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Ecoprint Business Development at Newcoral Ecofriendly UMKM trhough Improving Production, Management and Marketing Quality

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ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) *newcoral ecofriendly* is a business engaged in the production of other ecoprints based on natural materials such as leaves, twigs, flowers, and roots. The ecoprint products produced have high artistic value and are environmentally friendly, making them one of the leading business opportunities in the creative industry. However, this MSME faces a number of problems that hinder business development, including inconsistent production quality, less structured business management, and limited marketing strategies. The method implemented in community partnership empowerment-based service in the form of workshop activities, mentoring in ecoprint making practices, providing training related to management governance and marketing processes, as well as monitoring and evaluation. This program is expected to produce outputs in the form of scientific publications, media publications, and videos. Through this activity, Usaha Mikro, Kecil, dan Menengah (UMKM) *newcoral ecofriendly* is expected to be able to increase competitiveness and contribute to the development of environmentally friendly creative industries in Indonesia.

Keywords: Ecoprint, Quality, UMKM Newcoral Ecofriendly.

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INTRODUCTION

Ecoprint is one of Indonesia's cultural heritages that is identical to the diversity of motifs. Along with the development of the times, ecoprint fabrics are currently worn by various groups of people,

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thus becoming an opportunity for the advancement of the ecoprint industry in Indonesia (Amperawati et al., 2023; Rahmawati et al., 2024) . The ecoprint industry is not limited to *pounding* and kukus ecoprints, but currently ecoprints are becoming an ecoprint that is in great demand because it is in accordance with the lifestyle trends of people who care about the environment. Ecoprint is an ecoprint whose manufacturing method utilizes natural materials such as leaves, roots, and plant stems (Brillyantina et al., 2024) .

Newcoral ecofriendly is a business engaged in ecoprint clothing and was founded with inspiration from the rich flora and fauna of Karanganyar Regency. The two founders of Newcoral, namely Denny Djoko N, an art graduate from FSRD Trisakti University, and Fadilla Kesuma, a biology graduate from the University of North Sumatra, share a love of visual arts, decoration, and batik tulis. In 2019, Newcoral began an in-depth experiment on natural dyes from plants growing around their production house environment then they developed an ecoprint technique that combines natural dyes from various leaves, bark, flowers, and coffee on natural fiber fabrics (Jaafar et al., 2018; Sulaiman et al., 2022; Wahyuningsih et al., 2020) . Although initially the products labeled *newcoral ecofriendly* were not well received by the market due to limited access to media and appropriate marketing places, both of them remained enthusiastic and innovative.

Over time, they actively attended various events around Karanganyar Regency and Surakarta City, promoting sustainable ready-to-wear ecoprint clothing. One of the historic moments for Newcoral was on March 7, 2020 when they participated in the first Solo Art Market. The event was attended by important figures and entrepreneurs from the Solo Raya area, where Newcoral achieved the largest turnover since the business began and gained a deeper understanding of the right market for their products. However, their journey was not smooth. On March 14, 2020, the KLB (Extraordinary Event) status of COVID-19 in Solo restricted community activities. However, *Newcoral ecofriendly,* which was officially established on November 6, 2020, continues to participate in various exhibitions in Solo, Jakarta, and surrounding areas. *Newcoral ecofriendly* is one of the ecoprint producers on Jl. Thamrin, RT 02/10, Kadiporo, Bejen, Karanganyar 57716. The production process is carried out manually, namely using traditional methods with pounding techniques.

This business was pioneered since 2020 (COVID pandemic). This business idea emerged because of concern for the environment, where teak leaf waste, etc. produced does not pollute the environment so it does not require a special place for disposal. In addition, in terms of the market, ecoprint products have high market opportunities. The ecoprint manufacturing process by *newcoral ecofriendly* includes (1) preparation stage, (2) mordanting stage, (3) color transfer/pounding stage, (4) steam stage, (5) fixation stage, where all these stages are done manually. The natural materials used include teak leaves, wulung castor oil plant leaves (Wahyuningsih et al., 2022) , starfruit leaves, African wood leaves, lanang leaves. Apart from leaves, parts of the plant that can be used for ecoprinting are stems, to roots (Sulaiman et al., 2022) . Over time, the *newcoral ecofriendly business* continues to strive to produce quality ecoprints so that they can compete competitively locally, regionally, nationally, and internationally (Darsinandra & Azizah, 2024; Mubarat et al., 2021) .

