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# Empowering Rural Entrepreneurs through Independent-Entrepreneurship Literacy Program

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**Abstract** It is well known that the economic development of a country largely depends on the economic development and the living standards in rural areas. Yet, it is also a fact on the contrary that there is a major problem faced by rural entrepreneurs, namely illiteracy. Illiteracy causes some other problems, including lack of financial resources, low business management skills, lack of proper marketing, and lack of human resource management. The same situation is encountered by bamboo craftsmen in Rogomulyo Village, who has low entrepreneurial competencies. This condition encourages the need for entrepreneurship education in a rural area. By integrating the concept of community empowerment and entrepreneurship capacity building, the present program implemented independent-entrepreneurship literacy for bamboo craftsmen in Rogomulyo Village. It aims to enhance their competencies in running a small business. For reaching that outcome, this program applied Participatory Action Research (PAR) which consists of five stages, including problem identification, action planning, acting, evaluation, and specifying learning achieved. More specifically, the entrepreneurship programs implemented are business literacy, financial literacy, and digital marketing literacy. The finding suggests that the implementation of an independent-entrepreneurship literacy program could enhance bamboo craftsmen's competencies so that they could develop their bamboo craft business in Rogomulyo Village. However, they still require support from several parties, including local government, local companies, and others.

**Keywords:** rural entrepreneurship; illiteracy; entrepreneurship capacity building; entrepreneurship literacy; bamboo-craft.

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## 1. Introduction

To support the stability of national development, village empowerment and development becomes a priority program for the Indonesian government. According to the Law Number 6 of 2014 on villages, village empowerment is an effort to develop the independence and well-being of communities by enhancing their knowledge, attitudes,

skills, behavior, ability, and awareness and utilizing resources through the establishment of policies, programs, activities, and assistance based on the villagers' priority needs. Furthermore, rural area development aims to increase the quality of life and the welfare of the villagers and to alleviate poverty, through the basic need fulfillment, infrastructure and local-economic development, and sustainable use of natural resources and the environment (Zhu et al., 2015). Hence, rural area development must be prioritized.

One of the ways to augment the economic development of a village or a rural area is through entrepreneurship. Village entrepreneurship, also known as rural entrepreneurship, refers to entrepreneurship activity that is performed in a rural area by optimally utilizing its potential resources (Munoz & Kimmitt, 2019). Rural entrepreneurship development plays a vital role in enhancing the welfare of families and communities (Ngorora & Mago, 2016). Furthermore, Mohamad et al. (2021) mentioned in their study that rural entrepreneurship directly impacts the poverty reduction in a country. Simply put, rural entrepreneurship development is needed for poverty alleviation. Therefore, local-economic development largely depends on rural entrepreneurship development.

Rogomulyo Village is a village in Semarang Regency, Indonesia, which currently concerns with small-sized and medium-sized enterprises (SMEs) development. Basically, this village has potential resources that can be developed in the SMEs context. First, this village has natural resources, namely bamboo, that could be very beneficial for SMEs development. In Rogomulyo, four types of bamboo grow well in the backyard and along the street, such as *bambu wulung*, *bambu apus*, *bambu hitam*, and *bambu gombong*. In this case, there is an opportunity for developing bamboo in the cluster-craft business. Affirmatively, Lee et al. (2010) mentioned in their study that the existence of bamboo-craft professionals could positively impact the development of creative industry.

Second, some villagers in Rogomulyo have the skill to make traditional bamboo weaving. They are usually making *kepang*, *kre*, *besek*, and *kipas*. The potential of this human capital enables the village to develop a local business. As mentioned by Krieger et al. (2021) in their current study, human capital is one of the important elements required for entrepreneurship development. Third, the Semarang Regency fully supports the development of SMEs in a rural area, including cluster-craft development. It is regulated

through the Regional Regulation of the Province of Central Java Number 13 of 2013, which concerns the empowerment of micro, small, and medium enterprises.

Unfortunately, the development of bamboo-craft business in Rogomulyo Village is still facing some problems. Based on the observation result, low entrepreneurial literacy is the main problem. [Sutisna et al. \(2021\)](#) stated that entrepreneurial literacy is closely related to entrepreneurial competencies, which are needed for running a business. Basically, it includes financial-risk management, digital marketing, and human resource development. In relation to that, [Ibidunni et al. \(2021\)](#) mentioned further that entrepreneurship competencies directly affect business performance, especially in today's era. Thus, their business performance is still unstable. Moreover, [Crovini \(2019\)](#) stated that increasing product competitiveness requires both entrepreneurs' skills and management strategies development.

In addition to human capability, the other problem is the low involvement of Rogomulyo's young generation in the bamboo-craft business development. In this case, the researchers conducted a survey through an in-person interview by inviting ten participants, who are bamboo craftsmen in Rogomulyo Village. The survey results indicate that the actors in the bamboo-crafts business in Rogomulyo Village are dominated by the old generation who are in their 50s and 60s. Most young generations argued that traditional bamboo-craft business is not a good preference for them if they want to gain economic value. This problem has a significant obstacle in the sense that digital literacy is closely related to the young generation. More specifically, those problems are identified and presented in Table 1.

