EMPOWERING WOMEN MSMEs WITH DISABILITIES THROUGH ONLINE MENTORING BUSINESS MODEL CANVAS IN DISBERDAYA PROGRAM

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ABSTRACT

Women micro, small, and medium enterprise (MSME) entrepreneurs with disabilities often face multiple barriers in developing their businesses, including limited access to business mentoring, market opportunities, digital support, and structured business management tools. This community service activity aimed to strengthen the business management capacity of women MSME entrepreneurs with disabilities through Online Business Model Canvas Mentoring in the DisBerdaya Program initiated by DANA Indonesia in collaboration with GreatNusa and other partners. The activity was conducted online through Zoom Meeting on May 12, 2026, involving 30 selected participants from various regions in Indonesia with diverse business backgrounds, including food, beverages, handicrafts, clothing, salons, auto repair shops, and educational services. The method combined Participatory Action Research and Asset-Based Community Development by positioning participants as active business owners who reflected on their assets, challenges, and business development opportunities. The mentoring focused on introducing the Business Model Canvas as a simple and visual tool for mapping customer segments, value propositions, sales channels, customer relationships, and revenue streams. The results showed an improvement in participants' understanding of business model mapping. The average score increased from 85.4 in the pre-test to 98.5 in the post-test, indicating a 13.1-point improvement. The number of participants who achieved a perfect score increased from 17 to 25 participants. Topic-based analysis also showed improvement across all assessed areas, particularly value proposition, which increased from 80.8% to 100.0%. These findings indicate that the mentoring improved participants' initial business model literacy, encouraged reflection on business development priorities, and produced preliminary Business Model Canvas drafts as practical outputs. This activity demonstrates that inclusive online business mentoring can support economic empowerment when participants are treated as active entrepreneurs with assets, experience, and growth potential.

Keywords: Business Model Canvas; Community-based research; Community empowerment; Empowerment of MSMEs; Gender equality

A. INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a vital role in Indonesia's economy as they underpin community economic activity, create jobs, and drive household economic resilience. MSMEs contribute approximately 60% to the Gross Domestic Product (GDP) and employ about 97% of the national workforce (Coordinating Ministry for Economic Affairs of the Republic of Indonesia, 2025). This role demonstrates that strengthening MSMEs is not only related to economic growth but also to the equitable distribution of economic opportunities, poverty reduction, and increased community self-reliance. In the context of inclusive development, strengthening MSMEs becomes increasingly important when business owners come from groups facing social, economic, and accessibility barriers, including women with disabilities.

Women make a significant contribution to the MSME ecosystem in Indonesia. The World Bank (2024) notes that women own approximately 60% of small and medium enterprises (SMEs) in Indonesia. However, female MSME entrepreneurs remain largely concentrated in the micro-scale sector and face greater limitations in accessing credit, markets, business networks, and growth opportunities compared to their male counterparts. This situation indicates that while women's involvement in MSMEs is significant in terms of numbers, it has not yet been fully accompanied by the ability to grow, scale up their businesses, and expand into new markets. Consequently, the empowerment of women-led MSMEs must be directed not only toward enhancing entrepreneurial motivation but also toward strengthening more structured business management capabilities.

These challenges become even more complex when the entrepreneurs are women with disabilities. People with disabilities still face barriers in accessing education, employment, training, technology, financial services, and socioeconomic networks. Dewi et al. (2022) show that people with disabilities in Indonesia face persistent barriers in accessing the labor market and are more likely to

experience labor market exclusion. This situation underscores the importance of empowerment programs that not only strengthen business skills but also enhance the capacity, self-confidence, and economic access of people with disabilities through training, mentoring, and access to business resources. In this context, inclusive social entrepreneurship can serve as a key approach to fostering economic participation and self-reliance among people with disabilities. Widagdo et al. (2025) demonstrate that entrepreneurship programs supported by adaptive vocational training, multi-stakeholder partnerships, and digital entrepreneurship support can strengthen social inclusion, identity transformation, and the economic empowerment of people with disabilities.

The target audience for this community service activity is the participants of the DisBerdaya 2026 Program, namely women with disabilities who run MSMEs from various regions across Indonesia. According to the program document, DisBerdaya 2026 selected 30 participants from 185 applicants. The selected participants represent women with disabilities who run MSMEs from various regions of Indonesia. The participants' business profiles are also quite diverse, covering the food and beverage sector, accessories, clothing, handicrafts, beauty salons, auto repair shops, educational services, tutoring, English language courses, Quranic recitation courses, and several other types of service-based businesses. Based on the activity briefing, the majority of participants have physical disabilities. This profile indicates that the target community possesses real business potential but also requires an empowerment approach that is practical, inclusive, and easily adaptable to the specific conditions of each business.

In terms of potential, participants have established businesses and a diverse range of products or services. This diversity serves as a key asset in empowerment activities because participants are not starting from scratch; rather, they already have experience running a business, understanding customers, managing production, and selling products or services. However, in terms of challenges, MSME operators often lack a clear business model framework. Many micro-enterprises operate based on habits, daily experience, and personal relationships, but have not yet systematically defined their

customer segments, value propositions, sales channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structures. As a result, these businesses face the risk of struggling to grow, having difficulty differentiating themselves from competitors, and being vulnerable to reliance on a single type of customer or a single source of income.

The primary challenge for partners in this initiative is the difficulty in mapping out and developing business models that are simple, visual, and practical. This issue is significant because the development of MSMEs cannot rely solely on product quality. Even a good product requires an understanding of who the primary customers are, what value is being offered, how the product reaches customers, how customer relationships are maintained, and how the business generates sustainable revenue. For women-owned MSMEs with disabilities, this issue becomes even more critical because barriers to mobility, market access, limited networks, and low digital literacy can hinder their ability to grow their businesses. If a business model is not mapped out, the business resembles a vehicle without a map: it keeps moving and expending effort, but it may not reach its destination.

This community service activity aims to enhance participants' ability to understand and develop simple business models through Online Business Model Canvas Mentoring. Specifically, this activity aims to help participants map out their businesses, identify customer segments, define the value of their products or services, determine sales channels, build customer relationships, and identify revenue streams. These objectives are designed based on participants' need for practical tools to assess business conditions and design more targeted business development. Thus, this activity is not only focused on knowledge transfer but also on strengthening participants' ability to reflect on and refine their respective business models.

