



STRENGTHENING GREEN ECONOMY AND DIGITAL MARKETING CAPACITY THROUGH COMMUNITY BASED UPCYCLING IN BEKASIJAYA

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Abstract

Community based recycling initiatives require not only production skills but also business management and digital marketing capabilities to create sustainable economic value. This community service program aimed to strengthen the green economy, business bookkeeping, recycled product development, branding, and digital marketing capacity of EcoJaya Craft, a women led home industry group in Bekasi Jaya, East Bekasi. The program used an educative participatory approach combining needs identification, guided practice, mentoring, technology adoption, and formative output-based evaluation. This paper reports three documented core meetings held on June 15, June 25, and July 2, 2026. The intervention connected business management with upcycling practice and digital promotion. Documented outputs indicate achieved status for business bookkeeping and recycled craft development. Product outputs expanded from simple bags to a wider range including wallets, pouches, bottle holders, and stationery holders, accompanied by better finishing, more consistent production support, and the use of the EcoJaya Craft brand identity. Digital marketing follows up emphasized content planning, channel management, visual consistency, and monitoring preparation. The results suggest that integrating circular economy practice with simple digital tools can strengthen community readiness for more professional and market-oriented microenterprise management.

Keywords: Circular Economy, Digital Marketing, Green Economy, Upcycling, Women Empowerment, Community Service

INTRODUCTION

Digital transformation has changed how micro, small, and medium enterprises communicate value, organize customer relationships, and reach markets. For small businesses, this transformation is not merely the adoption of digital tools. It also requires changes in business capabilities, marketing routines, and decision-making processes (Verhoef et al., 2021; Plekhanov et al, 2023). Digital and social media marketing can support broader market access, customer engagement, and business sustainability when they are used strategically rather than only as posting channels (Dwivedi et al., 2021; Tatik & Setiawan, 2025).

At the same time, the environmental challenge of plastic waste creates a strong need for community level circular economy practices. The World Bank has emphasized that Indonesia faces significant plastic waste leakage and that circular economy approaches, including reuse, recovery, and recycling, are important to reduce environmental pressure while generating social and economic benefits (World Bank, 2021). Recent Indonesian research also shows that circular economy practices can strengthen organizational performance when they are adapted to the resource conditions of SMEs (Rahmat et. Al, 2024).

Women led microenterprises are particularly relevant in this context because they often combine household responsibilities with production, sales, customer service, and financial administration. Social media marketing can contribute to the social performance of women led microenterprises, especially when digital skills are supported by human capital and practical business

capabilities (Aracil-Jordá et al, 2023). Therefore, community empowerment needs to connect environmental action with practical management and market oriented digital skills.

The partner in this program, EcoJaya Craft, is a home industry group in Bekasi Jaya, East Bekasi. Initial program documentation identified two major business constraints: weak business management and limited digital marketing capability. Bookkeeping was informal, organizational roles were not yet structured, and product marketing relied mainly on conventional channels. Recycled products were also still limited in variety, with inconsistent finishing and weak brand identity. These constraints reduced the partner's ability to measure performance, standardize products, communicate value, and reach a wider market.

This community service program therefore integrated three dimensions: simple business management, upcycle/recycle product development, and digital marketing. The approach is consistent with sustainable digital transformation research, which emphasizes that SMEs need practical roadmaps linking technology adoption with sustainability and organizational alignment (Mick, et al, 2024). The activity also draws on previous evidence that interactive digital marketing can improve visibility and sales conversion (Nursafitri & Angriani, 2025) and that digital transformation can support more efficient business management (Angriani, et al, 2024). The purpose of this paper is to describe the implementation process, documented outputs, and formative achievements of the program in strengthening the green economy and digital marketing capacity of the Bekasi Jaya recycling community.

METHOD AND PROCEDURES

Activity Design

The program used an educative participatory community empowerment approach. The partner was involved as an active participant in identifying problems, practicing new routines, reviewing outputs, and preparing follow up actions. The activity combined discussion, guided practice, mentoring, and simple technology transfer using tools that were accessible to the community.