With ecoprint's commitment to produce quality and environmentally friendly ecoprint products, *newcoral ecofriendly MSMEs* need support to increase production capacity, business management, and marketing. The assistance provided is expected to help these MSMEs maximize their potential and compete in an increasingly competitive market (Fakhrurozi, 2023; Natasha et al., 2024) .

Some of the problems faced by *newcoral ecofriendly* are the limited equipment at *newcoral ecofriendly* , causing the ecoprint production time to take a relatively long time. The production process for 1 *newcoral ecofriendly ecoprint motif* is carried out within 1 week. The resulting ecoprint products have an unstable coloring level and are easy to fade. In addition, the natural materials used in ecoprint production are very minimal. This limitation certainly affects market expansion (Widiana & Karsam, 2024) .

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On the other hand, as an MSME that is starting a business, *newcoral ecofriendly* does not yet have organized management. Starting from the production process to marketing is done together. The management conditions still use a simple bookkeeping pattern. The role of management is very important, not only related to financial management, but also includes resources that must be empowered (human, money, equipment, methods, markets), utilization, and goals (Setyoningrum, 2020) . Likewise in carrying out production planning related to quality control (Intan et al., 2019; Kristiyanti & Rahmasari, 2015) . The problems faced by *newcoral ecofriendly* are related to marketing namely, active and effective marketing has not been carried out even though exports have been made to France.

Based on this, community partnership empowerment-based service in *newcoral ecofriendly* aims to, first, improve the quality of research-based coloring of a decrease in absorption value before and after the addition of alum as a mordant/agent that maintains color. Second, improve marketing skills for ecoprint products through various social media by holding training. Third, improve management governance by presenting speakers from academics. The hope of this community partnership empowerment program is to improve the quality of ecoprint products so that product sales increase. In addition, it is also to make *newcoral ecofriendly* a competitive professional business in terms of product innovation, price, so that it can increase turnover from before.

Based on discussions with partners, *newcoral ecofriendly priority issues* include the following:

a. Production Field
   Lack of creative ideas regarding the combination of natural materials as ecoprint motifs and not yet finding the right composition related to color resistance. The lack of natural materials used causes the resulting ecoprint products to have relatively the same motifs. In addition, there are several stages that cause low product quality, such as the imperfect scouring process, the composition of the substance during the mordant is lacking, the use of inappropriate materials, coloring that fades easily, and the length of the steaming process is not right. In addition, the lack of equipment causes the production process to be hampered, where the equipment owned by *newcoral ecofriendly* is a medium-sized steamer that can only accommodate 2 (two) rolls of cloth. The limited number of stoves owned by *newcoral ecofriendly* also causes the steaming process to take a long time.
b. Marketing Field
   The lack of partner skills in marketing causes the level of ecoprint product sales to tend to be low. Previously, the marketing process by *newcoral ecofriendly* was carried out through social media, but the marketing intensity was passive and less informative. This causes consumers to have less interest in *newcoral ecofriendly products* , especially marketing in airport and hotel showrooms is busy only during the holiday season.
c. Management Field
   The absence of a systematic and structured management system means that all personnel at *Newcoral Ecofriendly* are responsible for all ecoprint manufacturing processes, this is because there is no *job description division* which has an impact on less structured financial administration.

