

Empowering Balikpapan's Persons with Disabilities: A Digital Marketing and Packaging Training for Economic Inclusion

Pemberdayaan Penyandang Disabilitas Balikpapan: Pelatihan Pemasaran dan Pengemasan Digital untuk Inklusi Ekonomi

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Abstract

This community empowerment program enhanced the economic inclusion of persons with disabilities (PwDs) in Balikpapan by integrating digital marketing and product packaging training into a single, inclusive learning model. The program responded to the digital divide and the limited entrepreneurial capacity among local PwDs by adopting a participatory approach that emphasized accessibility and practical skill development. The facilitators conducted the program at the Perkumpulan Penyandang Disabilitas Indonesia (PPDI) Community Hall, involving 35 participants and helping them build core competencies in digital branding, packaging aesthetics, and the use of digital tools such as Canva and social media platforms for product marketing purposes. The instructional team developed educational materials using multimodal and inclusive pedagogical strategies, incorporating visual aids and hands-on activities. Assessment teams administered pre- and post-training evaluations, which showed that participants improved significantly in their conceptual understanding, confidence, and ability to apply digital tools and design packaging to market their own products. These findings confirm that integrated, accessible training models can empower marginalized communities, particularly PwDs, to participate more fully in the digital economy. This initiative provides a scalable model for inclusive skills development that supports broader sustainable development goals.

Keywords: digital marketing; inclusive training; persons with disabilities; product packaging; skill development

Abstrak

Program pemberdayaan masyarakat ini meningkatkan inklusi ekonomi penyandang disabilitas (Difabel) di Balikpapan dengan mengintegrasikan pemasaran digital dan pelatihan pengemasan produk ke dalam satu model pembelajaran yang inklusif. Program ini menanggapi kesenjangan digital dan keterbatasan kapasitas kewirausahaan di antara Difabel lokal dengan mengadopsi pendekatan partisipatif yang menekankan aksesibilitas dan pengembangan keterampilan praktis. Para fasilitator melaksanakan program di Balai Warga Perkumpulan Penyandang Disabilitas Indonesia (PPDI), melibatkan 35 peserta dan membantu mereka membangun kompetensi inti dalam pencitraan merek digital, estetika kemasan, dan penggunaan perangkat digital seperti Canva dan platform media sosial untuk tujuan pemasaran produk. Tim pengajar mengembangkan materi pendidikan menggunakan strategi pedagogis multimoda dan inklusif, menggabungkan alat bantu visual dan kegiatan langsung. Tim penilai memberikan evaluasi pra dan pasca pelatihan, yang menunjukkan bahwa peserta meningkat secara signifikan dalam pemahaman konseptual, kepercayaan diri, dan kemampuan untuk menerapkan perangkat digital dan merancang kemasan untuk memasarkan produk mereka sendiri. Temuan ini menegaskan bahwa model pelatihan yang terintegrasi dan aksesibel dapat memberdayakan komunitas terpinggirkan, khususnya penyandang disabilitas, untuk berpartisipasi lebih penuh dalam ekonomi digital. Inisiatif ini menyediakan model yang terukur untuk pengembangan keterampilan inklusif yang mendukung tujuan pembangunan berkelanjutan yang lebih luas.

Kata kunci: pemasaran digital; pelatihan inklusif; penyandang disabilitas; pengemasan produk; pengembangan keterampilan

1. INTRODUCTION

In today's fast-evolving digital economy, one of the most pressing challenges remains the digital divide—particularly among persons with disabilities (PwDs). In Balikpapan, Indonesia, the economic potential of PwDs is often overlooked due to limited access to market-driven skills and training. Local observations and municipal data indicate that while many PwDs exhibit strong entrepreneurial capabilities, their lack of digital marketing and product packaging skills restricts their ability to penetrate the competitive marketplace (Maryani et al., 2023). The importance of digital skills training for economic empowerment has been strongly supported in recent literature. Digital marketing training in the disability community significantly improved their ability to introduce branded products, increase business sustainability, and engage broader markets (Permadi et al., 2024). Similarly, (Redko, 2024) emphasized the critical role of social enterprises and vocational skill training in promoting self-reliance and improving the quality of life of individuals with disabilities. The integration of packaging design into entrepreneurship training was also explored by Retnowati and Sutisna (2023), who demonstrated that visually appealing packaging increases both perceived product value and consumer engagement.