Table 1. Problem Identification

Problem	Need Analysis	Action-Solution
Entrepreneurial illiteracy	The need for entrepreneurship literacy	Entrepreneurship literacy
Low digitalization and management skill	The need for digital-business literacy	Digital-business integration
Lack of motivation and engagement	The need for rural entrepreneurship development	Youth-generation involvement

Source: Survey (2020)

As shown in Table 1, entrepreneurial literacy and digital literacy are the primary problems faced by bamboo craftsmen in Rogomulyo Village. As defined, entrepreneurial literacy refers to the villagers' competence in running a business while digital literacy is their ability to integrate the use of information and communication technology (ICT) into their business cycle (Scarborough & Cornwall, 2016; Skala, 2019). These two problems are considered significant because these directly affect the villagers' desire to run a business, specifically a bamboo-craft business in Rogomulyo Village. Furthermore, Table 1 states the need for analysis result based on the problems encountered by the villagers in developing the bamboo-craft business. There are three need analysis results, namely the need for entrepreneurship literacy, the need for digital business literacy, and the need for rural entrepreneurship development. Basically, entrepreneurship literacy includes education and training with the major purpose of producing literate entrepreneurs.

Entrepreneurship literacy is related to critical business information literacy, which is defined by Stonebraker et al. (2017) as entrepreneurship education to build an ethical business person. In simpler terms, an ethical businessperson means a literate entrepreneur who can define, analyze, and evaluate critically both the opportunities and the challenges of the business. Moreover, digital technology plays a crucial role in the process of business development. Thus, literate entrepreneurs should have the ability to integrate and implement the use of ICT platforms to engage their business in a digital business environment. It means that the need for digital business literacy is to empower digital and management skills. Based on the problem identification and need analysis results, entrepreneurship literacy and education are best solutions that will surely yield a change in bamboo-craft business performance in Rogomulyo Village.

The independent-entrepreneurship literacy program is closely related to digital business literacy. Siemens (2010) has mentioned that some challenges faced by rural villagers in running a small business, such as market area, access to urban centers, and even infrastructure gaps, could be solved by bringing digital literacy to entrepreneurship development. It is due to the fact that digital entrepreneurship has a positive role in small business digitalization and management (Franco et al., 2021). In like manner, Standing and Mattsson (2018) also explained that digital entrepreneurship could significantly impact the business model and business development for both novice and experienced

entrepreneurs. Therefore, it is a must for all entrepreneurs to adapt to technology advancement so that they could easily enter digital business environment.

In the case of bamboo-craft business development in Rogomulyo Village, digitalization must be integrated. In this case, they have that opportunity to build and develop bamboo-craft business because bamboo has a great potential to be developed in the socio-economic context. Further, bamboo is a promising plant that can be utilized for various uses such as furniture and handicrafts. It means that the economic value of the handicraft industry sector is as high as of the agricultural sector for supporting economic development in rural areas; thus, it needs to be revitalized through the entrepreneurial process (Tung, 2021). Moreover, Yang et al. (2021) stated that a cluster-craft evolution could be made through good knowledge of the current trends and the customer demands. Hence, the implementation of an independent-entrepreneurship literacy program is by integrating digital business literacy.

Furthermore, both entrepreneurs' skills and knowledge can be fostered through entrepreneurship education (Lindh & Thorgren, 2016). In line with that, entrepreneurship education could improve the performance of small-scale business actors so that they can survive and even develop significantly in various marketplaces (Carayannis et al., 2015; Muhammad Auwal et al., 2020). Moreover, Devezas et al. (2017) stated that the continuity of entrepreneurship education could significantly improve the performance of the small business. In the same manner, abilities can only be prepared through training and counseling with various methods, which are suitable for the target group's conditions. Santos et al. (2019) also mentioned that entrepreneurship education could be integrated into empowerment program.

Simply put, both empowerment and entrepreneurship education are needed for capacity building. However, entrepreneurship education is generally implemented in formal education, such as schools and colleges. In this connection, rural entrepreneurs also lack adequate access for digital business literacy. Therefore, the present program tries to fill the gap on how to integrate community empowerment and entrepreneurship education for rural entrepreneurs through the implementation of independent-entrepreneurship literacy program. This literacy program highlights the principles of being a successful entrepreneur by optimally and innovatively utilizing potential

resources. Also, the present program adopts the concept of community capacity building for local-economic development.

The implementation of community capacity building aims to develop the skills and competencies of all members in a community so that they can optimally control their own lives and contribute to local development as well (Noya et al., 2009). The concept of community development and capacity building relates to entrepreneurial activity, which is needed for local-economic development. In this connection, Lackeus (2014) mentions some entrepreneurial competencies needed for entrepreneurship development, such as self-efficacy, self-insight, entrepreneurial identity, marketing skills, entrepreneurial passion, interpersonal skills, resource skills, declarative knowledge, opportunity skills, strategic skills, learning skills, and innovativeness. All in all, the implementation of independent-entrepreneurship literacy in the present program covers three main programs, that is, business literacy, financial literacy, and digital marketing literacy.

In collaboration with the local government, the young community, and the bamboo craftsmen of Rogomulyo Village, the community empowerment team implemented an empowerment program that focuses on independent-entrepreneurship literacy and education. This program further aims to improve the entrepreneurial skills and knowledge of the targeted group by applying the principles of digital entrepreneurship. The concept of independent-entrepreneurship literacy and education program serves a different method in implementing entrepreneurship education to villagers in rural area, by integrating community empowerment and entrepreneurship capacity building. Also, this program highlights the targeted group's involvement during the whole program. Furthermore, this empowerment program supports the Ministry of Cooperatives and SMEs' program, namely developing micro and medium enterprises in rural areas. In addition to that, this program is in line with the efforts of the Indonesian Ministry of Industry, which is currently prioritizing the quality of human resources improvement in rural areas to reach the vision of Advanced Indonesia. Overall, this program is worth carrying out.

