

MINI STUDIO PHOTO BOX TO IMPROVE THE QUALITY OF PRODUCT PHOTOS BY UTILISING WASTE PAPER AS A FORM OF GREEN ECONOMY PROGRAMME SUPPORT FOR SMK PAB 5 KLAMBIR LIMA STUDENTS, DELI SERDANG

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Abstract: The use of high-quality product photos is very important to support product marketing, especially in a digital environment. This article describes the results of community service in the form of making a mini studio photo box using recycled paper waste. The aim of this programme is to provide new skills to students of SMK PAB 5 Klambir Lima, Deli Serdang Regency, in supporting the green economy programme. The programme involved training on design, production, and utilisation of photo boxes to support sustainable product photo quality. The results show that students can produce functional photo boxes by utilising waste and understand the importance of green economy principles in daily life..

INTRODUCTION

In the digital era, many young people like to take pictures through mobile phones. The use of mobile phones for these young people is not only as a means of communication but also as a means to learn, find information and even find additional work to help finance through smart phones (Hariyanto & Wahyuni, 2020; Sebayang et al., 2021; Wahyuni & Mesra, 2022).

Through the Community Service Program (PKM) conducted at SKMS PAB 5 Klambir 5 , it provides insight for students to be able to take advantage of paper or cardboard waste around to become a mini studio. the quality of product photos is one of the important factors in attracting the attention of SMKS PAB 5 students. The purpose of this program is to provide new skills to students to produce functional photo boxes by utilising waste (Wahyuni & Mesra, 2022).

SMKS PAB 5 Klambir Lima, located in Pasar 2 Klambir 5, Hampan Perak District, Deli Serdang Regency, North Sumatra, is a private school that has been established since 1962. The school is dedicated to producing young people who are

superior and ready to compete in the world of work. With a land area of 13,500 square metres, SMKS PAB 5 Klambir Lima has adequate facilities to support the teaching and learning process. This school organises Vocational High School (SMK) level education with an operating time of 6 days a week. According to the Ministry of Education and Culture's Dapo, the Vocational High School Profile is SMKS PAB 5 Klambir Lima is under the auspices of the Amal Bakti Association Foundation of North Sumatra. This school has received ‘B’ accreditation from the National Accreditation Board (BAN) with SK number 1452/BAN-SM/SK/2019 which was issued on 12 December 2019. This indicates that SMKS PAB 5 Klambir Lima has met the educational quality standards set by the government. SMKS PAB 5 Klambir Lima has internet access and electricity sources from PLN, and is supported by professional and experienced educators. SMKS PAB 5 Klambir Lima is ready to produce graduates who are ready to enter the world of work and become assets for the nation. This school continues to innovate and develop itself in order to keep up with the times and produce graduates who are qualified and ready to face global challenges. (<https://data-sekolah.zekolah.id/sekolah/smks-pab-5-klambir-lima-235290>).

As a solution, this community service programme develops a mini studio photo box from waste paper as a practical and affordable tool . This programme is also in line with the principles of green economy, which is the sustainable use of resources to reduce waste and increase efficiency (Hidayat et al., 2023). Waste paper, which is often considered worthless, is transformed into an innovative product that supports the creative economic needs of vocational students. Mini photo studio box from waste paper as a practical and affordable tool (Wahyuni, Hermansyah, et al., 2022). This programme is also in line with the principles of green economy, which is the sustainable use of resources to reduce waste and increase efficiency. Waste paper that is often considered worthless is transformed into an innovative product that supports the needs and develops students' creativity (Lubis et al., 2022; Wahyuni, Hariyanto, et al., 2022).