What makes this initiative original is its integrated model—merging digital marketing and packaging into a single, inclusive program. This contrasts with fragmented training efforts in Indonesia that often treat these skills separately (Gan, Sarma, Tang, & Sim, 2022). Additionally, while many studies focus on national urban centers like Jakarta or Surabaya, this program focuses on Balikpapan: Perkumpulan Penyandang Disabilitas Indonesia (PPDI), which has received limited scholarly attention, thereby contributing new geographic and practical insights to the field of community empowerment (Sharma, Kumar, & Ibrahim, 2025). The barriers faced by Perkumpulan Penyandang Disabilitas Indonesia (PPDI) in Balikpapan are concrete: they include digital illiteracy, lack of training facilities, exclusion from market access platforms, and limited participation in creative economies. Yet, with increasing internet penetration and the proliferation of e-commerce, there is strong potential to empower this marginalized group through integrated digital and packaging education (Rofiah, Zuchdi, & Rieuwpassa, 2020). Furthermore, economic inclusion aligns with global development goals on reducing inequalities and enabling inclusive, equitable employment (Shaw, Wickenden, & Thompson, 2022).

This community engagement program adopts a participatory model, involving Perkumpulan Penyandang Disabilitas Indonesia (PPDI) in each stage—from design to implementation and evaluation. It collaborates with local stakeholders including NGOs, social services, and small-medium enterprise actors, ensuring contextual relevance and long-term sustainability (Maryani et al., 2023). The training curriculum will emphasize practice-based learning and accessibility, grounded in inclusive pedagogical methods. From a conceptual standpoint, the framework draws from rights-based approaches and inclusive development theories. Shaw et al. (2022) assert that inclusive employment practices that engage persons with disabilities as active contributors—rather than passive beneficiaries—yield more sustainable development outcomes. As highlighted by Misra et al. (2025), such training must align with real-world career pathways and evolving digital economies to be truly transformative. Hence, the Empowering Balikpapan's Persons with Disabilities initiative responds directly to documented needs, fills a scholarly gap, and builds a replicable model for inclusive economic development through skills integration and participatory training.

2. METHOD

We conducted the community education program at the Perkumpulan Penyandang Disabilitas Indonesia (PPDI) Community Hall in Balikpapan, East Kalimantan. The PPDI Balikpapan community members, consisting of individuals with physical and sensory disabilities interested in developing micro-entrepreneurial skills, participated in the program. We applied

educational approaches such as inclusive lectures, guided discussions, printed handouts, and reflection-based assessments during the community service activities. We designed the program to build participants' conceptual understanding of digital marketing and product packaging as foundational tools for economic participation. Merriam & Baumgartner (2020) explain that adult learning becomes most effective when it integrates lived experience with reflective conceptual input, which led us to use presentations as the primary delivery method.

We designed the educational materials to be accessible, visually supportive, and easy to understand. We structured the content into two major themes: digital marketing and product packaging. The marketing module covered the following topics: 1) introducing marketing and its purpose; 2) understanding product characteristics; 3) developing marketing strategies for MSMEs (micro, small, and medium enterprises); 4) differentiating products; 5) designing attractive packaging; 6) applying digital promotion; and 7) introducing simple editing tools such as Canva. Meanwhile, the packaging module included: 1) introducing packaging; 2) explaining general benefits of packaging; 3) describing types of packaging; 4) outlining principles of design; 5) creating branding and logos; 6) illustrating visual identity functions; and 7) implementing packaging on PPDI members' own products. In addition to interactive PowerPoint slides, sample product images, and visual design aids. We followed the inclusive design guidelines outlined in Mahon et al. (2022) to ensure accessibility for learners with visual and cognitive impairments. We delivered each session using multimodal learning formats, enabling a more engaging and inclusive educational experience (Ioannou et al., 2022).

This community-based marketing and packaging education campaign aims to empower persons with disabilities by introducing the importance of digital presence and product identity in small businesses. To assess the effectiveness of the sessions, we employed pre- and post-reflection forms and observation-based feedback, which helped us capture participants' growth in understanding and self-confidence. Braun and Clarke (2006) state that thematic analysis of qualitative feedback offers a valid approach in non-formal education research. We expected participants to gain a foundational awareness of digital branding, storytelling, and packaging aesthetics, which would help them articulate business ideas more effectively. We evaluated success through reflection-based pretests and posttests.