The solution offered in this activity is online mentoring based on the Business Model Canvas (BMC). The BMC is a strategic management tool developed by Osterwalder and Pigneur (2010) to describe, visualize, evaluate, and modify business models through nine key blocks. In the context of MSMEs, the BMC can help entrepreneurs simplify complex business concepts into a visual format

that is easier to understand. The Business Model Canvas is also relevant because it provides a practical framework to help entrepreneurs understand value propositions, marketing, and key elements of business development. Chumaidiyah et al. (2024) demonstrate that SME performance can be enhanced through a model integrating the Business Model Canvas, functional organization, and supply chain management, with a focus on value propositions, marketing, production, supply chains, and business performance. Furthermore, Nurseto et al. (2024) demonstrate that the application of the Business Model Canvas in online learning can support the development of an entrepreneurial mindset, making it relevant for use in online business mentoring activities.

The workshop procedure consists of several stages. First, participants are introduced to the basic concepts of business models and the importance of the BMC as a business map. Second, participants receive an explanation of the nine BMC blocks, with an emphasis on the five main blocks most relevant to the initial mapping of microenterprises: customer segments, value propositions, sales channels, customer relationships, and revenue streams. Third, participants are guided to connect each BMC block to their own businesses through simple examples drawn from their daily business operations. Fourth, participants engage in a practical exercise to fill in the main BMC blocks based on the businesses they operate. Fifth, participants reflect on the parts of their business model that are still weak and identify concrete steps they can take following the mentoring session.

Participants actively engaged in this activity by attending the online sessions, responding to the facilitator’s questions, participating in the chat, and completing the BMC elements based on their own efforts. Activity records show interaction between the facilitator, the sign language interpreter, and the participants during the Zoom sessions. The use of an online format allows participants from various regions to join the activity without having to face travel costs and greater mobility barriers. This approach is relevant to the needs of participants with disabilities because the design of empowerment activities must consider aspects of accessibility, flexibility, and comfort of

participation. However, online implementation also requires attention to device readiness, internet connection, and participants' ability to use technology.

The DisBerdaya program serves as a key framework for this initiative, as it is designed to empower women with disabilities through the use of technology and business capacity building. According to the program document, DisBerdaya 2026 is supported by several parties, including Ant International Foundation, Dewijaya Care, Egoamote, the Indonesian Association of Women with Disabilities (HWDI), Silang.id, Mercy Corps Indonesia Foundation and GreatNusa as implementing partners. This program demonstrates multi-stakeholder collaboration in building a more inclusive economic empowerment ecosystem. In this context, BMC mentoring serves as a form of academic and practical business management contribution to help participants better understand the structure of their businesses.

The learning outcomes of this activity cover knowledge, business management, and practical documentation. In terms of knowledge, participants are expected to understand the basic concepts of the BMC and the functions of each key block in business development. In terms of management, participants are expected to be able to map out customers, product or service value, sales channels, customer relationships, and revenue streams in a more systematic manner. In terms of practical documentation, participants are guided to produce a simple preliminary BMC design tailored to their respective businesses. These outcomes are important because they can serve as a foundation for participants to refine their business strategies, expand their markets, enhance customer relationships, and design more diverse revenue streams.

Based on the above description, the Online Business Model Canvas Mentoring activity within the DisBerdaya Program holds both academic and practical relevance. Academically, this activity represents the application of business management knowledge—specifically regarding business models and entrepreneurship—to community empowerment practices. Practically, this activity helps women with disabilities who own MSMEs understand their businesses in a more structured way and

identify opportunities for improvement that can be implemented gradually. Thus, inclusive economic empowerment through the BMC is not merely a training activity but also a mentoring process aimed at strengthening strategic thinking capacity, business independence, and the sustainability of MSMEs owned by women with disabilities.

B. IMPLEMENTATION AND METHODS

This community service activity was conducted in the form of Online Business Model Canvas Mentoring as part of the 2026 DisBerdaya Program. The activity was held online via the Zoom Meeting app on May 12, 2026. The target audience for the activity was 30 female participants with disabilities who are MSME owners and were selected for the 2026 DisBerdaya Program. Participants came from various regions across Indonesia and had diverse business backgrounds, including food, beverages, accessories, clothing, handicrafts, beauty salons, auto repair shops, educational services, tutoring, English language courses, Quranic recitation classes, and various other service-based businesses. According to the activity briefing document, the majority of participants have physical disabilities. An online format was chosen to expand access for participants from various regions and to reduce mobility barriers and travel costs, which can pose challenges for participants with disabilities.

The activity employs a combination of Participatory Action Research (PAR) and Asset-Based Community Development (ABCD) approaches. The PAR approach was chosen because it positions participants as active agents in the empowerment process, rather than mere recipients of materials. Participatory Action Research emphasizes active community participation in identifying problems, reflecting on the conditions faced, and jointly formulating actions for change (Kindon et al., 2007). In this activity, the PAR principle is applied by involving participants in identifying business conditions, answering reflective questions, sharing business experiences, and mapping the elements of a business model based on their respective businesses.

The ABCD approach was used because the participants already possessed business assets that could be developed. ABCD emphasizes that community empowerment should begin with the strengths, potential, skills, networks, and resources already possessed by the community, rather than solely focusing on the shortcomings or problems they face (Mathie et al., 2017). In the context of this activity, participants' key assets include experience in running a business, products or services already offered, production skills, relationships with customers, existing sales channels, and the potential for digital-based business development. Therefore, the mentoring activity is not intended to replace participants' businesses, but to help them reassess their business assets and organize them within the BMC framework to make them more structured.

The program consists of four main phases: preparation, explanation and mentoring, business model mapping practice, and reflection. During the preparation phase, the program organizers prepare BMC training materials, presentation materials, icebreaker questions, activity sheets, and activity documentation templates (Figure 1). The materials are written in simple language and include examples relevant to the participants' business lives so that they can be understood by MSME owners from various business backgrounds. The main materials cover an introduction to the business model concept, the definition of the BMC, the function of the BMC for MSMEs, and an explanation of the nine BMC blocks: customer segments, value proposition, sales channels, customer relationships, revenue streams, key resources, key activities, key partnerships, and cost structure.



Figure 1. Preparation and Introduction

During the mentoring session, participants received an explanation of the basic concepts of the BMC as a tool for mapping a business in a simple, visual, and practical way (Figure 2). The facilitator explained that the BMC can help business owners understand who their primary customers are, what value they offer, how their products or services are sold, how customer relationships are maintained, and where the business's revenue streams come from. In this session, the material is delivered not only through lectures but also through reflective questions, case studies, interactive discussions, and participant responses via the Zoom chat. The session is also supported by a sign language interpreter to ensure communication accessibility for participants who require such support.