## 2. Methods

### 2.1. The approach and method

One of the success criteria in implementing a community engagement program is the involvement of the targeted group throughout the program. Thus, the present program implemented Participatory Action Research (PAR) with an entrepreneurship capacity building design. [Datta et al. \(2015\)](#) defined PAR as an approach of action research that highlights the involvement of community members throughout the program, including planning, implementing, and evaluating. It further means that PAR focuses on generating and implementing ideas through collaborative work with the subject of the study. In relation to that, [Tetui et al. \(2017\)](#) mentioned that PAR plays a crucial role in building local capacity and intervention continuity. Moreover, the entrepreneurship capacity building concept refers to the entrepreneurial process that involves functional literacy, financial or economic literacy, business literacy, and technology literacy. The major purpose of entrepreneurship capacity building is to build literate entrepreneurs equipped with digital business literacy. The aforementioned research and program were done within 5 months, from August to December 2020.

There are several reasons for implementing the PAR in the present program. First, PAR enables the targeted group to know what the program implemented is, how the program will be implemented, and why the program should be implemented. By understanding the core concept of the program implementation, the targeted group could be a part of the research and program subjects, instead of being the research object only. As stated by [Aziz et al. \(2011\)](#) in their study, PAR could actively engage the targeted group in the empowerment program. Second, PAR enables the targeted group to improve their management skill throughout the process of entrepreneurial activities because this design enables the program to be implemented with people rather than for people ([Kemmis et al., 2014](#); [McIntyre, 2008](#)). Thirdly, participatory action research gives a great opportunity for the intervention continuity. Intervention continuity refers to the follow-up program in which the targeted group could individually develop the existing program with or without any guidance. Therefore, it could be safely concluded that participatory action research is an appropriate approach to run a community engagement program.

There are five phases in PAR design, namely problem identification, action planning, taking action, evaluation, and reflection and follow-up program ([Coghlan & Brydon-](#)



Miller, 2014). First, problem identification refers to the process of identifying problems faced by the targeted group and the potential to solve the problem as well. In simpler terms, the main activities in problem identification are identifying problem, evaluating it, and discovering possible potential solutions. Second, action planning is the process of generating potential solution into action–solution planning. Planning here means organizing the problem solution one by one into a complete plan that can be used to achieve the main goal of taking action and solution. In other words, action planning requires key-objective identification and activities management.

Third, acting is the process of implementing action planning into an actual activity. If action planning is a series of solutions to ideas, taking action is a series of program activities to bring a solution or a change. Fourth, evaluation is the process of systematic assessment and structured interpretation about the intervention implemented. It is well known that the implementation of action commonly confronts some obstacles and limitations. Thus, it needs to be critically evaluated so that the program intervention could yield a greater impact on the targeted group. Lastly, reflection and follow-up programs refer to the process of reflecting upon the program implemented and focusing on the program continuity. The design is presented in Figure 1.

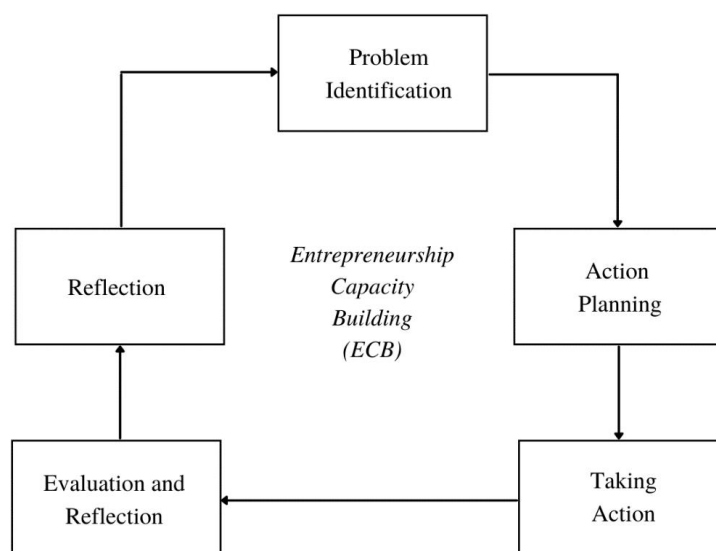


Figure 1. The Participatory Action Research Framework for the Present Program

Source: Adopted from Coghlan and Brydon-Miller (2014)

As presented in Figure 1, the main goal of the program is to build and develop an entrepreneurship program, which is a bamboo-craft business for SMEs purposes in Rogomulyo Village. As mentioned in the previous section, there are five phases in PAR, namely problem identification, action planning, taking action, evaluation, and reflection. Those phases are then explained in a more detailed way.

### **2.1.1. Problem identification**

Problem identification refers to an activity of exploring, identifying, and evaluating the problems faced by the targeted group. This stage was carried out by doing field observation, interview, and focused group discussion (FGD) with the targeted group in the first month. It took around 3 weeks to identify the problem clearly and completely, by inviting the local government, local craftsmen, and young generation community of the village.

Based on the problem identification result, there are three problems faced by the villagers in developing a bamboo-craft business, namely entrepreneurship illiteracy, digital illiteracy, and low motivation and engagement. First, the Rogomulyo villagers, especially bamboo craftsmen, were confronted with the entrepreneurship illiteracy problem. As elucidated, entrepreneurship illiteracy refers to the condition in which the villagers do not have the capability and ability to run a business based on entrepreneurship principles and processes.

In the case of bamboo-craft business development in the village, the villagers and the craftsmen were not considering craft business as one of the promising businesses both nationally and internationally (Fillis, 2014). This situation drives them into a poor condition of business development in today's era. Second, the villagers also cannot optimally integrate the use of technology into their business development. Also, they cannot adapt to the digital business environment. Lastly, there was also a problem with the young generation who argued that bamboo-craft business is not a promising income-generating endeavor. Hence, they ignore the bamboo-craft business development in their village.