3. RESULT AND DISCUSSION

From February to June 2025, we conducted a community engagement activity focused on inclusive economic empowerment at the Perkumpulan Penyandang Disabilitas Indonesia (PPDI) Community Hall in Balikpapan, East Kalimantan. The program involved 35 participants, including individuals with disabilities and MSME actors. We delivered training sessions covering key competencies in digital marketing and product packaging to bridge the digital divide and promote entrepreneurship among Perkumpulan Penyandang Disabilitas Indonesia (PPDI). We began the event with a baseline pretest survey consisting of 4 items that evaluated the participants' prior understanding of product identity, branding, packaging, and digital marketing. After completing the full training cycle, we conducted a posttest with 5 expanded indicators to assess not only knowledge improvement but also confidence in applying digital tools, practical packaging skills, and market readiness.

We intentionally designed each training session to foster an interactive and empowering learning environment, using various assistive media to support the educational needs of participants with visual and cognitive impairments. We structured the instructional content into three interrelated core sessions: (1) Product Digital Marketing, (2) Product Packaging, and (3) Discussion and Reflection. These sessions aimed not only to deliver foundational knowledge but also to cultivate participants' self-confidence in independently managing and promoting their products. The following section details each training session we implemented as part of this community education program.

1. Session 1 - Presentation on Product Digital Marketing: The first session of the community education program focused on introducing the fundamental concepts of digital marketing for participants' microenterprise products. This session was designed to be inclusive and accessible, particularly for individuals with physical and sensory disabilities. The materials were delivered through multimodal PowerPoint presentations, accompanied by printed booklets, product images, and visual aids. The delivery approach was interactive, incorporating guided discussions and group reflections. The topics covered in this session included:

- a. An introduction to basic marketing principles and the importance of marketing strategies for microenterprise development.
- b. Understanding the unique characteristics of participants' products, such as their local value and distinguishing features.
- c. Marketing strategies tailored for MSMEs (Micro, Small, and Medium Enterprises), particularly those operating in community-based settings.
- d. Product differentiation as a way to highlight identity in digital markets.
- e. Digital promotion techniques, including the use of social media platforms and online marketplaces.
- f. Introduction to Canva, a free and user-friendly design tool for creating simple promotional materials.



Figure 1. Digital Marketing Training Session

This session emphasized active participation, where participants were encouraged to reflect on their own products and discuss how they could enhance their digital visibility. The use of visual and practical approaches aimed to support participants who face challenges in accessing text-based information.

