

# ROLES OF BUSINESS INCUBATOR IN IMPROVING FAMILY WELFARE (STUDY ON WOMEN ENTREPRENEURS IN CREATIVE ECONOMY SECTOR IN WEST JAVA PROVINCE)

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## ABSTRACT

*The empowerment of the creative economy often relates to the roles of the business incubator in improving the business of women entrepreneurs, concerning both the quantity and quality. Considering the significant role of the incubator, the study on the appropriate business incubator model can be followed by women entrepreneurs with various characteristics. This study is intended to be a pilot project for developing women entrepreneurs. The business empowerment model in this study employs a clear, structured, measurable, and integrated method, stages, and coaching processes. Hence, the startups are expected to accelerate their business development through the resources and services they acquire. The empowerment model has proven to result in a significant impact on the incubator management, offered both in the business incubator itself and the network owned by the business incubator.*

**Keywords:** Business Incubator, Women Empowerment, Family Welfare, Creative Economy, MSMEs.

## INTRODUCTION

The development of the creative economy in Indonesia, primarily in West Java province, cannot be separated from the contribution of women entrepreneurs. The number of women entrepreneurs in Indonesia has increased quite significantly. Presently, the number of women entrepreneurs in Indonesia is approximately 14.3 million people. This number increased by 1.6 million people from previously of 12.7 million people. In addition to the number, the labor participation rate of women also increased from the previous periods. According to the 2017 data from the Central Statistics Agency of Indonesia (BPS), the labor participation rate of women increased from 48.87 to 55.04 percent. Based on this evidence, women empowerment is the need for Indonesia in increasing the economic status of society. Women are not the burden or barriers in the development; they are one of the potential assets which should be maintained. One of the things which can be done to empower women is to let the small and medium businesses absorb unemployed women. In addition to reducing unemployment, it will facilitate those women to increase their skills and capabilities (Setyaningsih et al., 2012). SME sector consists of small and medium businesses that have a significant contribution to the world economy, both the developed and the developing countries. Those businesses indeed play essential roles in the

economy (Iqbal et al., 2016). Available in many places, small and medium enterprises (SMEs) are the backbone of the economy and have a higher contribution to creating job opportunities than the larger enterprises do.

One of the 17 Sustainable Development Goals (SDGs) launched by the United Nations (UN), is gender equality for empowering women (United Nations, 2018). Women's empowerment is closely related to economic development. Economic development can improve women's condition and reduce inequality between men and women. Besides, several studies unveiled that women often become the victim experiencing gender discrimination, primarily those who live in developing countries. This fact is the result of cultural and wealth distribution aspects, mainly related to education and health. Women contribute to the economic development by involving in job creation and entering the business sector, namely the small and medium enterprises (Al Mamun & Ekpe, 2016). For bridging that gap, there should be stimuli to motivate women to increase their role in their families and society. One way that can be done is by empowering women involving in the creative economy through a business incubation program. According to Tahir et al. (2011), the performance of an entrepreneur is determined by the combinations of motivation, entrepreneurial skills, and business skills. Business incubation is a system and institutional management for assisting industrial countries by developing the SME sector. This present study reveals that firm performance increases significantly if that company experiences an incubation program. Incubation program assists companies to be more sustained even when they have finished that program. It is possible because their profitability and sales growth tend to increase. The incubation program provides many empirical benefits, such as increasing revenues and growth, facilitating patent registration, giving ease for obtaining a loan and financial support, as well as supporting cooperation or alliance (Ayatse et al., 2017).

Notably, women's involvement in the economy is one of the keys to economic growth. If there are many women work, the economy will grow as well. The increase of women participation rate at the workplace will reduce the gap of participation between male and female employees. This condition will boost the growth of the economy faster. Empowering women in developing countries will not only improve the welfare of the households, but also improve the social and fiscal aspects of those countries through the increase in education quality, poverty alleviation, and minimization of domestic violence (Crittenden et al., 2019). Another study reveals that gender equality will significantly affect economic growth through the improvement in human capital and labor productivity rate. Gender equality will enhance the quality of human resources, which can be done through formal and informal education. One of the forms of informal education is a business incubation program specially designed and provided for women.