Moreover, problem identification deals with a need analysis. This analysis is required in the empowerment program to plan an action based on the real condition of the targeted group. Based on the need analysis, there are three things to overcome the problems in

Rogomulyo Village. These include the need for entrepreneurship literacy, digital business literacy, and young generation involvement in rural entrepreneurship development.

### **2.1.2. Action planning**

This stage deals with organizing and generating program solutions for solving the identified problems in the previous stage. This was also done by doing FGD with the targeted group for 2 weeks long. If the previous FGD tackled mainly on problem identification, the FGD in this stage boiled down on discussing and delivering program solutions. Furthermore, this FGD session involved 20 participants, including the empowerment program team, the Rogomulyo headman, the Karang Taruna Tunas Mulia members, and the bamboo craftsmen.

Based on the action-planning discussion result, the planning program is craft business development based on the scheme of entrepreneurship capacity building. The program was organized to empower the artisans or the craftsmen and the villagers in Rogomulyo Village so that the bamboo-craft business could be well developed in this village. The entrepreneurship capacity building covers some entrepreneurship literacy programs, including functional literacy, financial literacy or economic literacy, business literacy, and technology literacy.

As briefly elucidated, functional literacy refers to literacy that focuses on the business model and business development. Economic literacy, also known as financial literacy, refers to the skills of financial management, such as acquiring, managing, and using the budget for business development. Business literacy is the skill of taking risk and seeing opportunities in the global business environment. Technology literacy refers to the skills of integrating the use of technology into business practices so that it could reach the digital business environment. These programs were then tied up into a single program, namely the independent-entrepreneurship literacy program.

### **2.1.3. Taking action**

This phase was performed through workshops, training, and mentoring. It took 3 months of implementing the practical ideas of independent-entrepreneurship literacy programs, covering functional literacy, financial literacy or economic literacy, business literacy, and

technology literacy. The process of program implementation is then presented in the next session.

#### **2.1.4. Evaluation**

This phase was conducted after the program has been implemented, which is in the fifth month. In this case, the program evaluation did not only involve the empowerment program team but also involve the targeted group, including bamboo craftsmen and Tunas Mulia Community. The main purpose of this evaluation was to discover and overcome some barriers that happened throughout the program implementation. This evaluation was also used to monitor and document the program implementation.

#### **2.1.5. Reflection**

Reflection is the last phase in PAR. This stage was conducted in the fifth month. In relation to the entrepreneurship literacy program, the reflection was performed by reviewing and analyzing the implemented program for refinement. Basically, reflection is needed in the action research because it enables the team to plan for the changes to be made and actions to be implemented. In the present program, reflection was carried out to develop the concept of entrepreneurship capacity building and the ideas of the independent-entrepreneurship literacy program, so it could meet the targeted groups' needs in the future. For the program to be continued, it needed some adjustment and consideration as well.

### **2.2. The study site and participants**

The present program was implemented in Rogomulyo Village, Semarang. This village was chosen as the research and program site for several reasons. First and foremost, Rogomulyo Village is one of the villages in Semarang Regency, which is likely to be developed as a tourism village. Based on the preliminary study, the local government of the village also has a plan to develop a tourism spot by optimally utilizing its potential, including SMEs development. Thus, the present program is a great opportunity to be implemented in the village.

Second, the village has some local-potential resources that could be developed in the SMEs context, namely natural and human resources. Natural resource refers to all

materials that exist naturally and can be utilized for supporting humans' lives, especially for economic purposes. The existing natural resource in the village is bamboo material. On the other hand, human resource refers to a group of people or community who has the capability and ability to utilize the natural resource for economic gain. As the natural resource in the village is bamboo, the human resource is then bamboo craftsmen. Based on those two potentials in hand, Rogomulyo Village is a potential village that could be enhanced using entrepreneurship literacy and education.

There are two groups of people who were invited to participate throughout the program, namely the bamboo craftsmen and the youth-generation community, that is, the Tunas Mulia Community. In total, there are 22 participants. First, the bamboo craftsmen were involved as they have a great potential to be engaged in rural entrepreneurship development, especially for bamboo-craft business. Simply put, bamboo craftsmen are the major resource of rural entrepreneurship development in the present program. Besides, they are considered as the appropriate subject as they argued that they lack digital business literacy and did not know how to run a business effectively and appropriately. Also, they wanted to adapt to the digitalization era so that they could be engaged actively in the digital business environment.

Second, the Tunas Mulia Community was selected to participate because they have a significant role to improve the economic-dynamic state in the village. The young generation is a catalyst of change who is called as digital generation or net generation.. [Tambunan et al. \(2021\)](#) also mentioned that the young generation holds a crucial role in village economic development. Thus, they are expected to maintain the sustainability of rural entrepreneurship development in the village. In conclusion, with the hard work and collaboration among the empowerment program team, the bamboo craftsmen, and the youth-generation community in the village, the program could be implemented effectively and successfully.

### **3. Results and discussion**

This section focuses on reporting the program result and discussing the findings during the implementation program. It covers three main themes, namely the implementation of the program, the impact of the program, and the evaluation of the program.

### **3.1. The implementation of independent-entrepreneurship literacy program**

This section presents the implementation of the independent-entrepreneurship literacy program in the acting phase, which covers business literacy, financial literacy, and technology literacy or digital marketing literacy. Those activities were designed based on the concepts of community capacity building by [Noya et al. \(2009\)](#) and development of entrepreneurial competencies by [Lackeus \(2014\)](#).