METHODS

The methods implemented in community partnership empowerment-based community service with reference to the above problems are:

1. Socialization
   The implementation of the preparation stages is as follows:
   a. Observation. At this stage, it is necessary to search, collect and record valid data needed to develop Community Partnership Empowerment (PKM) on *newcoral ecofriendly* .
   b. Preparation. At this stage, the entire team prepares all the needs and requirements used in the implementation of the program, takes care of related permits at the Pilang Village

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Government so that the program runs according to plan. Inviting related parties to be willing to cooperate in implementing PKM on *newcoral ecofriendly.*

c. Socialization to the Community. At this stage, socialization was held to the community of Pilang Village, Masaran District, Sragen Regency, regarding PKM on *newcoral ecofriendly.*
d. Program Presentation by the Community Service Team. Conducting program presentations to partners regarding efforts to improve production quality and quantity. It is expected that there will be discussions, input and feedback to perfect the *newcoral ecofriendly empowerment program* .

2. Implementation of Training Activities and Partner Participation
   a. Production Field:
      1) Discussion with partners regarding equipment and materials used
      2) Preparation for purchasing equipment and materials for making ecoprints
      3) Conducting training includes providing materials and scientific studies on natural materials and ecoprint making techniques.
      4) Providing assistance during the ecoprint manufacturing process, from the preparation stage to finishing and providing assistance in making various products such as tote bags, wallets, outers, etc.
   b. Marketing Field:
      1) Discussion with partners regarding marketing activities that have been implemented
      2) Conducting a SWOT analysis
      3) Providing simple training on leaflet making
      4) Participating in the UMKM bazaar at UNS Dies Natalis 2025 and Sunday market activities at UNS every Sunday.
   c. Management Field
      The stages carried out are checking and evaluating *newcoral ecofriendly management records* , providing input on how to record/bookkeeping, and providing socialization by presenting competent speakers for discussions on management governance. In addition, assistance is provided in dividing tasks according to the skills of each personnel. Partner participation in activities includes:
      1) Production Field. Partner products at the implementation stage of service are proposing equipment and material needs for ecoprint production. In addition, partners can practice natural materials, mordants, equipment that has been designed in production.
      2) Marketing Field. Partner participation in the marketing field is that partners prepare ecoprint products in several models by highlighting product advantages. Proposers and partners work together to find marketing opportunities and proactively offer products. Evaluation of implementation is carried out by conducting periodic checks on partner *e-commerce* and sales results.
      3) Management Field. Partner participation, namely active partners to conduct structured recording so that all obstacles from materials, tools, or personnel errors can be traced.
3. Application of Technology
   a. Application of natural colors using cow bone powder.
   b. Marketing training and assistance through *the marketplace* .
      Participants from *newcoral ecofriendly* are directly involved in the application of the use of *the Shopee marketplace* so that by creating an *online store account* , product photography, mentoring is carried out until uploading products and advertising for marketing expansion (Wahyuningsih et al., 2022) .
4. Roles and duties of team members.
   The roles and duties of team members in community-based partnership programs include the head of the proposer acting as a coordinator regarding the readiness of tools, supporting materials for ecoprint production, and presentation of the relevance of previous research results. The proposer member plays a role in investigating marketing improvements according to the field of competence and conducting product evaluations and reviews. Student members play a role in conducting scientific research related to the coloring of the ecoprint produced.

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RESULTS AND DISCUSSION

Since its inception, *newcoral ecofriendly* consists of 13 people who work together to help with production and marketing. Along with the government's new normal appeal, ecoprint production continues to be increased. *Newcoral ecofriendly* is not only active in producing ecoprint for consumer orders but also products that will be exhibited in bazaars. The marketing system by *newcoral ecofriendly* includes conventional and online. The conventional system is by marketing directly to consumers, participating in bazaars/exhibitions. Currently, *newcoral ecofriendly* routinely markets ecorpint showrooms at the airport and Alana hotel. The online marketing system by *newcoral ecofriendly* is carried out through Instagram social media. Here are *newcoral ecofriendly products* .

Figure 3. **Various Types of Products Produced**

This MSME faces several problems. First, the production process is still done manually, resulting in limited production capacity and inconsistent quality. Second, the business management system is not well structured, especially in financial bookkeeping and division of tasks between personnel. Third, product marketing is still limited due to the lack of use of digital media such as marketplaces that have a wider reach. Fourth, high operational costs, especially the use of gas heaters, also pose a challenge to production efficiency.