## LITERATURE REVIEW

### Women Empowerment

Empowerment is the individual feeling about the increase in strengths and capabilities that affect the living space of somebody focusing on the change of social structure (Setyaningsih et al., 2012). Empowerment is crucial to enable the marginalized individuals for gaining access to the resources and assessing their own experiences (Crittenden et al., 2019).

Women's empowerment can reduce socio-economic vulnerability and dependence on men in households. Furthermore, it can increase the involvement and control of household

decisions, economic activity, and resources. More importantly, women empowerment can financially contribute to the households and increase self-confidence and awareness of social problems (Al-Mamun et al., 2014).

Women's empowerment is closely related to economic development. Economic development can improve women's condition and reduce inequality between men and women. Notably, women's involvement in the economy is one of the keys to economic growth. If there are many women work, the economy will grow as well. The increase of women participation rate at the workplace will reduce the gap of participation between male and female laborers. Therefore, it will finally boost economic growth faster.

### **Business Incubation**

Business incubation is a policy tool that facilitates entrepreneurial development by creating and implementing programs focused on providing targeted resources and services (Ayatse et al., 2017). Those services, designed to increase the added value for the entrepreneurs, provide the specific and targeted benefits for the businesses being incubated.

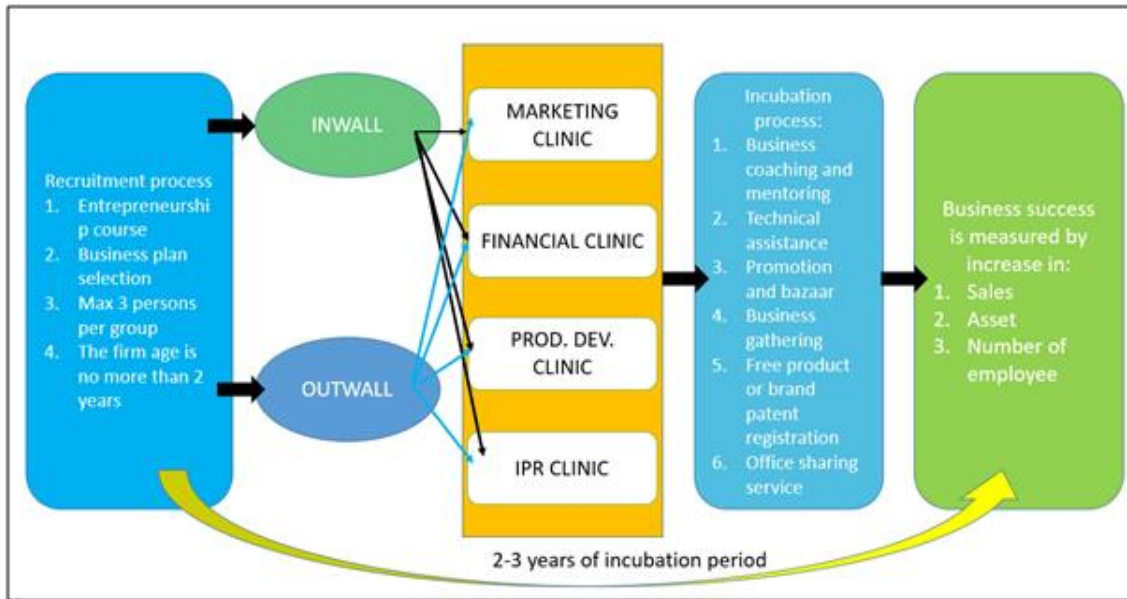
As a policy tool, business incubation facilitates entrepreneurial development creatively and enables the implementation of programs, which focus on providing the targeted resources and services. This concept is based on the premise for increasing the firm's growth and sustainability by developing a mechanism that will ensure the early identification of companies which will have a promising future but face issues in their resources (Iyortsuun, 2017).