#### **3.1.1. Business literacy**

Business literacy deals with the ways to start, manage, and develop a business. In term of entrepreneurial competencies, it is closely related to opportunity, interpersonal, and strategic skills. Opportunity skill refers to the entrepreneurs' competency in recognizing and acting on any business opportunities so that they can adapt to the development of business worldwide. For that reason, both interpersonal and strategic skills play a crucial role in business development. On the one hand, interpersonal skill refers to leadership, human resource management, observing and solving problem, and motivating others. In the same vein, strategic skill is the ability of defining a vision, prioritizing work, analyzing risk management, and developing a strategy. In the case of Rogomulyo Village, business literacy was conducted by educating the craftsmen on how to bring their traditional bamboo weaving into a digital business environment. This kind of environment boils down on the strategy to run a business based on the needs of today's market. In relation to the market analysis, arts and crafts play a vital role in the modern world. Thus, the present program focused on educating and training the targeted group about bamboo-handicraft business development.

Basically, bamboo handicraft is different from traditional bamboo weaving although the technical skill needed is almost the same. There were three activities done to develop business literacy among the targeted group. These include workshops, training, and mentoring. First and foremost, the activity was conducting a workshop, namely a digital business workshop, to modify the mindset and perspective of the targeted group about business. Through this workshop, the targeted group was educated on what and why digital business is, how to run a business in the digital era, and how to change traditional bamboo weaving into a bamboo-handicraft business. Second, the training program was conducted to train the targeted group on how to make bamboo handicrafts. It includes

further home decor products, such as a bamboo lampshade, a bamboo hanging lamp, and a bamboo vase.

This training was performed by inviting an expert in bamboo-handicraft development from Brajan Bamboo, as the instructor. Third, mentoring refers to the activity in which the targeted group was allowed to individually develop their skill in making bamboo handicrafts. In simpler terms, the bamboo-handicraft expert acts as a facilitator rather than an instructor. This activity enables the targeted group to explore the variety of bamboo handicrafts and fosters them to learn by doing. Hence, business literacy deals with knowledge and skill development in the context of a bamboo-handicraft business.

### **3.1.2. Financial literacy**

In running a business, financial literacy is very important. Based on the preliminary study, most of the targeted group lack knowledge on effective financial management. In addition, the main problem is how to create a business plan, including crafting of financial plan and obtaining financial resources. For that reason, before running a business, they should know to get and manage their business finances properly. Thus, the present program tried to solve this problem by conducting financial literacy program.

This program was performed through an intensive workshop. The latter facilitates the targeted group with a handbook of finances management so that they could understand the given topic. The handbook consists of three major topics, which include the following: designing a spending plan for the business, budgeting and organizing business finance, and developing a saving strategy. In relation to designing a spending plan, the targeted group was introduced to a three-step process of tracking, reviewing, and taking action. Next, budgeting and organizing finances refer to the process of making a budget worksheet. Lastly, developing a saving strategy deals with the technique of saving money for business development.

### **3.1.3. Digital marketing literacy**

Marketing skill plays a vital role in digital business environment. It refers to the ability in conducting market analysis, marketing products and services, persuading, and communicating a vision. However, one of the most significant problems faced by the bamboo craftsmen in the village is the low digital marketing skill. Thus, the present

program worked on this digital literacy program. Digital literacy is closely related to the integration of ICT into business development. In the present program, the digital literacy program was conducted through three activities, namely workshop, training, and mentoring. First, the workshop was conducted three times with the focus on introducing the concept of digital marketing, including digital marketing media, digital marketing strategy, content marketing, social media marketing, and e-commerce marketing.

Second, the training activity focused on content marketing, social media marketing, and e-commerce marketing. Content marketing was conducted by training the targeted group on how to create interesting and persuasive marketing content, including product photography for a good-sale image, word arrangement for a convincing caption, and products catalog. Social media marketing refers to the activity of creating and managing a social media account for business purposes, such as Instagram, Facebook, and WhatsApp Business accounts. In relation to e-commerce marketing, the targeted group was trained on how to create and manage an account on an e-commerce platform. The last activity in digital marketing literacy is mentoring. The latter refers to the accompaniment in which the targeted group was given a chance to individually practice the digital marketing process, including taking pictures, creating social media accounts, creating e-commerce accounts, and creating content for those accounts. In conclusion, digital marketing literacy is regarded as the process of entering a digital business environment through several digital platforms.

### **3.2. The targeted group's perception on the implementation of independent-entrepreneurship literacy program**

To know the impact of the independent-entrepreneurship literacy program on the targeted group's entrepreneurial competencies, a questionnaire was distributed. The questionnaire consists of some statements of agreement with the five-point Likert scale, one representing strongly disagree and five representing strongly agree. The questionnaire was administered two times to measure the differences in the targeted groups' understanding, before and after the program implementation. The complete results are presented in this part for each literacy program, including business literacy, financial literacy, and digital marketing literacy.



### 3.2.1. Business literacy

Business literacy deals with the process of starting and developing a rural business based on digital business activity. To obtain this literacy, the targeted group in the village was expected to be able to build a rural business for bamboo-craft development. Thus, the survey was given to them to know their understanding regarding business literacy, before and after this literacy program was implemented. The survey consists of seven statements of agreement: (1) I completely understand the concept of business development in the digital era; (2) I completely understand the principles of business development in the digital era; (3) I completely understand the techniques of business development in the digital era; (4) I completely understand the types of handicraft business; (5) I could appropriately decide the technique used for bamboo-handicraft business development in this digital era; (6) I could decide the type of bamboo-handicraft business that is appropriate to the Z generation; and (7) I could innovatively make a variety of bamboo-handicraft products for the Z generation. The survey result is presented in Figure 2.