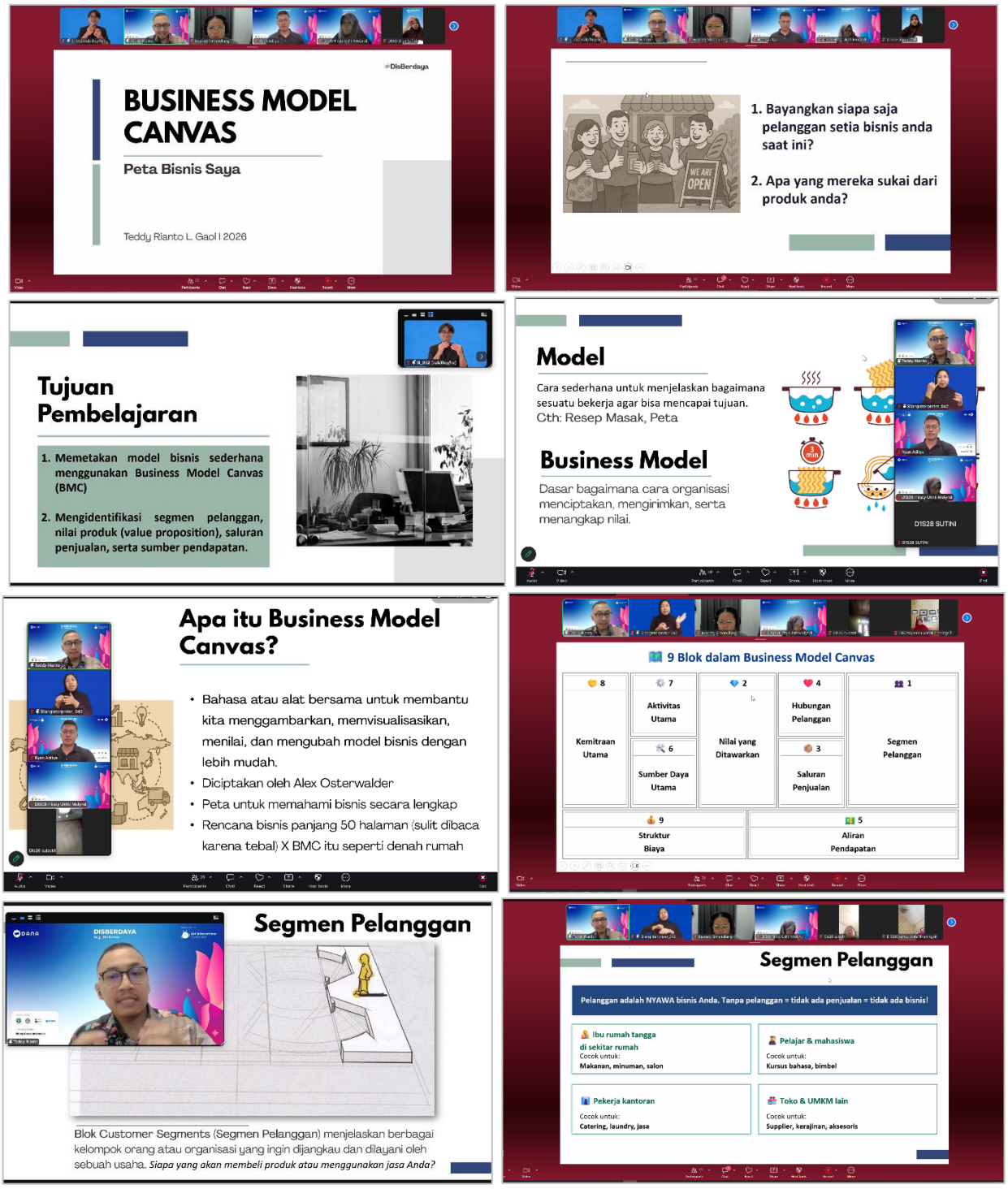


Figure 2. An explanation of the Business Model Canvas during the online Business Model Canvas mentoring session for participants

During the business model mapping exercise, participants were guided to fill out the five main sections of the BMC most relevant to the initial mapping of a microenterprise: customer segments, value proposition, sales channels, customer relationships, and revenue streams. These five blocks were selected so that participants could focus on the most fundamental aspects of business

development, particularly in understanding customers, clarifying the advantages of products or services, determining how to reach the market, maintaining relationships with customers, and identifying revenue sources. Participants are asked to connect each block to their respective businesses. For example, participants are asked to answer who their business's primary customers are, why customers buy their products or services, through which channels the products are sold, how customers are retained, and where the business's revenue comes from.

During the reflection phase, participants are guided to reassess the weak points in their business model and identify concrete steps they can take following the session (Figure 3). Reflection is facilitated through probing questions, such as: What new insights have you gained about your business? Which BMC block is the weakest in your current business? And what one concrete step can you take in the near future? This stage is crucial to ensure the activity does not stop at conceptual understanding but continues toward a commitment to business improvement. Thus, the mentoring activity is designed to foster changes in participants' knowledge, business mindset, and initial ability to map out a business model.

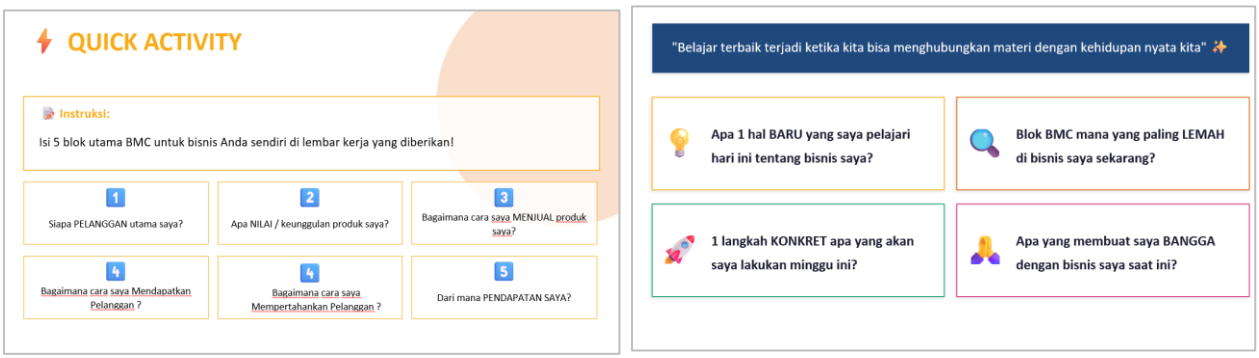


Figure 3. Quick activity and self-reflection

The success of the activity was measured using descriptive and qualitative methods. The instruments used included participant attendance records, a pre-test, observations of participation during the activity, documentation of interactions in the Zoom Meeting, and post-test. Attendance records are used to measure participant engagement administratively. Pre-tests are used to obtain an initial understanding of participants' grasp of BMC concepts and the basic elements of business

models. Participation observations are used to assess participant engagement during the session, such as their responsiveness to questions, their discussion of business conditions, and their adherence to activity instructions. Activity documentation serves as evidence of implementation and interaction among facilitators, participants, and sign language interpreters. Meanwhile, post-test was used to assess participants' understanding after the mentoring session and to identify changes in their knowledge of BMC and business model elements. The comparison between the pre-test and post-test results provided an overview of the extent to which the activity improved participants' conceptual understanding. In addition, qualitative observations were used to capture participants' ability to relate the material to their own businesses, particularly in identifying customer segments, value propositions, sales channels, customer relationships, and revenue streams. Through these instruments, the achievement of the activity was not only evaluated based on participant attendance, since attendance alone would give an overly optimistic picture, but also based on participants' learning process, interaction, reflection, and ability to apply the BMC framework to their respective business contexts.