This existing condition shows that there is great potential for development, especially through mentoring in the aspects of production, management, and marketing. This mentoring is also relevant to Key Performance Indicators (KPI) such as increasing the competitiveness of business partners and student contributions in community service activities. In the context of Independent Learning Independent Campus (MBKM), this program can support the recognition of student credits through the application of knowledge in the field.

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Figure 1. *The* Process of Making Ecoprints by *Newcoral Ecofriendly* in a Simple Way

Natural dyes are produced from extracts of several plants, such as roots, wood, leaves, seeds and flowers. Natural dyes that are widely used come from: Indigoo leaves (*Indigofera*), soga tingi tree (*Ceriops candolleana arn*), tegeran wood (*Cudraina javanensis*), turmeric (*Curcuma*), tea (*Tea*), noni wood (*Morinda citrifelia*), soga jambal bark (*Pelthophorum ferrugium*), kesumba (*Bixa orelana*), and guava leaves (*Psidium guavaja*). However, until now there has actually been no standardization related to natural dyes for ecoprint dyes and dye quality values. Standardization of natural dyes should be initiated by identifying and recording dye procedures including the comparison of dyes used, pH conditions (observed during the fixation process), use of color locking materials), duration of the boiling process and other traditional techniques that are usually carried out. A summary of the coloring conditions of several natural dyes is shown in Table 2.

Table 2. Final Color from Using Several Types of Natural Dyes

Natural dyes	Color
Anthocyanin	Red
Mango leaves	Light brown
Curcumin	Yellow
Indigo	Blue
High Bark Soga	Brownish Red

Source: processed by author 2025

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Figure 2. The Ecoprint Production Process is Carried Out Together (Steam Technique)

Figure 3. Newcoral Ecofriendly Product

After the PKM activity was carried out, mentoring and evaluation were carried out with the following evaluation results:

a. There needs to be a gradual and continuous evaluation until the partner becomes a partner who is actively involved in the productive and independent economic sector.
b. Product evaluation needs to be continuously carried out to determine the quality of the ecoprint produced, with the criteria of diversity and color fastness testing with 3 processes, namely the washing process with soap, the drying process under direct sunlight and the rubbing process.
c. Evaluation of implementation is done by actively communicating with partners regarding the management program that has been carried out. In addition, it also encourages and motivates

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partners to continue to develop, carry out systematic business management, and schedule visits to partners.

d. Program evaluation and feedback to determine the effectiveness of the program that has been implemented.

Overall, the evaluation of the activities is shown in Table 1.

Table 1. Evaluation Design

No	Aspects evaluated	Indicators of success
1	Ecoprint products produced	The color does not fade easily, as shown by research data on the reduction in color absorbance.
2	Product marketing training	Can create product leaflets or pamphlets, have active *e-commerce* .
3	*Newcoral ecofriendly* management system	*Jobdesk* distribution that is in accordance with personnel skills, structured and traceable bookkeeping records.

Source: processed by author (2025).

CONCLUSION

The purpose of this PKM activity is to improve the quality of research-based coloring, a decrease in absorption value before and after the addition of alum as a mordant/agent that maintains color, improve marketing skills for ecoprint products through various social media. The results of this activity are an increase in the capacity and quality of MSME production which is then expected to further improve the standard of living of the surrounding community.

REFERENCES

Amperawati, ED, Rahmawati, Purnomo, RA, Jaafar, NI, Arifah, S., & Sasana, H. (2023). Measuring Batik Industry Resilience through Economic Transformation. *Migration Letters* , *20* (8), 924–933. https://doi.org/10.59670/ml.v20i8.5629

Brillyantina, S., Dhandy, R., Slamet, AHH, Wulandari, SA, Mutmainah, DN, Asmunir, & Hujbi, JK (2024). Ecopreneurship Based on Environmentally Friendly Products Through Ecoprint Batik in Sepande Village. *Academic Journal of Community Service* , *2* (3), 172–177. https://doi.org/10.61722/japm.v2i3.2079

Darsinandra, AA, & Azizah, S. (2024). *BRANDING OF THE EAST JAVA COOPERATIVE AND SME SERVICE IN DEVELOPING THE BATIK UMKM INDUSTRY FOR* . *6* (4), 29–42.