The intervention was designed around five integrated stages: (1) socialization and needs identification, (2) capacity building training, (3) application of simple technology and innovation, (4) mentoring and formative evaluation, and (5) sustainability planning. This structure followed the program proposal and was adapted to the partner's actual readiness during implementation.

Partner and Implementation Period

The core partner was EcoJaya Craft, a productive community group categorized as a home industry in Bekasi Jaya, East Bekasi, West Java. The program focused on the partner's recycled plastic craft activities and business management. This paper reports three documented core meetings conducted on June 15, June 25, and July 2, 2026. These meetings were positioned within the broader mentoring plan of the community service program.

Program Team

The program was led by Sintia Nursafitri, with Tia Permata Juwita and Rayi Dwipanilih as lecturer members. The team combined expertise in digital marketing, management and finance, information systems, production support, content development, and visual branding.

Implementation Stages

Table 1. Stages of activity implementation

No.	Stage / Date	Main Activity	Expected / Observed Output
1	Initial engagement 15 June 2026	Program orientation, discussion of existing business conditions, and identification of management, production, and marketing needs.	Baseline problem map and agreed priority areas.
2	Participatory mentoring 25 June 2026	Focused discussion and guided mentoring on business organization, bookkeeping, production consistency, and product development.	Simple management routines, clearer task awareness, and production improvement directions.
3	Digital marketing strengthening 2 July 2026	Connecting previous learning with brand identity, content planning, digital channel management, and preparation for implementation monitoring.	Stronger brand and content direction, readiness for digital promotion and follow up.
4	Follow up	Continued monitoring of bookkeeping use, product consistency, content implementation, and digital market activities.	Evidence portfolio for sustained implementation and future outcome measurement.

Evaluation Approach

Evaluation was formative and output based. Evidence included observation of participant engagement, review of business bookkeeping routines, documented product development outputs, brand and packaging outputs, activity documentation, and the initial use of promotional channels. The program proposal contained quantitative targets, including an 80-90% improvement target in management and product development capability and a 30% sales growth target. The paper therefore reports achievement status based on verified implementation outputs and documented changes.

RESULTS

Baseline Condition of the Partner

At baseline, the partner's business management was still informal. Financial transactions were not recorded systematically, organizational roles were not clearly divided, and business planning was

limited. These conditions made it difficult to calculate production costs, monitor cash flow, and establish consistent selling prices.

The recycled craft activity also showed limitations in product variety and finishing. The partner mainly produced simple bags, while sewing quality and product consistency varied. In marketing, the partner still relied heavily on local bazaars and word of mouth communication. Brand identity, packaging, product photography, and digital content were not yet strong enough to support broader market positioning.

Improvement in Business Bookkeeping Capacity

One important program output was the strengthening of simple business bookkeeping. The intervention introduced a basic cash book structure, transaction recording, cost identification, and spreadsheet-based bookkeeping. The intended practice was not to create complex accounting procedures but to help the partner distinguish cash inflows, cash outflows, production costs, and business margins.

The achievement status for business bookkeeping was recorded as achieved at the implementation reporting stage. The practical significance of this output lies in the shift from undocumented transactions toward a more structured recording routine. This supports transparency and provides a basis for pricing, business evaluation, and future sales monitoring. The result is consistent with evidence that digital business and management orientation can support the sustainable growth of micro and small enterprises (Angriani et al, 2024).

Achievement of Recycled Craft Development (Upcycle / Recycle)

The recycled craft component also reached achieved status. Before the program, production was limited in design and quantity, and the dominant output was a simple bag with inconsistent sewing quality. Through mentoring and production support, the partner developed a broader range of recycled products, including bags, wallets, pouches, bottle holders, and stationery holders.

The program also supported better finishing and more consistent production through the use of supporting equipment such as a portable sewing machine, mini overlock machine, and snap button press. Product identity was strengthened through the EcoJaya Craft brand, label, and packaging. These outputs are important because circular economy initiatives generate stronger economic value when waste reduction is connected with product innovation, resource optimization, and market positioning (Rahmat, et al, 2024; Rifal et al, 2024).