The pre-test and post-test consisted of five objective knowledge questions covering the purpose of the BMC, customer segments, value propositions, revenue streams, and offline sales channels. Content relevance was addressed pragmatically by aligning each question with the mentoring objectives and the five topics emphasized in the learning materials. The same topic structure and scoring scheme were applied at both measurement points to support comparability. Nevertheless, the instrument was developed as a brief program-evaluation tool rather than a standardized psychometric scale. Formal expert-based content validity indices, pilot testing, and internal-consistency coefficients were not calculated. Given the limited number of items and the high baseline scores, the results are susceptible to a ceiling effect and should be interpreted as descriptive evidence of short-term conceptual learning, not as a validated measure of entrepreneurial competence or business performance.

Qualitative observations served as complementary evidence by documenting participant responses, discussion, reflection, and attempts to connect BMC elements to their businesses. These observations were not converted into a numerical scale and were not independently coded by multiple raters; therefore, inter-rater reliability was not estimated. Their role was to triangulate the learning process rather than to measure an effect size. Future implementations should combine the knowledge test with an expert-validated BMC rubric, pilot testing, and independent scoring procedures so that both conceptual understanding and the quality of participants' business-model drafts can be assessed more reliably.

C. RESULTS AND DISCUSSION

The Online Business Model Canvas Mentoring session was held as part of the DisBerdaya 2026 Program to strengthen the business management capabilities of women with disabilities who run MSMEs. This activity was held online via Zoom Meeting on May 12, 2026. The online format allowed participants from various regions in Indonesia to attend the mentoring sessions without facing mobility barriers, transportation costs, or geographical limitations. This format is particularly relevant because the majority of participants have physical disabilities and therefore require a more accessible learning environment.

This activity involved 30 women with disabilities who run MSMEs, selected from 185 applicants for the 2026 DisBerdaya Program (Figure 4). The participants came from diverse business backgrounds, including food, beverages, accessories, clothing, handicrafts, beauty salons, auto repair shops, educational services, tutoring, English language courses, Quran recitation courses, and several other service-based businesses. This diversity indicates that the target community already possesses productive assets and entrepreneurial experience. Therefore, the mentoring program is not designed to introduce entrepreneurship from scratch, but to help participants organize, evaluate, and improve the business models of the enterprises they are already running.

No	Nama Lengkap	Nama usaha
1	Laras Safitri Permata Sari	Kopi Selawat Bayang Bali
2	Siti Chodijah	Sentuhan kreasi disabilitas
3	Windi Yanti	bonita hana make-up
4	Mardiyah	Prism Queen
5	Supartini	Apik'e Rumah Rajut
6	Sutini	RUMBBLE COLECTION
7	Dian Hendriany	Afakia Coffee
8	Irbah Fauhan	Brie Kitchen
9	Dian Safitri	Hulwah florist
10	Riska Damayanti	WarunginAjaa
11	Citra Wiridina Putri	Cicit Group
12	Eka Pratiwi Taufanti	English Mate
13	Syamsu Anita Fitrianingsih	Menilik aksara
14	Silvia	Silvia Piobang
15	Sulastri	Lasiva

No	Nama Lengkap	Nama Usaha
16	Firsty Ukhti Molyndi	Molzania
17	Sefri Retno Budiarti	Dfrischa
18	Dian Oktaviana	Katun ungu
19	Rida Fahmi	UniRida Math
20	Dwi Handayani	So Berkah
21	Maria Rislinde Minis	Disabikitas Art Papua
22	Siti Farida	Salon Kecantikan & Desainer Internasional Fashion Carnifal
23	Rachmawati Basuki	PT Aefifood Joyo Inovasi
24	Iin Nurjanah	Difa Danusantara
25	Sri Wulan Febriyati	AWA WULAN CULINARY
26	Rachel Stefanie Halim	Kriya Rachel craft & crumbs
27	Chatrinka Ustuhanifan Sugiapto	Nirtch Arts
28	Dinah Salma Tsuraya	madinasalma Fashion
29	Kartasiah	Telur asin fondasi
30	Siti Badriyah	Sibad modiste

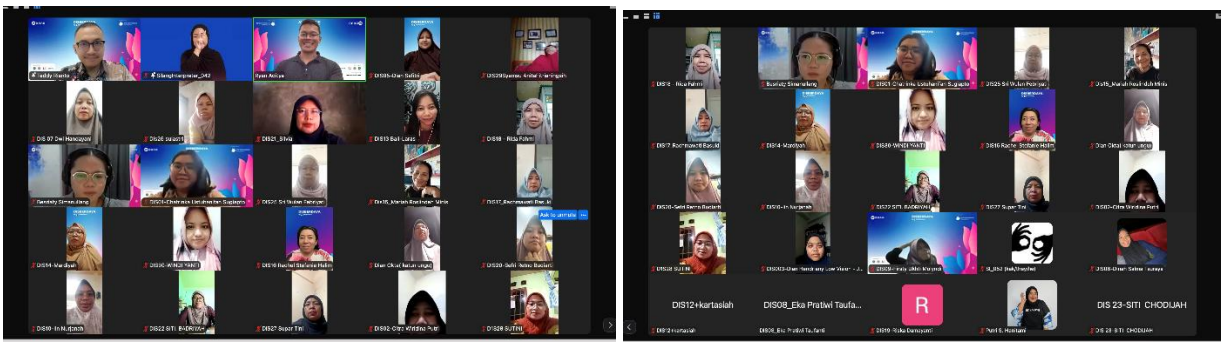


Figure 4. List of Participants

The mentoring sessions were facilitated through presentations, guided discussions, reflective questions, practical examples, and business model mapping exercises. The event also featured a sign language interpreter to ensure accessible communication throughout the sessions. The provision of accessibility support was a crucial component of the event, as inclusive empowerment requires not only relevant content but also a learning process that participants with diverse needs can engage with.