METHODS

The method used to create the product mini studio, several approaches were used as a guide in creating the mini studio, including product photography, green economy, and paper waste utilization. According to Schmidt (2020), Product photography is a

photographic technique that aims to display products attractively and professionally (Schmidt, 2020). Lighting, background, and shooting angle are key to effective product photography. UNEP explains that a green economy is an approach to development that emphasizes resource efficiency and reduced environmental impact (UNEP, 2011). Waste recycling is one of the key principles in realizing a green economy. According to Susanti (2018), waste paper can be processed into various creative products such as handicrafts, partition boards, or other supporting materials. Recycling paper can also significantly reduce carbon emissions. The methods and implementation of the programme involved several stages:

1. Waste Identification Collection of waste paper from the neighbourhood around the school.
2. Practising, making Mini Studio Photo Box, Training includes:
 - a) Design of photo box frame and framework.
 - b) Utilisation of recycled paper for reflector wall.
 - c) Simple lighting installation with LEDs.
 - d) Testing and Evaluation
3. Students practise the use of the photo box by photographing their homemade products.
4. The photos are assessed based on aesthetics and functionality.

Here are the easy steps to make a mini studio photo box using waste paper:

1. Prepare Materials
 - a) Cardboard or waste paper large enough to form a box (preferably strong cardboard).
 - b) White paper or tracing paper to create the background.
 - c) LED lamp (can use a table lamp with bright enough lighting).
 - d) Scissors, cutter, and glue.
2. Making the frame of the photo box
 - a) Cut the cardboard into a box shape. Usually, the ideal size is about 30x30 cm or 40x40 cm, depending on the product size to be photographed.
 - b) On the top and two sides of the box, make rectangular holes for the lights. The lights will be positioned on the sides of the box to provide even lighting on the product.

- c) Attach and seal the sides of the box with glue to form a solid structure.
3. Creating the Background; Stick white paper or tracing paper on the back of the box as a background. This paper will serve to create a clean background effect that does not distract from the focus of the product.
 4. Lighting Installation; Install the LED lights in the holes that have been made on the side of the box. Make sure the lighting is bright enough and evenly distributed throughout the box. If necessary, use reflectors or white material around the lights to spread the light more evenly.
 5. Product Setup; Place the product to be photographed in the center of the box. Try to keep the product stable and parallel to the camera so that the resulting photo is not blurry.
 6. Shooting; Use a good quality camera or smartphone to take pictures of the product. Adjust the lighting so that the product is visible without distracting shadows.

Here's the process of making a mini studio by vocational students, it looks like they are excited and enthusiastic about making a mini studio from cardboard.





Pic. 1 The process of making a mini studio and taking pictures of the product
By Students of SMKS PAB 5, Klambir Lima.



Pic. 3. Photo with PKM Team with Vice Principal and Students
of SMK Swasta PAB 5, Klambir Lima

RESULTS AND DISCUSSION

The results of the program showed an increase in student skills: Students understand how to make and utilize mini studio photo boxes independently. The application of mini studio photo boxes made from waste paper for product photos can have a significant impact on the visual quality of products sold online. Here are some of the results obtained from the application of this photo box:

1) Improved Product Photo Quality

The creation of a mini studio photo box equipped with proper lighting, a white background, and a stable structure is proven to produce clearer, sharper, and more professional product photos. Unwanted shadows are minimized thanks to the optimal lighting settings, so the products stand out more and the details are more

obvious. The resulting photos are cleaner and more structured, making the products more appealing to potential customers.

2) Cost Savings and Efficiency

Mini studio photo boxes made from waste paper are very economical, you may not have a large budget to buy professional photography studio equipment. Old cardboard or other paper waste can be obtained at a low cost or even for free, while the LED lights used provide good lighting without the need for high costs. This allows small businesses to improve the quality of their product photos without having to spend a lot of money.

3) Easy and Practical Manufacturing Process

The manufacturing stage of this mini photo studio box is relatively easy and can be done by yourself with simple tools and materials. Compared to conventional photo studio equipment that requires technical knowledge or expensive equipment, this mini photo studio box can be made using only waste paper and a few LED lights. This process saves time and effort and allows more people to access and utilize this simple technology.

4) Consistent Photo Quality

The use of a mini studio photo box allows product photos to be taken with consistent lighting conditions, as the lighting settings can be controlled easily. Product photos taken under different lighting conditions often result in differences in quality, which can confuse consumers. With a photo box, photo quality becomes more consistent, helping to create the ambiance of the photo booth as a better experience for consumers.