*"Business incubation is a process in starting and developing a business, as well as facilitating several skills, networks, and tools, needed by the business actors or entrepreneurs, so they will have a higher chance to be successful"* (Gozali et al., 2015). According to Idris (2012), business incubation is the process of fostering small businesses and or developing new products, which is carried out by business incubators by providing business facilities and infrastructure, business development support, and managerial as well as technological supports.

A business incubator can also provide a facility for accelerating entrepreneurial growth through the facilities and infrastructure owned under the base competency. By utilizing the facilities and services provided by the incubator, service users (tenants) can improve their weaknesses related to the entrepreneurial aspects. The development of a business incubation program is closely related to the development of micro, small, and medium enterprises (MSMEs) because economic growth generally starts with the presence of micro and small businesses. Micro and small businesses make up the largest proportion of business actors in Indonesia. So, in terms of quantity, this group has a very important and strategic role.

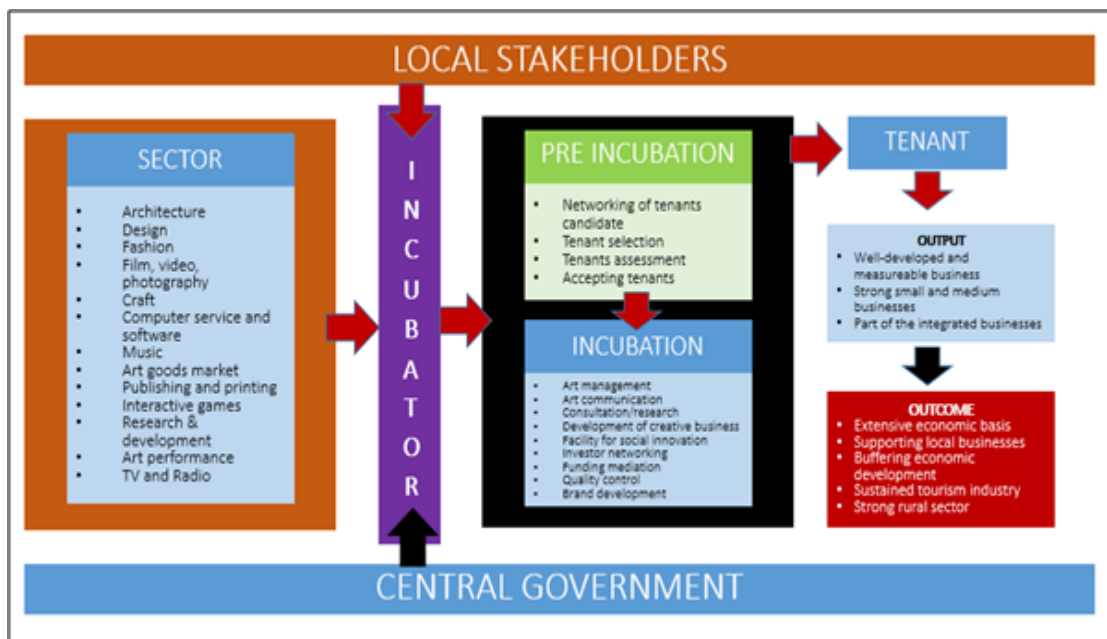
Hence, from those opinions above, it can be concluded that business incubation is a process of providing integrated services, both physical and non-physical ones, for the business development of MSMEs and startups. Incubation is used as a means of encouraging MSMEs and startups to develop their businesses. So, they can survive and finally be independent both financially and non-financially.

One of the most used business incubator models is the *"Infast business model"*, as seen in Figure 1. This model illustrates that the process of forming business actors can be up to 3 years, where the coaching program is carried out in an integrated manner starting from providing material in class and outside the classroom. The next stage is training related to marketing, finance, product development, and IPR registration. The third stage is the incubation process itself, which is the formation of a business, ended with the evaluation and control of all aspects.