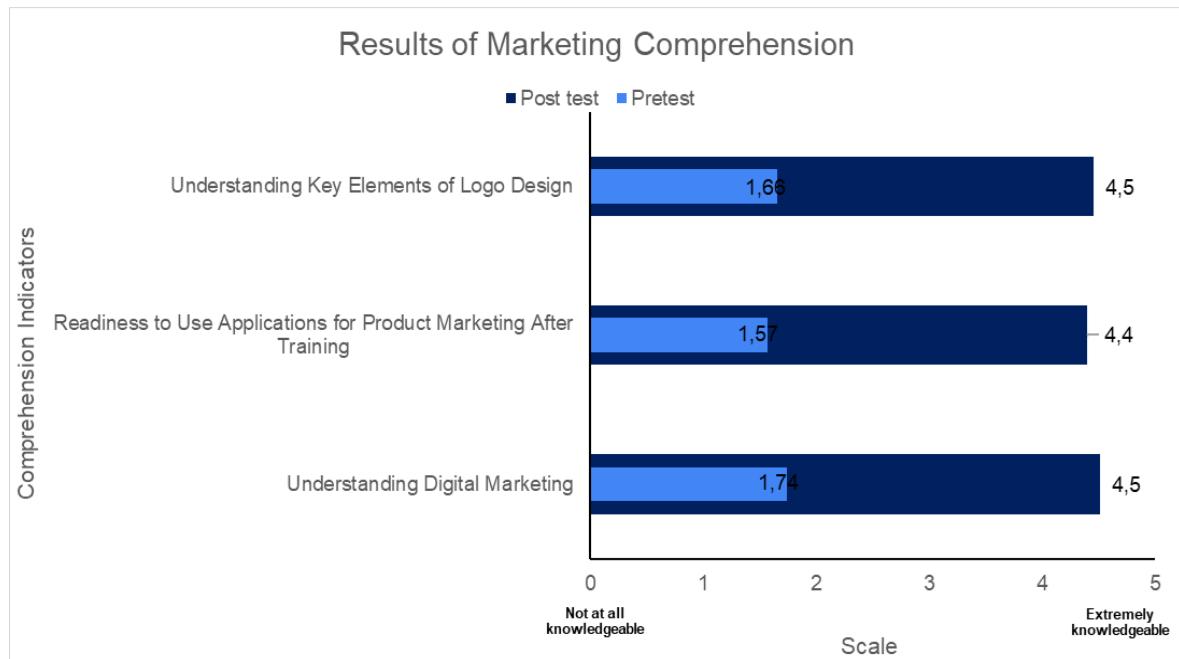


Figure 2. Results of Marketing Comprehension

The graph above presents the results of the pre-test and post-test assessments conducted with members of the Perkumpulan Penyandang Disabilitas Indonesia (PPDI), measuring their understanding of key concepts in marketing, particularly across three main indicators. The assessment employed a Likert scale ranging from 1 to 5. During the pre-test phase, all indicators scored below 2.5, indicating a generally low level of participant comprehension. For instance, understanding of essential elements in product packaging design scored only 1.77, comprehension of digital marketing reached 1.86, and awareness of the importance of product packaging was slightly higher at 2.03. These figures highlight the participants' initial need for increased knowledge and awareness regarding core aspects of product marketing. Following the implementation of the training program, the post-test results revealed a significant improvement across all indicators, with average scores exceeding 4.5. These outcomes demonstrate that the training had a positive and effective impact in enhancing the participants' understanding. As a result, PPDI members emerged better equipped to apply modern and structured marketing strategies.

2. Session 2 – Presentation on Product Packaging: The second session centered on product packaging, highlighting its importance as a key element of visual identity and a communication tool for conveying product value to consumers. This session maintained the same multimodal and participatory approach as the previous one. Topics in this session included:

- a. Introduction to product packaging and its functions within the context of MSMEs.
- b. General benefits of packaging, from product protection to marketing enhancement.
- c. Common types of packaging used by small business owners.
- d. Basic principles of packaging design, including the effective use of color, shape, and typography.
- e. Branding and logo development, and how these contribute to consistent product identity.

- f. The function of visual identity in building consumer trust and product recognition.
- g. Hands-on simulation of packaging design using participants' actual products.



Figure 3. Product Packaging Training Session

This session aimed to provide both conceptual understanding and practical experience. Participants were shown examples of effective packaging (best practices) and then guided in creating their own packaging concepts based on their products. This approach reflects the principles of adult learning as described by Merriam & Baumgartner (2020), which emphasize connecting lived experience with reflective, conceptual input.



Figure 4. Design Product Packaging

The graph above illustrates the pre-test and post-test results of members of the Perkumpulan Penyandang Disabilitas Indonesia (PPDI) in their understanding of key aspects of packaging, focusing specifically on three core indicators. The measurement employed a Likert scale ranging from 1 to 5. During the pre-test stage, all indicators scored below 2.0, indicating a relatively low level of comprehension among participants. For example, understanding of essential logo design elements reached only 1.66, readiness to use product marketing applications scored 1.57, and the ability to assess product packaging quality reached 1.74. These results indicate that prior to the training, participants lacked adequate knowledge regarding the strategic importance of packaging

in enhancing product competitiveness. After the training sessions, the post-test results showed a substantial improvement across all indicators, with average scores exceeding 4.4. Overall, these findings reflect the effectiveness of the training program in improving participants' literacy in packaging design and digital marketing. The significant increase in scores across all indicators provides strong evidence that the training methods successfully addressed the needs of the target group and delivered a tangible impact on their capacity to prepare market-ready and competitive products