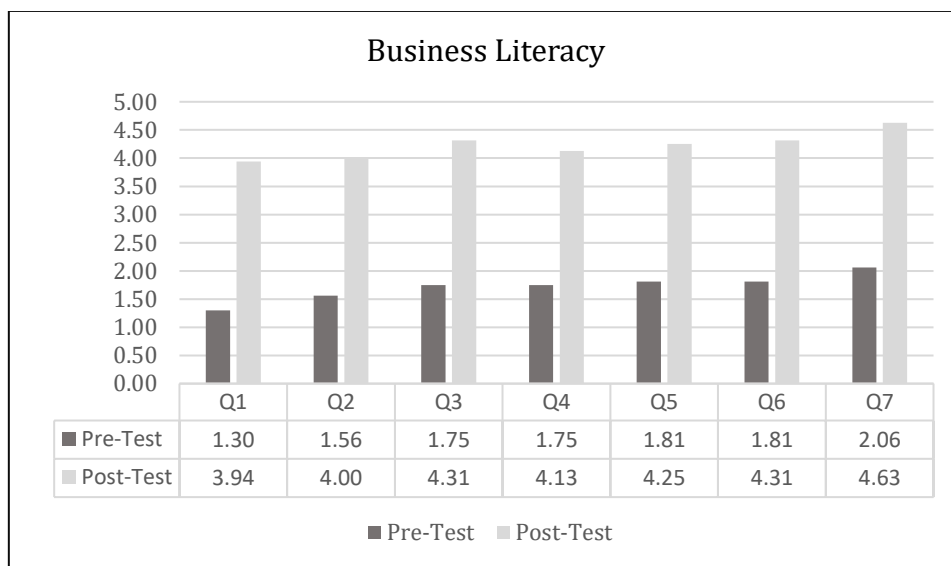


Figure 2. The Pre-Test and Post-Test Result of Business Literacy

Source: Survey Result (2020)

Figure 2 shows the targeted group’s understanding related to business literacy, before and after the implementation of the independent-entrepreneurship literacy program. Apparently, there is a positive change from the pre- to the post-survey. First, the result of questions 1–4 states that most of the targeted group strongly disagreed that they could understand the concept, the principles, the technique, and the types of handicraft business

in the digital environment. However, they agreed that they could completely understand the concept, the principles, the technique, and the types of handicraft business in the digital environment. Second, questions 5 and 6 show that the targeted group could decide on appropriate business development for bamboo craft after the business literacy program was implemented. Lastly, in relation to a practical skill, the targeted group agreed that they could make several varieties of bamboo handicrafts after the business literacy program was implemented.

The result indicates that the targeted group could obtain enough understanding related to digital business development with the implementation of the independent-entrepreneurship literacy program. Moreover, the targeted could develop their traditional bamboo weaving into a bamboo-handicraft business. Also, the program could enhance their ability in making bamboo handicraft. In conclusion, the independent-entrepreneurship literacy program could positively affect the targeted group's business literacy.

### **3.2.2. Financial literacy**

This was conducted to improve the targeted group's literacy about financial business management. To realize this goal, the survey was distributed to know the impact of this literacy program on the targeted group. The survey of this financial literacy consists of seven questions: (1) I completely understand the concept of a financial business plan; (2) I completely understand the concept of financial management for business; (3) I completely understand the concept of saving strategy for business; (4) I could make a financial plan appropriately; (5) I could make a financial statement report appropriately; (6) I could appropriately manage the business profit; and (7) I could appropriately implement the saving strategy toward my business. The result of the survey is presented in Figure 3.

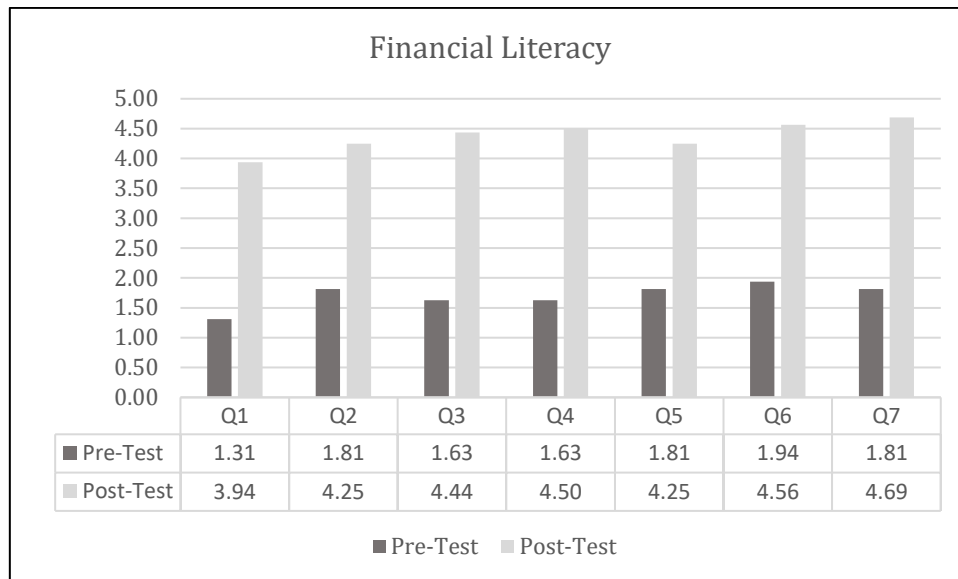


Figure 3. The Pre-Test and Post-Test Result of Financial Literacy

Source: Survey Result (2020)

As manifested in Figure 3, there is an improvement in the targeted group’s understanding related to financial literacy. Questions 1–3 show that before the program was implemented, the targeted group did not understand well the concept of the financial business plan, financial management, and saving strategy. However, they could completely understand the concept of the financial business plan, financial management, and saving strategy after the program was implemented. In addition, questions 4 and 5 state that the targeted could not make a financial business plan and financial statement report before the program was implemented. Affirmatively, the business literacy program could enhance their ability in making a financial business plan and financial statement report. Lastly, questions 6 and 7 show that the targeted group could manage the profit and save the business finances wisely after the business literacy program was implemented.