**FIGURE 1**  
**BUSINESS MODEL INFASST**

Another model in developing a business incubator, more specifically related to the creative economy, is shown in Figure 2 below. This model is more focused on the business incubator of the creative economy sector, involving the local government and creative economy agencies. This business incubator model is built to develop the creative economy sector consisting of 15 creative economy sub-sectors.



**FIGURE 2**  
**CREATIVE INDUSTRY INCUBATOR MODEL**

This research is descriptive and quantitative. This study processes quantitative data and explains those data. The sampling technique used in this present study is purposive sampling. The criteria for the businesses to be included as the research sample are, first, they must be in the fashion, craft, and food and beverage categories. Second, they never previously participated in any business incubation program. Third, they are small or micro-scale businesses. From these criteria, we managed to collect 37 businesses as the research sample. The data employed in this present study is the primary data. The primary data is collected through a questionnaire, disseminated to the research respondents before and after attending the business incubation program. The data analysis in this study is a capability comparison of women entrepreneurs in West Java before and after attending the business incubation program. To do this, we performed the descriptive statistic test, normality test, and hypothesis test. The test of the hypothesis used is the paired sample t-test for the normally distributed data.

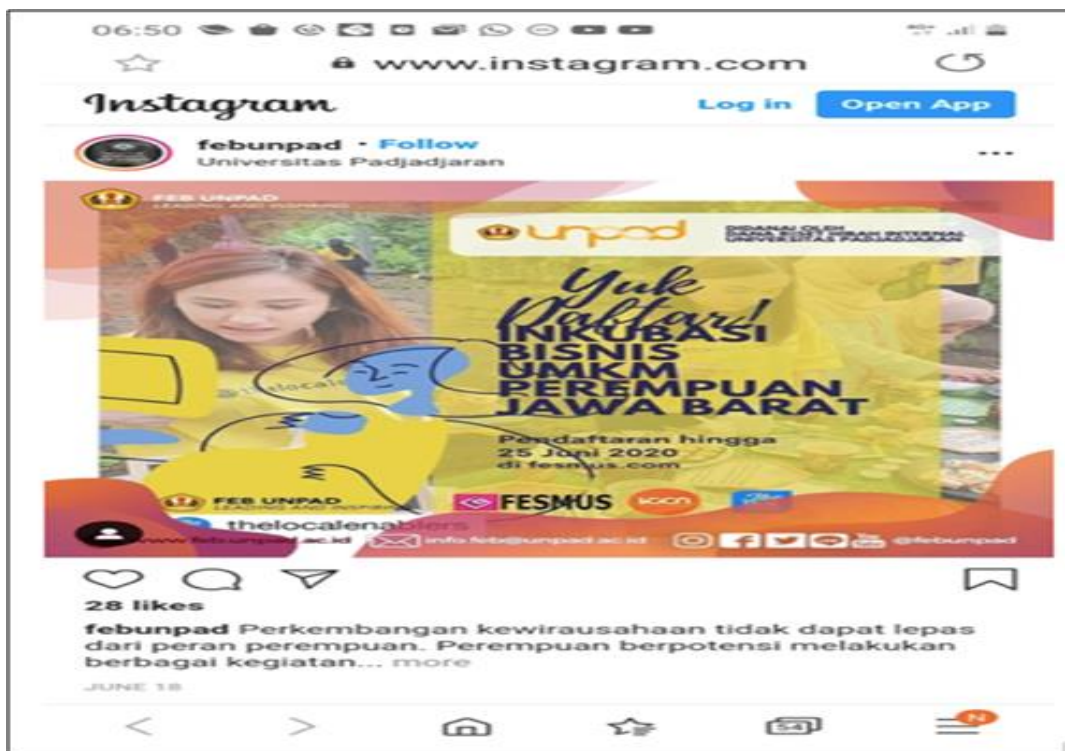
## RESEARCH METHOD

### Data and Analysis

Selection process of women entrepreneurs in west java for the business incubation program.