The mentoring session focused on the Business Model Canvas as a simple, visual tool to help participants understand how their businesses create, deliver, and capture value. This session emphasizes the five core blocks of the BMC considered most relevant for the initial mapping of MSMEs: customer segments, value proposition, sales channels, customer relationships, and revenue streams. These five blocks were selected because they directly address the fundamental challenges

commonly faced by micro-enterprises: identifying the right customers, clarifying product value, reaching the market, retaining customers, and generating sustainable revenue.

Achievement of program objectives

The primary objective of this activity is mapping a simple business model using the Business Model Canvas and identifying customer segments, product value, sales channels, and revenue streams including customer relationship. Achievement of this objective is assessed descriptively and qualitatively through participant attendance records, a pre-test, observations of participation during the activity, documentation of interactions in the Zoom Meeting, and post-test. The indicators used to assess the activity's success are presented in Table 1.

Table 1. Performance indicators for the online BMC mentoring program

Stage	Instrument	Relationship To Learning Objectives
Baseline	Pre-test	Assessing participants' prior understanding of the BMC and the elements of the business model
Process	Attendance, observation, Zoom documentation	Assessing participants' engagement in the process of understanding and applying the BMC
Output	Post-test	Assessing final achievements in terms of understanding the BMC and the ability to identify the key elements of the business model

Thus, the achievement of the learning objectives was not measured only by participant attendance, but through a combination of baseline assessment, process observation, interaction documentation, and post-activity assessment. This combination allowed the activity team to assess whether participants moved from merely attending the session to understanding and applying BMC elements in their own business contexts.

Conditions before and after the activity

Prior to the mentoring program, participants had already run various businesses and possessed productive assets, such as business experience, products or services, skills, customer relationships,

and established sales practices. However, their business models had not necessarily been systematically mapped out. The primary issue addressed in this program was not a lack of business potential, but rather the need to organize that potential into a clearer business model. The conditions before and after the program are summarized in Table 2.

Table 2. Participants' conditions before and after the mentoring activity

Aspect	Before the activity	After the activity
Business Model Canvas understanding	Participants had limited understanding of BMC as a business mapping tool.	Participants began to understand BMC and its key components for mapping their businesses.
Business model components	Participants had not systematically identified customer segments, value propositions, sales channels, customer relationships, and revenue streams.	Participants began to identify the main components of their business models.
Business reflection	Participants managed their businesses mainly based on daily routines and experience.	Participants began to reflect on business strengths, weaknesses, and possible improvement steps.
Business development orientation	Participants' business development was mostly based on short-term operational needs.	Participants began to view business development more strategically through customer, value, channel, relationship, and revenue perspectives.

This comparison shows that the program produced short-term changes in participants' business awareness. The most significant change was a shift in perspective—from viewing business solely as the act of selling products or services to understanding it as a system composed of interconnected elements. This change is significant because business sustainability depends not only on production capabilities but also on the ability to understand customers, communicate value, choose the right channels, maintain relationships, and manage revenue streams.

In the short term, this activity contributes to increased business knowledge and reflection. Participants are able to connect the BMC blocks to their businesses and identify areas for improvement. In the long term, this activity has the potential to support better business decision-

making, particularly in defining target customers, improving product positioning, strengthening both digital and non-digital sales channels, and developing more sustainable revenue streams. However, long-term economic impacts such as increased sales, profits, customer growth, or market expansion still require ongoing mentoring and post-activity measurement.

Activity Outcomes

The primary outcomes of this activity are an improved initial understanding among participants and a simple mapping of business models using the BMC. These outcomes relate to aspects of MSME development management. Through this activity, participants are guided to produce a preliminary BMC design based on their respective businesses, specifically focusing on the five main blocks: customer segments, value propositions, sales channels, customer relationships, and revenue streams.

This output is relevant to the participants' circumstances because the BMC provides a simple visual framework that can be used by entrepreneurs from various educational backgrounds and business sectors. For women with disabilities who run MSMEs, a tool like this is beneficial because it does not require complex financial analysis in the early stages. Instead, the BMC helps participants clarify their business logic step by step.

The program outcomes can be described at three levels. First, at the knowledge level, participants gain an introduction to the BMC and its role in business development. Second, at the skills level, participants practice identifying the basic components of their own business model. Third, at the reflection level, participants are encouraged to identify the weakest part of their current business model and determine one concrete action they can take after the mentoring session. These outcomes demonstrate that the activity does not stop at the delivery of information but also encourages participants to apply the concepts to their respective business contexts.

Community Participation and Interaction

Community participation was evident through the participants' active engagement during the mentoring sessions. Participants were not merely positioned as recipients of information, but as business owners who brought their own experiences, challenges, and business assets into the learning process. They were encouraged to respond to reflective questions, connect the material to their businesses, and map out the BMC blocks based on their individual circumstances.

Interaction occurs through verbal responses, responses in the discussion column, and guided reflection (Figure 5). The use of practical questions helps participants connect abstract business concepts with the realities of daily business operations. Questions such as "Who are your business's primary customers?", "Why should customers choose your product?", and "Where does the revenue come from in your business?" make the mentoring process more contextual and easily applicable. This interaction supports the participatory nature of the activity, as participants are encouraged to become active agents in identifying problems and formulating steps to improve their businesses.