Fakhrurozi, M. (2023). The Role of Government and Marketing Strategy on Sales of UMKM Ecoprint Yasmin Wiwid Lampung. *REMIK: Research and E-Journal of Computer Informatics Management* , *7* (3), 1676–1686.

Intan, T., Revia, B., & Erwita, A. (2019). Increasing the competitiveness of herbal beverage producers through the creation of creative social media content based on e-marketing. *Journal of Professional Communication* , *3* (2). https://doi.org/10.25139/jkp.v3i2.1982

Jaafar, NI, Sulaiman, A., & Ali, SM (2018). Pro-environmentalism behavior, organizational pressure, sustainable information technology initiatives and financial performance of Malaysian service firms. *Environmental Engineering and Management Journal* , *17* (1), 43–52. https://doi.org/10.30638/eemj.2018.006

Kristiyanti, M., & Rahmasari, L. (2015). Website as a Marketing Media for Superior Products of MSMEs in Semarang City. *June* , *13* (2), 186.

E-ISSN : 2614-1035, P-ISSN : 2614-1027
Available online at:
https://ejournal.itbwigalumajang.ac.id/index.php/eps

Mubarat, H., Iswandi, H., & Ilhaq, M. (2021). Innovation Training and Product Development of Patera Eco Print Palembang. *SELAPARANG Journal of Progressive Community Service* , *4* (2), 329. https://doi.org/10.31764/jpmb.v4i2.4325

Natasha, JA, Aulia, AW, & Syarifah, SI (2024). Transformation of South Malang Ecoprint Batik: Optimization of Green Capital Budgeting and Green Marketing for the Global Market. *National Symposium on Vocational Accounting (SNAV) XII* , *1* , 577–589.

Rahmawati, Wahyuningsih, S., Amperawati, ED, Noviani, R., Arifah, S., Junaidi, A., & Nurlaela, S. (2024). Optimization of Solo-Ecoprint Batik through Improving Production Quality, Management, and Marketing. *Journal of Empowered Community Empowerment : Journal of Learning, Empowerment and Community Service* , *7* (1), 25–35.

Setyoningrum, AAD (2020). Women, Financial Management and Economy. *EKOBIS : Journal of Management and Accounting Science* , *8* (2), 16–24. https://doi.org/10.36596/ekobis.v8i2.484

Sulaiman, E., Budiastuti, E., Pratiwi, VA, Herlina, E., Suwandi, Virgiyanti, & Kosasih, A. (2022). Go Green Products Using Ecoprint Techniques. *Indonesian Journal of Community Services Cel* , *1* (1), 56–62. https://doi.org/10.70110/ijcsc.v1i1.8

Wahyuningsih, S., Kusumastuti, A., Krisnawati, M., Paramita, O., Yuniar, M., & Furi, M. (2022). Quality of motifs, colors and fastness of Sekar Ayu ecoprint products in terms of mordant type, natural dyes, and types of leaves on silk fabrics. *IOP Conference Series: Earth and Environmental Science* , *969* (1). https://doi.org/10.1088/1755-1315/969/1/012043

Wahyuningsih, S., Rahmawati, Handayani, SR, Setyaningsih, & Ponimah. (2020). Chemistry of Natural Dyes of Batik Crafts Coloring Process. *IOP Conference Series: Materials Science and Engineering* , *858* (1). https://doi.org/10.1088/1757-899X/858/1/012052

Widiana, ME, & Karsam. (2024). Batik Standardization Management Strategy to Increase Competitive Marketing in the Industrial Revolution 4.0 Era. In *PT. Pena Persada Kerta Utama.*