This present study has several purposes. First, this study aims to obtain the selected women entrepreneurs that have the potential to develop and expand their businesses as targeted. Second, this study aims to facilitate those entrepreneurs, so they can prepare planning, work plans, and business activity reports using the CANVAS method. Third, the purpose of this study is to support those women entrepreneurs, so they become more competent and the “*champion*” MSMEs. Finally, this present study attempts to facilitate the creation of cadres consisting of women entrepreneurs. They are expected to later share their knowledge and experiences with other entrepreneurs and ultimately develop the creative economy sector in West Java province. By partnering with The Local Enablers and Fesmus Community, our incubation program started by selecting the women entrepreneurs in West Java, amounting to 37 MSMEs. The selection process was performed using various social media. All the MSMEs we selected fulfilled the criteria that we have outlined earlier. The following is one of the media used to select the candidates for the business incubation program (Figure 3).

The incubation program started when we had collected the 37 women entrepreneurs from various cities of West Java province. Those entrepreneurs can be seen in the Table 1 as below: This business incubation is aimed to support those women entrepreneurs in West Java. This activity is expected to facilitate the learning of the MSMEs, so they can improve their mindset and business model. Besides, this incubation program provides an opportunity to create good networking among them. Due to the COVID-19 pandemic, the business incubation was conducted virtually using online platforms, namely Zoom Meeting and GoogleMeet. The parties involved in the incubation program are the Faculty of Economics and Business Universitas Padjadjaran, The Local Enablers, and Fashion Muslim. The 37 women MSMEs were selected by the organizing committee of the incubation program. The participants of this business incubation were from three business categories, namely, food, beverage, and fashion businesses. The program was conducted in seven meetings using the tailor-made curriculum. This curriculum was adjusted to the needs of the participants, designed from the questionnaire disseminated to them in the beginning. An evaluation was also performed at the end of the program (Table 2).



**FIGURE 3**  
**BUSINESS INCUBATION PROGRAM FOR WOMEN ENTREPRENEURS IN WEST JAVA**

**Table 1**  
**IDENTITY OF RESPONDENTS IN THE CREATIVE ECONOMY**

No	Brand	Owner	Product
1	@ldebaran's corner	Bella Surya Febrianti	Culinary
2	Dlsha handmade	Achdiani S	Fashion
3	Hanasta Yana	Thia H	Fashion
4	Tiluwanda	Siti nursila	Fashion
5	KUKEBI	Yesi Endah Sundasari	Culinary
6	Faustine	Reri Kusumawati	Fashion and craft
7	GOBANG.SITETEH	Trully ariestianti	Culinary
8	ndaqies	Evelinda Budi Susana	Culinary
9	Cemal Cemil	Ranny Andriany	Culinary
10	Kelir Binangkit	Filosofi Putri Aulia	Fashion and craft
11	ARTiC.SeedtoCup	Citra	Culinary
12	Banilla Hook Co.	Amalia Karisma	Fashion
13	RJO	Rumah jahit orien	Fashion and craft
14	Jamarot Annur Jaya	Dra. Hj Lilis santika MH	Culinary
15	Gurilem Paporit	Santi sagita	Culinary
16	BLC	Batiklilicgd	Fashion
17	Rizara kitchen/Rizara syar'i	YUYUN RATNAWATI	Culinary
18	Chefmama	Risna oktavianny	Culinary
19	Sehat.kan	Zizan Nur Hanifah	Culinary
20	Wie	Dwi Santi	Fashion
21	Mimi_kfood	Intan krisna putri	Culinary