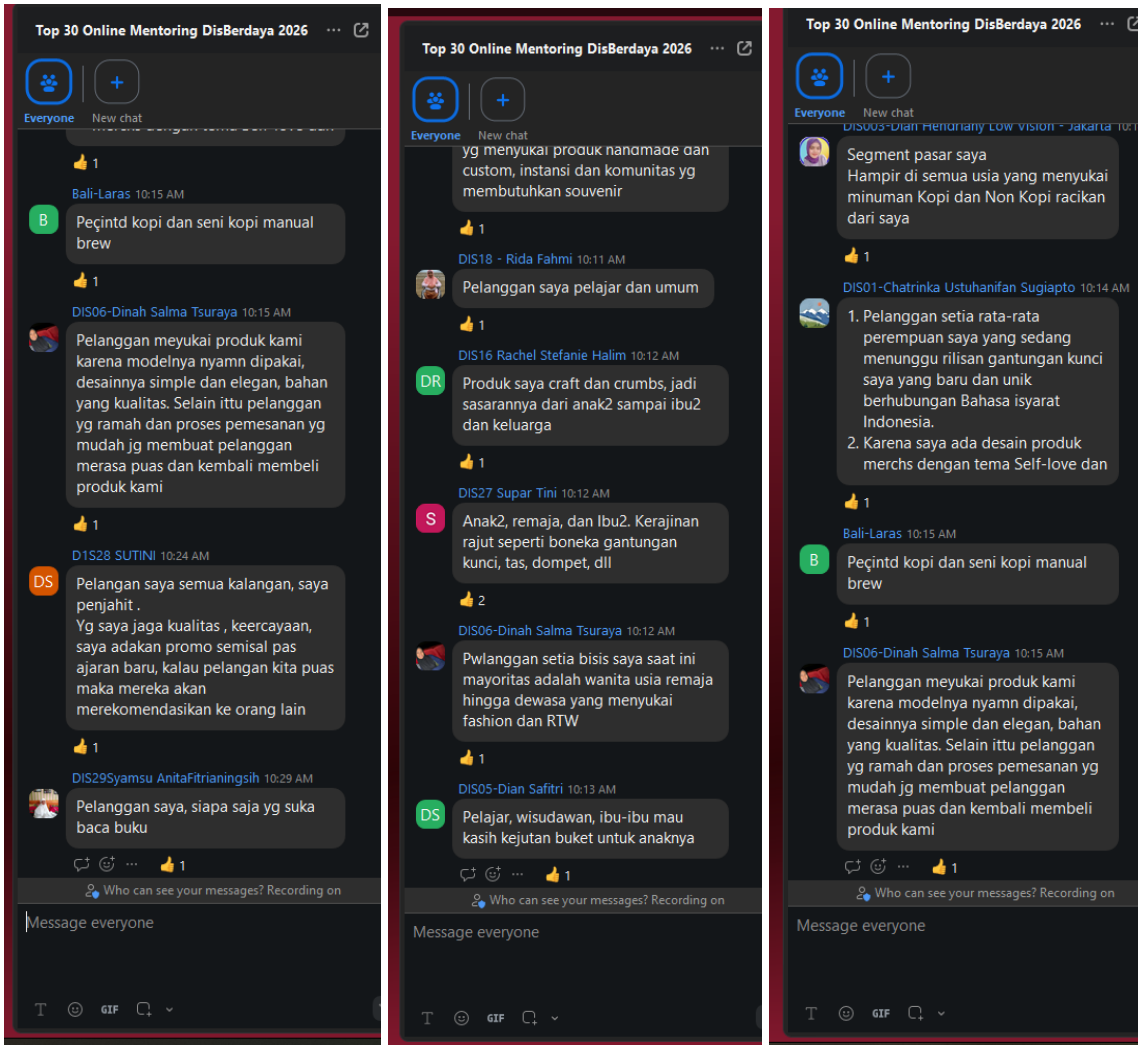


Figure 5. Participant engagement and interaction

The involvement of program partners also supports the implementation of activities. The DisBerdaya program provides a platform, participant selection, communication management, and accessibility support. This collaboration is crucial because inclusive community empowerment requires coordination among facilitators, program organizers, accessibility support providers, and participants. Without such a support system, online mentoring can easily devolve into a passive webinar that merely generates attendance records rather than meaningful learning.

Enabling and Hindering Factors

Several factors supported the implementation of this activity. First, the participants already had established businesses, making it easier to relate the mentoring material to real-world cases. Second,

the diversity of business sectors provided a wealth of discussion examples, as the BMC can be applied to food businesses, service industries, handicrafts, education, and other types of microenterprises. Third, the online format helped overcome geographical barriers and allowed participants from various regions to join the same learning space. Fourth, the presence of a sign language interpreter enhances the accessibility of the program.

However, several limiting factors were also identified. First, the diversity of participants' business backgrounds requires facilitators to use examples that are simple, flexible, and varied. A single business example cannot represent all types of businesses. Second, the online format depends on internet connectivity, device readiness, and participants' digital proficiency. Third, the limited duration of the mentoring sessions prevents in-depth individual feedback from being provided to each participant. Fourth, the activities remain focused on the initial mapping of the BMC, so they cannot yet measure long-term business changes such as sales growth, customer retention, cost efficiency, or profit improvement.

These limitations indicate that this initiative was successful as an initial capacity-building intervention, but further activities are still needed to generate a stronger economic impact. Follow-up mentoring could be developed through individual BMC review sessions, peer group mentoring, digital marketing support, financial record-keeping training, and follow-up evaluations after one to three months. These follow-up activities would enable the program to assess whether the adoption of the BMC has led to tangible improvements in business practices.

Pre-test and post-test results

The pre-test and post-test were used to measure changes in participants' understanding of the BMC after the online mentoring session. The pre-test was completed by 26 participants, while the post-test was completed by 27 participants. The results showed an increase in the average score from 85.4 in the pre-test to 98.5 in the post-test, indicating an improvement of 13.1 points (Table 3 and

Figure 6). The minimum score also increased from 20 in the pre-test to 80 in the post-test, while the maximum score remained 100 in both tests. The number of participants who obtained a perfect score increased from 17 participants in the pre-test to 25 participants in the post-test (Figure 8).

For participants who completed both the pre-test and post-test, paired data were available for 25 participants. The average score increased from 86.4 to 99.2, showing an average improvement of 12.8 points. Among these participants, 8 showed score improvement, 17 maintained their scores, and no participant experienced a decline. This result indicates that the mentoring activity strengthened participants' understanding of BMC, particularly among participants who had lower initial scores. However, because several participants already obtained high scores in the pre-test, the improvement should be interpreted with consideration of a ceiling effect.

The topic-based analysis also showed improvement across all five assessed BMC topics. The correct response rate for understanding the purpose of BMC increased from 92.3% to 100.0%. The correct response rate for customer segment increased from 88.5% to 100.0%, while value proposition increased from 80.8% to 100.0%. Revenue streams improved from 84.6% to 96.3%, and offline channel increased from 80.8% to 96.3% (Figure 7). The largest improvement was found in value proposition, indicating that the mentoring helped participants better understand how to explain why customers should choose their products or services.

These findings suggest that the Online Business Model Canvas Mentoring contributed to short-term learning outcomes, especially in improving participants' conceptual understanding of BMC and its key components. The results also support the achievement of the learning objectives, namely enabling participants to understand BMC as a simple business mapping tool and identify customer segments, value propositions, sales channels, customer relationships, and revenue streams. Although the results do not yet measure long-term business outcomes such as sales growth, customer retention, or profit improvement, they provide evidence that the activity successfully strengthened participants' initial business model literacy.

