software necessary to help with sustainability record-keeping, and another 44.5% considered this feature fairly necessary, so that cumulatively 97.1% of respondents wanted automated guidance to be present in the system.

Table 22. Expected Benefits of an Integrated Software

Category	f	%
Manage business better	127	92.7%
Access to financing	2	1.5%
Compliance with government regulation	1	0.7%
Only adds burden	3	2.2%
No impact	4	2.9%
Total	**137**	**100.0%**

Table 23. Need for Automated Guidance in the Software

Category	f	%
Yes, Very Necessary	72	52.6%
Necessary	61	44.5%
Not Necessary	4	2.9%
Total	**137**	**100.0%**

The finding that most strongly confirms the high adoption potential is the willingness to use the software if provided for free or at low cost, reaching 93.4% (128 of 137 respondents), as well as willingness to be involved as early (pilot) users, reaching 78.1% (107 of 137 respondents). Both findings are strong indicators that technology-adoption barriers among MSMEs relate more to cost factors and initial trust in the system, rather than to rejection of the idea of digitalizing sustainable financial reporting itself.

Table 24. Willingness to Use the Software If Available Free/at Low Cost

Category	f	%
Yes	128	93.4%
No	9	6.6%
Total	**137**	**100.0%**

Table 25. Willingness to Be Involved as an Early (Pilot) User

Category	f	%
Yes	107	78.1%
No	30	21.9%
Total	**137**	**100.0%**

4.6 Discussion: The Awareness–Practice Gap and Model Implications

Overall, the results of this study confirm a consistent pattern in the behavior of Indonesian MSMEs in the context of the green economy and budget efficiency, namely a high level of normative awareness of the importance of the environment and budget efficiency, but a low level of implementation of recording practices that support that awareness. This awareness–practice gap is consistent with findings from prior research showing that MSME actors' understanding of and concern for environmental issues is generally fairly good, but its translation into detailed recording of environmental costs remains limited due to low formal accounting literacy (Herlindawati et al., 2022). A key factor that consistently emerged in this study is the preference for simplicity: basic features are more favored than complex ones, simple-number reporting formats are preferred over narrative or graphical forms, and a familiar medium/platform (Android applications) is the dominant choice. This is consistent with various studies affirming that the success of implementing an accounting information system in MSMEs is largely determined by ease of use and its fit with business

actors' daily capacity and habits, rather than solely by the sophistication of the features offered. From the budget-efficiency perspective, the finding that most MSMEs only consider budget efficiency at a moderate level (score 3) indicates significant room for improvement, given that effective budgetary accounting can help MSMEs identify cost-efficiency opportunities, manage cash flow, and reallocate the budget toward more environmentally friendly activities. The sustainable accounting model design recommended from the results of this study therefore needs to integrate three main elements: (1) a simple yet structured basic financial record-keeping module; (2) an environmental cost/activity record-keeping module (waste, energy, water) that is separate from but connected to the main financial module, so that budget efficiency and environmental impact can be monitored simultaneously; and (3) automated guidance that walks the user through the process step by step, given that 97.1% of respondents wanted this feature.

Regarding implementation strategy, the high willingness to use the software if free or low-cost (93.4%) and the willingness to become early users (78.1%) indicate a major opportunity for local governments, financial institutions, and universities to act as facilitators in providing and mentoring a mobile-application-based sustainable accounting model for MSMEs, while also serving as a basis for subsidy or technology-incentive policy for MSMEs that adopt green reporting practices. The bimodal training-preference pattern (face-to-face vs. self-directed digital) also indicates the need for a layered mentoring strategy, namely a combination of direct training for the group of MSMEs with low digital literacy and self-directed, application-based learning modules for the group that is more adaptive to technology.

CLOSING

5. CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusions

Based on the results of the analysis of 137 MSME respondents in the Aceh and North Sumatra regions, it can be concluded that the behavior of Indonesian MSMEs' financial-reporting practices in the context of the green economy and budget efficiency is still at an early (basic) stage, marked by the dominance of simple financial record-keeping (70.1%), low application of the green economy (37.2%), and minimal recording of environmentally friendly costs/activities (only 30.3% at score 3–5). On the other hand, normative awareness of the importance of environmental aspects is relatively high, reflected in 59.1% of respondents who consider the environmental impact of their business and 94.2% who consider recording environmental aspects such as waste, energy, and water to be important. This gap between awareness and practice is the main starting point for formulating a sustainable accounting model for Indonesian MSMEs. Key factors in designing a sustainable accounting model responsive to the green economy and budget efficiency include feature simplicity, ease of understanding the system, availability of automated guidance, and compatibility with a platform familiar to users. The most effective model design to implement is one based on an Android mobile application (chosen by 65.7% of respondents), integrating financial and environmental record-keeping in the form of simple-number reporting, equipped with automated guidance, and provided for free or at low cost, given that 93.4% of MSMEs stated their willingness to adopt this model if these conditions are met.

5.2 Recommendations

1. For MSME actors, it is recommended that they begin developing the habit of recording environmentally friendly costs and activities in a simple way, even without a digital system yet, as an initial step in the transition toward green accounting practice.
2. For technology developers and MSME-mentoring institutions, it is recommended that they develop an Android-based sustainable accounting application with a simple interface, with basic record-keeping features as the top priority, and equipped with automated guidance to ease the adoption process.
3. For local governments and financial institutions, it is recommended that they provide subsidy schemes, incentives, or free/low-cost platforms for MSMEs willing to adopt a sustainable accounting model, given the high willingness of MSMEs to participate as early users.

4. For future research, it is recommended to expand the geographic scope and number of respondents, and to use inferential analysis approaches (such as difference tests or regression analysis) to examine relationships between variables in greater depth, including prototype testing of a sustainable accounting application designed based on the findings of this study.

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