The following are the results of pictures or photos taken by students of SMK PAB 5, based on group work carried out in this Community Service (PKM) activity. This product image is taken from a mini studio made by students after which they arrange the product series as good and attractive as possible.



Pic.3. Mini Studio Product Shooting Results
by students of PAB 5 Klambir 5.

Discussion of Mini Studio Photo Box and Green Economy.

In addition to the practical benefits directly felt by businesses, the use of mini studio photo boxes made from waste paper is also very much in line with the concept of the green economy. A green economy refers to economic growth that has a positive impact on the environment, pays attention to sustainability, and minimizes the use of non-renewable natural resources. In this context, mini studio photo boxes made from waste paper support the principles of the green economy in the following ways:

Waste Reduction and Waste Utilisation;

- 1) Waste paper, such as used cardboard, packaging paper, and other paper materials, is one type of waste that often ends up in landfills. By utilizing paper waste to make a mini photo studio box, paper waste that would otherwise be thrown away can be repurposed. This supports waste reduction efforts, one of the fundamental principles of the green economy that aims to reduce waste and recycle reusable materials.
- 2) Reducing the Use of Hazardous Materials; In the manufacture of conventional photo studio equipment, synthetic materials such as plastics, metals, and chemicals are often used, which require production processes that can damage the environment. By switching to using waste paper, we reduce our dependence on hazardous materials that are difficult to decompose and contribute to environmental pollution. The creation of this mini photo studio box from waste paper reduces the carbon footprint and environmental impact of the photographic equipment production process.

Raising Environmental Awareness Among Students

- 1) Small businesses that utilize mini studio photo boxes made from recycled paper not only gain practical and economic benefits but also contribute to the environmental conservation movement. By using these recycled materials, students can introduce the concept of a green economy to their customers, which is becoming increasingly important in a market that prioritizes sustainability and environmental impact. This strategy can enhance the business's positive image and add value to its product marketing.
- 2) Providing an Economical and Sustainable Solution: Mini studio photo boxes made from recycled paper offer a sustainable and cost-effective solution for small businesses that may find it challenging to afford expensive studio equipment. This approach not only provides economic advantages but also encourages more efficient resource usage. The materials can be sourced locally and easily, supporting the local economy in an environmentally friendly manner.
- 3) Energy and Resource Reduction: The lighting used in the mini studio photo boxes consists of LED lights, which are highly energy-efficient compared to conventional lighting options that consume more energy. The use of LED lights significantly reduces electricity consumption, aligning with efforts to minimize carbon footprints and promote energy resource efficiency.

CONCLUSION

From the service activities of making mini studio photo boxes by utilizing waste paper is a smart and practical solution that provides various benefits, both in terms of improving the quality of product photos, saving costs, and supporting the principles of green economy, the following conclusions can be drawn; 1. Reducing the use of new resources and utilizing existing materials, this mini photo studio box contributes to waste reduction, energy efficiency, and environmental preservation. In addition, this solution also allows students to improve the marketing quality of their products without having to spend a lot of money. Overall, the mini studio photo box made from waste paper not only has a positive impact on business quality but also makes a significant contribution to environmental sustainability and the green economy.

1. The program of making mini studio photo boxes from waste paper succeeded in improving the quality of photo products of SMK PAB 5 Klambir Lima students. In

addition, this program provides students with an understanding of the importance of supporting a green economy through waste recycling.

2. Fostering Creativity and Innovation for Students; By utilizing recycled materials, businesses can design and create their own photo boxes according to the needs of the products they sell. This approach not only promotes creativity in tool making but can also encourage innovation in new ways to utilize waste and recycled materials in everyday life.
3. Supporting Green Economy Development on a Small Scale; The mini photo studio box made from waste paper not only impacts the students but also contributes to green economic development efforts at a broader level. As more businesses adopt sustainable ways of operating, it can help accelerate the transition to a greener, more efficient, and environmentally friendly economy.