Table 3. Summary result of pre-test and post-test

Indicator	Pre-test	Post-test	Change
Number of responses	26	27	-
Average score	85.4	98.5	+13.1 points
Median score	100	100	0
Minimum score	20	80	+60 points
Maximum score	100	100	0
Participants scoring 100	17 participants	25 participants	+8 participants

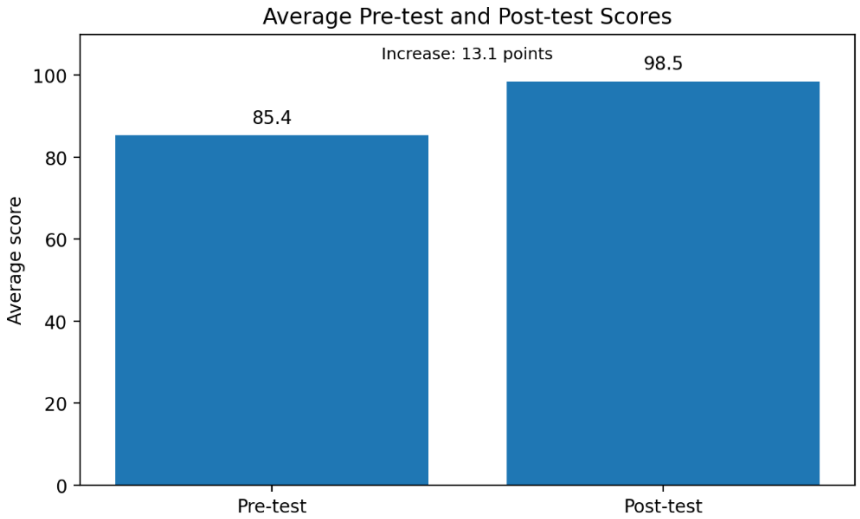


Figure 6. Average pre-test and post-test scores

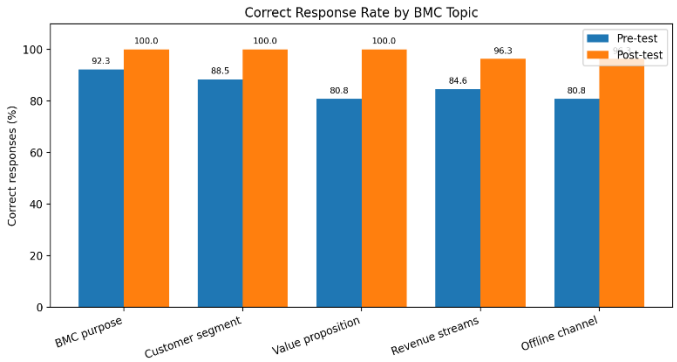


Figure 7. Correct response rate by BMC topic

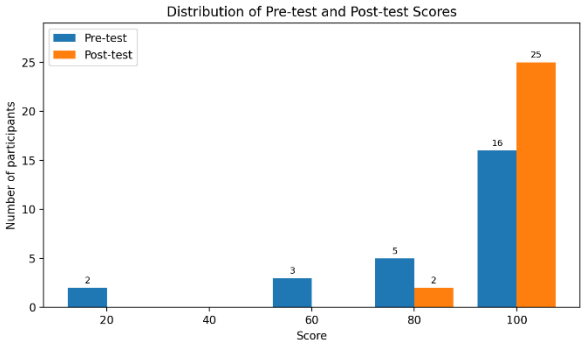


Figure 8. Distribution of pre-test and post-test scores

Critical Interpretation of Learning and Empowerment Outcomes

The observed learning gains can be explained by several mutually reinforcing features of the mentoring design. First, the BMC translated complex business logic into a compact visual structure, enabling participants to connect abstract concepts with familiar decisions about customers, value, channels, relationships, and revenue (Osterwalder & Pigneur, 2010). Second, the use of contextual examples, reflective questions, and direct mapping exercises shifted the session from one-way delivery toward active application. This interpretation is consistent with Nurseto et al. (2024), who found that using the BMC in online learning can support the development of an entrepreneurial mindset. It also provides an early learning pathway toward the more integrated business improvements associated with BMC-based SME development, although the present activity did not test the operational performance or supply-chain outcomes examined by Chumaidiyah et al. (2024).

The PAR and ABCD elements help explain why the approach was relevant to this participant group. PAR created space for participants to articulate their own business conditions and formulate improvement steps, while ABCD treated prior business experience, products, skills, customer relationships, and existing channels as assets on which new knowledge could be built (Mathie et al., 2017). The online format and sign-language interpretation also reduced participation barriers, suggesting that accessibility support was not merely logistical but part of the intervention mechanism. This aligns with Widagdo et al. (2025), who emphasize the importance of adaptive support, digital entrepreneurship, and multi-stakeholder collaboration in strengthening disability inclusion.

Viewed through Kabeer's (1999) resources-agency-achievements framework, the program mobilized resources in the form of existing business assets, mentoring content, digital access, and communication support; exercised agency through reflection, discussion, and participant-led mapping; and generated immediate achievements in the form of higher knowledge scores and preliminary BMC drafts. This theoretical lens clarifies both the contribution and the boundary of the findings. The study documents an early stage of empowerment—the capacity to understand and reconsider business choices—but does not yet demonstrate achievements in income, market expansion, profitability, or sustained decision-making autonomy.

At the same time, the score changes cannot be attributed exclusively to the mentoring session. The 30 participants were selected from 185 applicants and already operated businesses, so prior entrepreneurial experience and participant motivation may have contributed to their high baseline knowledge. Repeated exposure to the same five topics across the pre-test, mentoring, and post-test may also have produced a testing or recall effect. In addition, the sign-language interpreter, contextual examples, facilitator interaction, and other accessibility support may have improved comprehension independently of the BMC content itself. The absence of a comparison group, the small number of test items, the ceiling effect, and the difference in pre-test and post-test response counts further limit causal interpretation.

Evidence of practical community impact in this evaluation is therefore located primarily at the output level: participants began mapping their businesses, identified weak BMC blocks, and formulated immediate action priorities. These outputs are more substantial than attendance alone, but they are not equivalent to verified changes in business practice or performance. A follow-up evaluation at one, three, and six months should assess whether participants revised and used their BMCs; validated customer segments; changed their value propositions or sales channels; diversified revenue; and experienced measurable changes in customer retention, sales, costs, or profit. Using matched participant data, an independently scored BMC rubric, and short qualitative interviews

would provide stronger evidence of whether initial learning was converted into sustained economic empowerment.