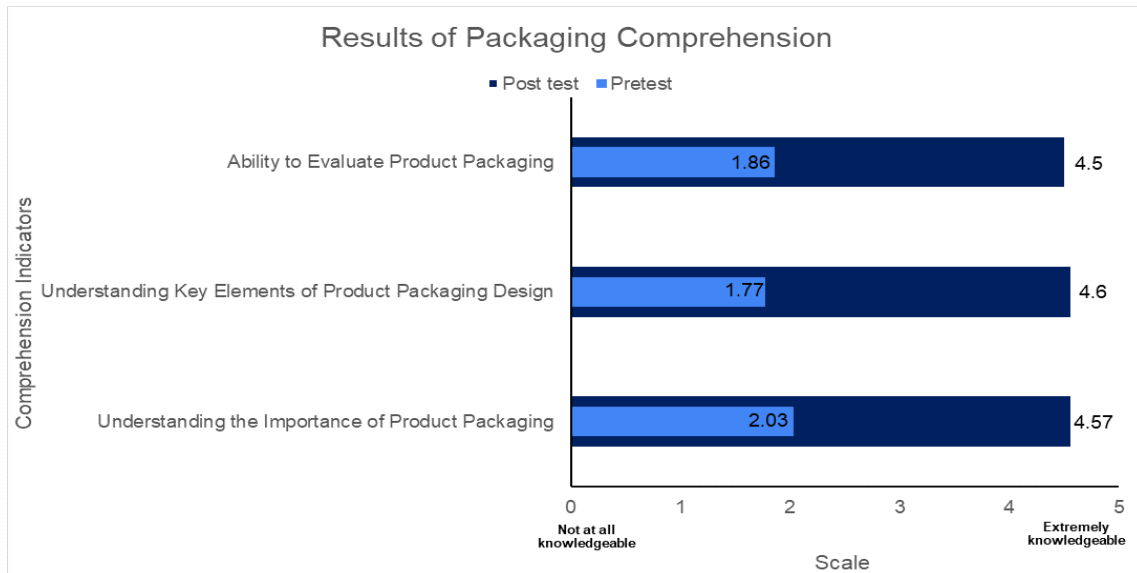


Figure 5. Results of Packaging Comprehension

3. Session 3 – Discussion and Reflection: The third session served as a guided group discussion and reflection forum, intended to reinforce participants' understanding of the previously presented material while identifying real-world challenges in entrepreneurship practice. The session was conducted using an inclusive format that allowed all participants — including those with sensory or mobility impairments — to engage actively. Key activities in this session included:

- a. Participants sharing personal experiences related to their products, marketing, and packaging.
- b. Facilitators leading thematic discussions on common obstacles in accessing digital markets.
- c. Individual reflection using customized forms tailored to the participants' literacy levels.
- d. Selected participants presenting their branding or packaging plans developed in prior sessions.



Figure 6. Discussion, Reflection, and Implementation session

We also used this session as part of the formative evaluation process to capture participants' perceptions of the effectiveness of the materials and instructional methods. Following Braun and Clarke's (2006) approach, we employed thematic analysis to interpret qualitative feedback, ensuring that the insights would inform future module development. Through this session, we expected participants not only to gain technical understanding of marketing and packaging but also to feel heard and valued during the learning process—ultimately boosting their self-confidence to independently manage their microenterprises.

4. CONCLUSION

This community engagement initiative demonstrated that integrated training in digital marketing and product packaging significantly enhances the entrepreneurial capacities of persons with disabilities (PwDs) in Balikpapan especially Perkumpulan Penyandang Disabilitas Indonesia (PPDI). Pre- and post-training assessments showed that participants markedly improved their conceptual understanding, practical readiness, and confidence in applying digital tools and design packaging to promote their products. The program's inclusive pedagogical approach—rooted in multimodal instruction, hands-on learning, and accessible materials—effectively addressed the digital literacy gaps and visual branding challenges faced by the Perkumpulan Penyandang Disabilitas Indonesia (PPDI) community. Furthermore, by encouraging active participation and reflection, the training facilitated participants' acquisition of technical skills and empowered them with a stronger sense of self-efficacy and market inclusion. These findings highlight the importance of delivering context-sensitive, integrated skills education to promote inclusive economic development. This program's success offers a replicable model for other regions aiming to support marginalized communities through participatory, practice-based learning interventions aligned with sustainable development goals.

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