No	Brand	Owner	Product
22	Canda Camilan Sunda	Annisa Dwi O. W	Culinary
23	Eshq Parfume	Reni Kodariah	Craft
24	Ceuceushop	Diandra Xz	Fashion
25	Amoora Design	Mutiara Ramadhani	Fashion
26	Zukhruf	Rosyanti	Fashion
27	kedai mak ling	Linda Rosmellia I.W	Culinary
28	Rco	Risti Selfia	Culinary
29	Toko Madam Fenk	Fenny Solehati	Fashion
30	Conny's Creation	Koni Agustinawati	Fashion and craft
31	Betty's Kitchen	Hani Rachmayani	Food
32	Hannywong fashion	Hani nokmayawati	Fashion
33	Purellhijab	Elly Seliawati	Fashion
34	Tibia&Nez cookies	Sumi sulastri	Culinary
35	Ichiy2.thn	Euis Rohyati	Culinary
36	Qurrota ayun	Mila karmila	Culinary
37	Orangebakery	Eli Kamaliah	Culinary

Source: Processed data, 2020

No	Material	Topic/Indicator	Target (Objective)
1	Planning	Long term and short-term planning	Participants can prepare their business plan for both the long and short terms
		SWOT Analysis	Participants can understand the strengths, weaknesses, opportunities, and threats of their businesses
		Vision, missions, objectives	Participants can set the vision, missions, and objectives of their businesses
2	Marketing	Online product marketing	Participants can market their products optimally through various social media, understand how to expand their marketing coverage through appropriate distribution channels, and utilize the existing marketplaces
		Setting the appropriate distribution channels through the reseller	
		Utilizing Shopee and Lazada	
3	Product Management	Identifying the uniqueness of their products	Participants can identify uniqueness which becomes the product advantage and ways to improve the quality of their products. Besides, they are expected to design appropriate product packaging to increase product value
		Improving product quality	
		Designing product packaging	
4	Financial Management	Simple financial report or bookkeeping	Participants can record their selling activities and make simple financial reports, separate their assets from the business assets, and identify the external financial sources for developing their businesses.
		Preparing simple financial reports	
		Identifying external financial sources for business development.	
5	Pricing	Method in determining the cost of goods sold	Participants can determine the cost of goods sold and set the right pricing at the right time
		Strategy for increasing sales through pricing strategy	
6	Collaboration	Identifying partners for collaboration	Participants can identify the partners to collaborate with, observe some aspects of cooperation, and know the right cooperation process.
		Aspects of collaboration and cooperation	

## Descriptive Statistics

The understanding assessment in this study uses three levels, namely, limited understanding, moderate understanding, and complete understanding. The score range is determined by subtracting the highest value by the lowest value and then divided by three. Therefore, the understanding assessment can be classified as follows (Table 3):

<b>Level of Understanding</b>	<b>Scoring</b>
Limited understanding	37- 86
Moderate understanding	87- 136
Complete understanding	137- 185

Source: Processed data, 2020

The description of the understanding and capability of women MSMEs in West Java covers several aspects of the managerial functions. To obtain it, we utilized a questionnaire on a Likert scale to measure eight (8) business management dimensions, where each dimension is measured by several indicators. The complete description of capability and understanding of our respondents is outlined as follows.

## Business Planning Capability

In this dimension, there are three questions related to business planning that need to be answered by all respondents. The following Table 4 shows the results:

<b>Indicator</b>	<b>Pre-Test</b>		<b>Post-Test</b>	
	<b>Score</b>	<b>Level</b>	<b>Score</b>	<b>Level</b>
<b>RUJP</b>	112	Moderate understanding	143	Complete understanding
<b>RUJM</b>	113	Moderate understanding	142	Complete understanding
<b>RUdJP</b>	124	Moderate understanding	146	Complete understanding
<b>Average</b>	116	Moderate understanding	144	Complete understanding

Source: Processed data, 2020

Note: RUJP: Long Term Business Planning; RUJM : Medium-Term Business Planning; RUdJP: Short Term Business Planning

Based on the table above, the pre-test value for the dimension of business planning capability is measured by the following indicators: (a) short term business planning; (b) medium-term business planning; and (c) long term business planning. In general, women MSMEs in West Java already have a moderate understanding of their business planning in those three categories.