Strengths and limitations of the activity outcomes

The primary advantage of this program is its practical nature. The BMC enables participants to visualize their business in a simple format and identify key business elements without having to draft a lengthy business plan. This is well-suited for micro-entrepreneurs who need business management tools that are accessible, straightforward, and practical. The use of examples drawn from daily business activities also helps participants grasp the material more easily.

Another advantage is that this activity aligns with the assets participants already possess. Participants already have a business, products, services, skills, and customers. Therefore, mentoring does not start from the assumption of deficiencies, but rather from the recognition that participants already have economic potential that can be strengthened. This makes the activity more empowering because it values participants as business owners with experience, rather than as passive beneficiaries.

A limitation of the activity's outcomes is that the resulting BMC design is still in its preliminary stage. The design still requires further validation, refinement, and implementation. For example, the customer segments identified by participants still need to be tested through customer interviews or sales data. The value proposition needs to be refined based on customer feedback. Sales channels need to be evaluated based on actual conversion rates and customer reach. Therefore, the output of this activity should be understood as an initial step in refining the business model, not as a final business strategy.

Future Development Opportunities

This activity opens up several opportunities for future development. First, BMC mentoring can be expanded into a series of structured sessions, with each session focusing on one or two BMC

blocks in greater depth. Second, participants' initial BMC designs can be reviewed individually to provide more specific feedback tailored to the type and scale of their respective businesses. Third, the BMC can be integrated with digital marketing mentoring so that participants can translate customer segments, value propositions, and sales channels into practical online sales strategies. Fourth, follow-up measurements can be conducted to assess changes in business performance, such as customer growth, sales channels used, revenue diversification, and customer retention.

Participants' adoption of the BMC also opens up opportunities to develop a more inclusive mentoring model for MSMEs. This model needs to combine business management tools, digital accessibility, assistive communication support, and ongoing mentoring. For women with disabilities who run MSMEs, empowerment should not only focus on motivation or inspiration, but also on practical tools that help them make better business decisions. In this context, the BMC can serve as a gateway to advanced mentoring in marketing, finance, operations, and digital transformation.

Overall, the Online Business Model Canvas Mentoring in the DisBerdaya Program provides added value in the form of increased business awareness, improved business model mapping skills, and enhanced reflection on business development priorities. This initiative contributes to short-term changes in knowledge and mindset, while also opening opportunities for long-term economic empowerment through ongoing mentoring and implementation. The program demonstrates that inclusive empowerment can be strengthened when participants are treated as active business actors who possess assets, experience, and potential—not merely as recipients of social assistance.

D. CONCLUSION

The Online Business Model Canvas Mentoring activity within the DisBerdaya Program has achieved its primary objective as a community empowerment initiative focused on strengthening the business management capabilities of women with disabilities who are MSME entrepreneurs. This activity successfully provided participants with a foundational understanding of the importance of

mapping business models in a simple, visual, and practical manner. Participants were not only introduced to the concept of the Business Model Canvas, but were also guided to connect this concept with the conditions of their respective businesses, particularly regarding customer segments, value propositions, sales channels, customer relationships, and revenue streams.

The level of achievement of the activities can be seen from the participants' engagement in the mentoring sessions, their responses to reflective questions, and their ability to begin identifying the basic elements of a business model. These activities resulted in an improved understanding of the BMC among participants, an initial mapping of business models, and a growing awareness of the need to reassess aspects of their businesses that still require improvement. Thus, the activity's objectives regarding knowledge enhancement, basic business management skills, and business model reflection can be considered achieved at this initial stage.

The empowerment methods employed, namely a combination of PAR and ABCD, align with the participants' issues, needs, and challenges. The PAR approach is relevant because participants are positioned as active agents who reflect on business conditions and formulate improvement steps, rather than merely being recipients of information. Meanwhile, the ABCD approach is appropriate because participants already possess business assets, sales experience, products or services, skills, customers, and development potential. Therefore, this activity does not start from the participants' shortcomings, but from the strengths and potential they already possess.

The short-term impact of this activity is evident in the participants' growing awareness that a business is not merely about selling products or services but must also be understood as an interconnected business system. Participants are beginning to understand that business sustainability is influenced by the clarity of the target customer base, the value offered, the sales channels used, how customer relationships are maintained, and the sources of revenue available. Another benefit of this activity is the provision of practical tools for participants to evaluate and develop their businesses in a more targeted manner.

In the long term, this activity has the potential to support the economic independence of women with disabilities who are MSME entrepreneurs if it is followed up with more intensive mentoring. The BMC can serve as a foundation for participants to refine marketing strategies, strengthen customer relationships, develop sales channels, and diversify revenue streams. However, economic impacts such as increased revenue, customer growth, cost efficiency, and profit growth cannot yet be directly concluded, as this activity is still in the stage of strengthening understanding and initial business model mapping.

Based on the results of the activity, it is recommended that the next empowerment program be conducted on an ongoing basis through continued mentoring. Future mentoring can focus on refining each participant's BMC, validating customer segments, strengthening value propositions, digital marketing strategies, basic financial record-keeping, and evaluating business progress. Additionally, impact measurement should be strengthened using pre-test and post-test instruments, BMC outcome assessment rubrics, participant satisfaction surveys, and business monitoring one to three months after the program. In this way, empowerment activities do not end with training but can evolve into a mentoring process that yields more measurable business changes.

Similar programs must also continue to prioritize accessibility, particularly for participants with disabilities. The use of online platforms, sign language interpreters, simple materials, contextual examples, and easy-to-follow activities are key factors in creating an inclusive empowerment process. Thus, the empowerment of women with disabilities in the MSME sector through the BMC can be developed as a business mentoring model that is not only focused on enhancing business capacity but also on strengthening independence, economic participation, and social inclusion.

Academically, this activity contributes an applied model of inclusive entrepreneurship mentoring that integrates the visual simplicity of the BMC with participatory learning, asset-based empowerment, and accessibility support. The contribution lies not in claiming immediate economic impact, but in showing how resources and access can be converted into agency and initial

achievements among women MSME entrepreneurs with disabilities (Kabeer, 1999). For practitioners and program designers, the broader implication is that inclusive entrepreneurship programs should combine relevant business tools with accessible communication, recognition of participants' existing assets, and structured follow-up rather than treating accessibility as a separate technical accommodation.

Future research should test this model with a larger matched panel, validated knowledge and BMC-quality instruments, and a comparison design where feasible. Longitudinal measurement at one, three, and six months should examine BMC use, implemented business changes, customer and channel development, revenue diversification, and financial performance. Analyses should also consider prior entrepreneurial experience, type of disability, digital readiness, and the form of accessibility support as potential moderators of program effectiveness. Such evidence would allow future studies to distinguish short-term learning from sustained changes in business behavior and economic empowerment.

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