The survey result indicates that the financial literacy program enables the targeted group to understand the concept of the financial business plan, financial business management, and financial saving strategy. Furthermore, this program allows them to easily make a financial business plan and a financial statement report. In the same manner, it enables them to manage the business profit and save finances efficiently. All in all, the targeted group’s financial literacy is positively increased after the implementation of the financial literacy program.

### 3.2.3. Digital marketing literacy

Digital marketing literacy is the last literacy program implemented. This part presents the survey of digital marketing literacy for the present program. The survey of digital marketing literacy consists of seven questions: (1) I completely understand the concept of digital marketing; (2) I completely understand several types of media for digital marketing; (3) I could decide on an appropriate digital marketing media for my business; (4) I could take a good image for product-selling purposes; (5) I could create an interesting and persuasive caption for product-selling purposes; (6) I could create and manage a social media account for marketing purposes; and (7) I could create and manage an e-commerce account for marketing purposes. The result of those questions is presented in Figure 4.

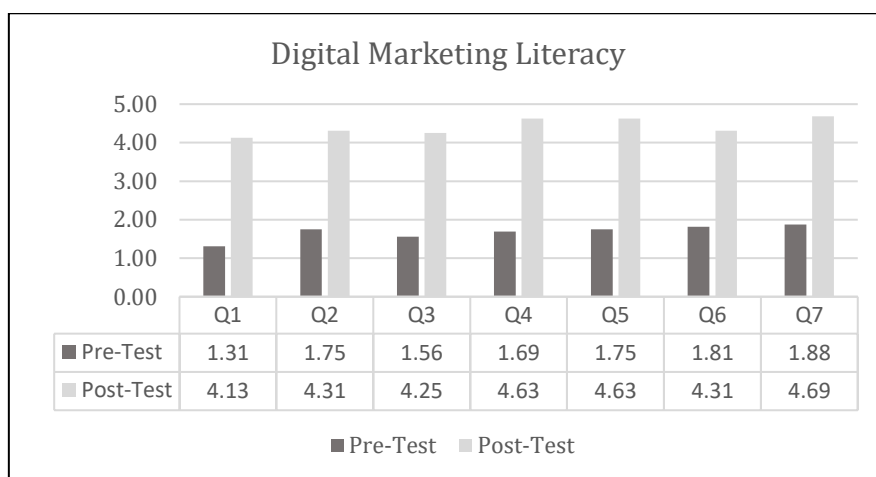


Figure 4. The Pre-Test and Post-Test Result of Digital Marketing Literacy

Source: Survey Result (2020)

From Figure 4, the targeted group’s literacy in digital marketing is improved with the implementation of digital marketing literacy. The result of the first to the third questions shows that the targeted group’s understanding about the concept of digital marketing was low before the program was implemented. However, after the program was implemented, they agreed that they completely understand the concept of digital marketing, including types of digital-marketing media and the strategy of choosing digital-marketing media. Next, regarding the fourth and the fifth questions, the targeted group agreed that they could implement the concept of content marketing, including picture photography and caption arrangement for product-selling purposes. Lastly, the fifth and the seventh

question states that the targeted group could create and manage a social media and an e-commerce account.

It indicates that the digital marketing program allows the targeted group to understand well the concept of digital marketing. Besides, they could also create an interesting and persuasive content marketing. Moreover, they could create and manage social media and e-commerce accounts for business purposes. Therefore, it could be safely concluded that the digital marketing program could enhance the targeted group's knowledge and skill in digital marketing.

### **3.3. The evaluation of independent-entrepreneurship literacy program**

Program evaluation is needed as this is a part of PAR design. This evaluation is used to identify the barriers and the supporting factors of the program implementation. Therefore, this session presents some barriers and supporting factors toward the implementation of the independent-entrepreneurship literacy program in the village.

Successfully, the program has reached the outcome, which is the development of targeted group's entrepreneurial competencies. It is proved by the survey results presented in the previous section. In connection to the concept of entrepreneurial competencies development proposed by Lackeus (2014), the implementation of independent-entrepreneurship program could positively enhance the opportunity, interpersonal, strategic, marketing, and resource skills of the targeted group. In addition, the program develops the targeted group's knowledge on optimally using potential resources, taking risk and probability, and fitting with entrepreneurship career.