## Marketing Management Capability

Marketing is one of the most essential components of MSME activities. In this dimension, there are six indicators related to the understanding of marketing management as summarized in the Table 5 as follows:

In the Table 5, the pre-test indicator with the smallest value is for the question of understanding the strategy for increasing sales of 101 (moderate understanding). This score is



followed by the understanding of the significance of regular business evaluation and appropriate promotion with a score of 103 equally (moderate understanding). The question about appropriate distribution scores 105 (moderate understanding) while the question about the understanding of social media promotion scores 115 (moderate understanding). The largest score is for the question about the target market of 120 (moderate understanding).

Indicator	Pre-Test		Post-Test	
	Score	Level	Score	Level
<b>PP</b>	120	Moderate understanding	140	Complete understanding
<b>PT</b>	103	Moderate understanding	120	Moderate understanding
<b>PMedSos</b>	115	Moderate understanding	139	Complete understanding
<b>DST</b>	105	Moderate understanding	137	Complete understanding
<b>SPP</b>	101	Moderate understanding	123	Moderate understanding
<b>EAU</b>	103	Moderate understanding	140	Complete understanding
<b>Average</b>	108	Moderate understanding	133	Moderate understanding

Source: Processed data, 2020

Note: PT: Right promotion; PMedSos: Social Media Promotion; DST : Appropriate Distribution; SPP: Strategy in Increasing Sales; EAU: Business Regular Evaluation

Meanwhile, in the post-test indicator, the smallest score is about the appropriate promotion scoring 120 (moderate understanding), followed by the question about the strategy in increasing sales of 123 (moderate understanding). The question about appropriate distribution scores 137 (complete understanding) and social media promotion scores 139 (complete understanding). The scores for the questions about the target market and regular business evaluation are equally 140 (complete understanding).

The average score for the pre-test is 108, which is at a level of moderate understanding. It means the women MSMEs in this study already have a moderate understanding of managing the marketing aspect before attending the incubation program. While the average score for the post-test is 133, which is also at the level of moderate understanding. It means, the women MSMEs in this study have a proper and better understanding of managing the marketing aspect after attending the incubation program. Hence, from the post-test and pre-test scores, there is an increase of 25 points. It means, their understanding of marketing has improved.

#### Product Management Capability

The following Table 6 reveals the scores for the dimension of product management. In this dimension, there are six indicators as follows:

Indicator	Pre-Test		Post-Test	
	Score	Level	Score	Level
<b>DPKP</b>	107	Moderate understanding	130	Moderate understanding
<b>KPKK</b>	134	Moderate understanding	148	Complete understanding
<b>KP</b>	135	Moderate understanding	159	Complete understanding
<b>IPP</b>	130	Moderate understanding	139	Complete understanding
<b>Average</b>	127	Moderate understanding	144	Complete understanding

Source: Processed data, 2020

Note: DPKP: Product Design for Fulfilling Market Needs; DPKK: Product Design for Fulfilling Consumer Needs; KP: Product Uniqueness; IPP: Development of New Product Innovation

The pre-test result in the table above shows that the highest score is for the question about the product uniqueness of 135 (moderate understanding), while the lowest score is for the question about designing a product for fulfilling market needs of 107 (moderate understanding). This latter result highlights the need for improvement so that the MSMEs will have a better understanding of designing a product for fulfilling the needs of their market (DPKP).

The post-test result shows that the highest score is also for the question about the product uniqueness of 159 (complete understanding), while the lowest score is also for the question about designing a product for fulfilling market needs of 130 (moderate understanding). Again, this latter result highlights the need for improvement. So, the MSMEs will be able to design the right products for fulfilling the needs of their market.

The average score for the pre-test for this dimension is 127, which is at a moderate level. It means, the MSMEs already possess a moderate understanding of product management. Furthermore, the average score for the post-test for this dimension is 144, which is at a complete level of understanding. It means, the MSMEs acquire more understanding of product management after attending the incubation program. Hence, from the post-test and pre-test scores, there is an increase of 17 points. It means the product management understanding of women MSMEs has improved.