REFERENCES

- Hariyanto, E., & Wahyuni, S. (2020). Sosialisasi Dan Pelatihan Penggunaan Internet Sehat Bagi Anggota Badan Usaha Milik Desa (Bumdes) Mozaik Desa Pematang Serai. *Jurnal ABDIMAS BSI*, 3(2), 253–259.
- Hidayat, R., Milanie, F. M., Nuraini, C., Azhari, I., & Sugiarto, A. (2023). Success Factors in Managing Wastewater Infrastructure through Community Participation (Case Study: Wastewater Infrastructure in Residential Areas of Medan Deli Subdistrict, Medan). *International Journal Papier Advance and Scientific Review*, 4(4), 26–44.
- Lubis, A., Nababan, E. B., & Wahyuni, S. (2022). PENINGKATAN SDM PROMOSI DINAS PARIWISATA SAMOSIR MELALUI PELATIHAN WEBSITE MENGGUNAKAN CMS WORDPRESS. *JMM (Jurnal Masyarakat Mandiri)*, 6(6), 4576–4586.
- Sebayang, S., Nuzuliati, & Wahyuni, S. (2021). *Edukasi Kepada Perangkat Desa Tentang Motivasi Kerja Kepemimpinan dan Budaya Organisasi*. 1(1), 51–58.
- Wahyuni, S., Hariyanto, E., & Sebayang, S. (2022). Pelatihan Camtasia Pada Guru SD Panca Budi Untuk Mendukung Transformasi Digital Sekolah Masa Pandemi Covid-19. *ETHOS: Jurnal Penelitian Dan Pengabdian Kepada Masyarakat*, 10(1), 59–67.
- Wahyuni, S., Hermansyah, H., & Yel, M. B. (2022). Aplikasi Bank Sampah Berbasis Website Dalam Mewujudkan Desa Bebas Sampah. *Prosiding Seminar Nasional Riset Information Science (SENARIS)*, 4(2), 242–250.
- Wahyuni, S., & Mesra, B. (2022). Mozaik BUMDES Waste Bank Application Development Using Android-Based GPS. *Jurnal Mantik*, 6(3), 2781–2788.
- Farza, T. C. N., Monica, D., Irmawan, S., Syariah, P., Sheikh, S., & Halim, H. A. (2022). Technology Utilisation: Village Potential Promotion Strategy through Village Blog. *Eka Prasetya Community Service Journal*, 1(1), 48-57.
- Schmidt, J. (2020). *Product Photography: An Essential Guide*. New York: Photography Press.

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“Digital Technology And Environmental Awareness In Promoting Sustainable Behavior
In Society 5.0”

- Susanti, R. (2018). Paper Waste Management in the Creative Industry. *Journal of Green Economy*, 4(2), 120-130.
- UNEP. (2011). *Towards a Green Economy: Pathways to Sustainable Development and Poverty Alleviation*. Nairobi: United Nations Environment Programme.
- Yunikawati, N. A., Prayitno, P. H., Purboyo, M. P., Istiqomah, N., & Yunika, E. (2018). Causes and solutions to reduce unemployment of SMK graduates in Indonesia. *UNEJ E-Proceeding*, 3(November 2017), 200-207.
- Zhao, C. (2021). Research on the development of green economy based on cultural and creative industries. *E3S Web of Conferences (NETID)*, 292(02038), 1-5.
<https://doi.org/10.1051/e3sconf/202129202038>
<https://data-sekolah.zekolah.id/sekolah/smks-pab-5-klambir-lima-235290>.
- Supiyandi, S., & Mailok, R. B. (2024). Application of Geographic Information Systems in Sustainable Development Initiatives. *Prosiding Universitas Dharmawangsa*, 4(1), 410-415.
- Rizal, C., Supiyandi, S., Zen, M., & Eka, M. (2022). Perancangan Server Kantor Desa Tomuan Holbung Berbasis Client Server. *Bulletin of Information Technology (BIT)*, 3(1), 27-33.