In terms of skills, the implementation of independent-entrepreneurship program could positively enhance the opportunity skills, the strategic skills, the marketing skills, and the resource skills of the targeted group. Firstly, the development of targeted group's opportunity skill is shown in the result of business literacy for Q5, Q6, and Q7, that the targeted group could appropriately decide the technique used for bamboo-handicraft business development, could decide the type of bamboo-handicraft business that is appropriate to Z generation, and could innovatively make a variety of bamboo-handicraft products. It indicates that they could act on business opportunity and product development skill in this digital business environment, as what suggested by Lackeus. Secondly, the development of targeted group's strategic skill is shown in the result of

digital marketing literacy skill for Q3, Q4, Q5, Q6, and Q7. It indicates that the targeted group could develop a strategy to build up their business by taking an appropriate digital-marketing media, taking good image for product-selling, creating an interesting and persuasive caption for product-selling, managing social media account for marketing purposes, and managing their e-commerce account as well. Thirdly, the development of targeted group's marketing and resource skill are shown in financial literacy result for Q4, Q5, Q6, and Q7. The results show that they could make a financial plan, make a financial statement report, manage their business profit, and implement the saving strategy for business development. It indicates that they could create a business plan and conduct market research for their business. All in all, the implementation of independent-entrepreneurship literacy program could positively enhance the entrepreneurs' skill in Rogomulyo Village.

In addition to entrepreneurial skill development, the implementation of independent-entrepreneurship literacy program also develops the targeted group's knowledge on how to optimally use their potential resources, how to take risk and probability, and how to fit with entrepreneurship career. It covers three main themes, including self-insight, mental models, and declarative knowledge. Firstly, the development of targeted group's self-insight and mental models can be seen from the result of business literacy for Q1, Q2, Q3, and Q4. The results show that they understand the concept, the principles, and the techniques of business development in digital era. It indicates that they know how to act in digital business environment for enhancing their entrepreneurship career, especially for handicraft business. Secondly, the development of targeted group's declarative knowledge is shown in the result of financial literacy and digital marketing literacy.

The survey results of financial literacy for Q1, Q2, and Q3 show that they completely understand the concept of a financial business plan, financial management, and also saving strategy. Additionally, the survey results of digital marketing literacy for Q1 and Q2 show that they could completely understand the concept of digital marketing and several types of media for marketing development. Therefore, it can be safely concluded that the implementation of independent-entrepreneurship could positively enhance the targeted group's entrepreneurial competencies in terms of knowledge.

### **3.3.1. Barrier factors**

By definition, barrier refers to the challenges that may happen accidentally throughout the program implementation. Because the present program was conducted in the village, there were some barriers. The first one comes from several people in the village who have their perception of entrepreneurship activities. Simply put, some people lacked interest and understanding of the present program. As a result, it took some time to convince them of the importance of the present program until they could realize how crucial this program is. Moreover, some people in the targeted group lacked experience in using digital technology.

This situation drove them to be poor not only in digital business literacy but also in using the technology itself. Furthermore, the targeted group lacked time to participate in the program because of their primary work, which is being a farmer. Therefore, the program implementation sometimes needed to be postponed. Those are some barriers that occurred during the implementation of the independent-entrepreneurship literacy program in the village.

### **3.3.2. Supporting factors**

If there were some barriers, there were also some incentives. The latter relate to the supporting factors that affect the success of program implementation. Toward the independent-entrepreneurship literacy program implementation in the village, there were some supporting factors. First and foremost, the desire to serve and make a change in the community is the most affected factor. With this desire in hand, there is always a positive vibe to conduct the entrepreneurship literacy program. Next, the village's government fully trusted and supported the implementation of an entrepreneurship literacy program in Rogomulyo.

The local government plays a vital role in empowerment program implementation, especially in rural areas. In addition to that, Rogomulyo Village still has some activists from Tunas Mulia Community who have a positive perception of the present program. They successfully motivated the young generation in the village to participate in the present program. Those supporting factors provide a great opportunity for the present program to be implemented successfully.

The supporting factors presented in this section, relates to the theory of local economic development and community capacity building proposed by Andi Westwood in [Noya et al. \(2009\)](#). Westwood stated that there is a strong relationship between social capital and economic development. Additionally, he also mentioned that social capital and community capacity building could highly promote economic development. In this case, social capital refers to the potentials of individuals that enable the society to function effectively, including policymakers and actors in local community. In the present program, the social capital are Rogomulyo Village Government as policymaker and Tunas Mulia Community as local actors. With these two capitals, the entrepreneurship literacy program for economic development in Rogomulyo Village could be implemented effectively and successfully.

#### **4. Conclusion**

Rural entrepreneurship is one of the key development pillars in a rural area as it could open a greater opportunity for the economic growth of the village. Yet, entrepreneurship development in Rogomulyo Village is still confronting some serious barriers, especially entrepreneurship illiteracy among the bamboo craftsmen. For this reason, the present program focuses on entrepreneurship education and literacy for bamboo craftsmen and the youth community in the village so that they could develop a bamboo-craft business innovatively. With the integration of literacy programs and entrepreneurship capacity building, this program was conducted by implementing business literacy, financial literacy, and digital marketing literacy through workshop, training, and mentoring.

After 5 months of program implementation, the entrepreneurial community in the village could obtain adequate skills and knowledge for running a bamboo-handicraft business in the digital business environment. More specifically, they could innovatively create varieties of modern bamboo handicrafts, actively promote the products through social media and e-commerce platforms, and effectively manage their business finances. Therefore, the independent-entrepreneurship literacy program is an effective empowerment program to build and develop entrepreneurship in rural areas through education and training.



### **Author Contribution**

The two authors fully contributed throughout the program implementation and the program reporting process. Diyamon Prasadha has contributed to the present study in the areas of conceptualization, methodology, validation, formal analysis, data curation, supervision, writing the review, and editing. Additionally, Yuni Dwi Susanti has contributed to the present study in the areas of problem investigation, resources, project administration, funding acquisition, and writing the original draft preparation. In short, all authors contributed to the final manuscript.

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### **Declaration of Conflicting Interest**

There is no conflicting interest in this manuscript.

### **Short Biography**

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