Table 2. Mapping of baseline conditions and documented outputs

Aspect	Baseline	Documented Output	Status
Business bookkeeping	No systematic transaction recording, weak cash flow visibility.	Simple cash book and spreadsheet based recording introduced, clearer basis for cost	Achieved

Aspect	Baseline	Documented Output	Status
		and margin monitoring.	
Product variety	Mainly simple recycled bags.	Bags, wallets, pouches, bottle holders, and stationery holders.	Achieved
Product quality	Inconsistent sewing and finishing.	Better finishing and production consistency supported by appropriate tools.	Achieved
Brand identity	No consistent logo, label, and packaging.	EcoJaya Craft identity applied to labels and packaging.	Achieved
Digital marketing	Local bazaar and word of mouth dominant.	Initial social media promotion, content planning, channel management, and monitoring preparation.	Initial implementation achieved

Strengthening Digital Marketing Capacity

The July 2, 2026 activity explicitly focused on strengthening digital marketing capacity. At this stage, the program connected earlier discussion and mentoring with practical market facing actions. The follow up focus included strengthening brand identity, planning content, managing digital channels, and preparing monitoring of implementation.

This approach is important because digital marketing performance depends on more than account ownership. Small enterprises need consistent messages, visual identity, relevant content, and routines for customer interaction (Dwivedi et al., 2020; Sharabati et al, 2024; Tatik & Setiawan, 2025). Sustainable digital transformation also requires a roadmap that links digital tools with business objectives and organizational readiness (Mick et al, 2024).

For EcoJaya Craft, the value proposition of recycled products provides a strong basis for storytelling. Content can communicate not only product functions but also the transformation of discarded materials into useful products and the social value generated by women's community entrepreneurship. This strengthens the connection between environmental value and market communication.

Community Participation and Green Economy Relevance

The participatory format helped the program remain practical. The partner was not positioned as a passive recipient of information, participants discussed real business problems, responded to proposed routines, and linked training materials with their own production and marketing context. This form of community learning is particularly relevant to women led microenterprises because practical digital marketing skills can support social performance when they are adapted to available human capital and business resources (Aracil-Jordá et al, 2023).

From a green economy perspective, the program linked circular use of plastic waste with product value creation and digital market access. The environmental benefit of upcycling becomes more sustainable when the community can maintain production quality, calculate business performance, build a recognizable brand, and reach customers more efficiently. In this sense, digital marketing acts as an enabler that connects circular production with a broader value network.

Activity Documentation



Figure 1. Participatory discussion and mentoring activity on June 25, 2026.



Figure 2. Group documentation during the digital marketing capacity strengthening activity on July 2, 2026.

Limitations and follow up

Therefore, the achieved status reported here is based on implementation evidence, documented partner outputs, and formative evaluation rather than experimental impact measurement.

Future monitoring should include repeated bookkeeping checks, product quality review, digital content analytics, marketplace activity, and sales records. The proposal's target of at least 30% sales growth requires longitudinal observation after the partner has consistently applied the marketing system. A simple dashboard combining cash flow, product output, content frequency, reach, inquiries, and sales can strengthen the next evaluation cycle.

CONCLUSION

The community service program in Bekasi Jaya demonstrates that green economy empowerment becomes more practical when upcycling is integrated with business management and digital marketing. The three documented core meetings connected needs identification, participatory mentoring, and digital marketing strengthening. Output based evaluation recorded achieved status for business bookkeeping capacity and recycled craft development. The partner expanded product variety, improved finishing, strengthened production consistency, and adopted the EcoJaya Craft identity for labels and packaging. Digital marketing follows up focused on brand identity, content planning, channel management, and monitoring preparation. These results indicate that simple digital tools and community-based mentoring can help women led recycling groups move toward more professional, market oriented, and sustainable microenterprise practices. Future work should strengthen quantitative outcome measurement, particularly sales growth, digital engagement, and the consistency of bookkeeping use over time.

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