### Financial Management Capability

The result about financial management dimension is shown in the Table 7 as follows:

Indicator	Pre-Test		Post-Test	
	Score	Level	Score	Level
<b>PKB</b>	103	Moderate understanding	137	Complete understanding
<b>PKyB</b>	108	Moderate understanding	140	Complete understanding
<b>Average</b>	106	Moderate understanding	139	Complete understanding

Source: Processed data, 2020

Note: PKB: Proper Financial Management; PKyB: Proper Financial Records

On average, the MSMEs in this study already have a moderate understanding of financial management with a score of 106. The highest score is for the question about financial records of 108 (moderate understanding), while the lowest score is for the question about the proper financial management of 103 (moderate understanding).

The post-test result shows that financial management capability improves. The highest score is for the question about financial records of 140 (complete understanding), while the lowest score is for the question about the proper financial management of 137 (complete understanding). The average score for financial management capability increases from 106 to 139.

### Collaboration Capability

The result of the collaboration understanding is shown in the Table 8 as follows:

The pre-test result in the table below shows that in the collaboration dimension, the highest score is for the indicator of 114 (moderate understanding). It is followed by the indicators of KDPL of 101 (moderate understanding) and KDMK of 99 (moderate understanding). The lowest score is for the indicator of KDPMA of 92 (moderate understanding).

<b>Table 8</b>				
<b>COLLABORATION CAPABILITY</b>				
<b>Indicator</b>	<b>Pre-Test</b>		<b>Post-Test</b>	
	<b>Score</b>	<b>Level</b>	<b>Score</b>	<b>Level</b>
<b>KDMK</b>	99	Moderate understanding	146	Complete understanding
<b>KDK</b>	114	Moderate understanding	132	Moderate understanding
<b>KDPMA</b>	92	Moderate understanding	147	Complete understanding
<b>KDPL</b>	101	Moderate understanding	144	Complete understanding
<b>Average</b>	102	Moderate understanding	142	Complete understanding

Source: Processed data, 2020

Note: KDMK: Cooperation with Business Partners; KDK: Cooperation with Consumers; KDPMA : Cooperation with Government, Media, and Academics; KDPL: Cooperation with Other Parties

The post-test result of the collaboration dimension shows that the highest score is for the indicator of KDPMA of 147 (complete understanding). It is followed by the indicators of KDMK of 146 (complete understanding) and KDPL of 144 (complete understanding). The lowest score is for the indicator of KDK of 132 (moderate understanding).

On average, the pre-test of the collaboration capability of respondents is at a moderate level (scoring 102). While the average score for the post-test is at a complete level (scoring 142). Hence, from the post-test and pre-test scores, we see an increase of 40 points. It can be concluded that the understanding of women MSMEs about collaboration capability has improved.

### Human Resource Management Capability

The following Table 9 shows the research result about the dimension of human resource (HR) management of the MSMEs in our study.

<b>Table 9</b>				
<b>HR MANAGEMENT CAPABILITY</b>				
<b>Indicator</b>	<b>Pre-Test</b>		<b>Post-Test</b>	
	<b>Score</b>	<b>Level</b>	<b>Score</b>	<b>Level</b>
<b>PTK</b>	107	Moderate understanding	137	Complete understanding
<b>SK</b>	102	Moderate understanding	132	Moderate understanding
<b>P&amp;P</b>	111	Moderate understanding	151	Complete understanding
<b>Average</b>	107	Moderate understanding	140	Complete understanding

Source: Processed data, 2020

Note: PTK: Management of Manpower; SK : Compensation System; P&P: Training and Education

The pre-test result of the human resource management dimension shows that the lowest score is for the indicator of compensation system of 102 (moderate understanding), while the highest score is for the indicator of training and education for developing capability and knowledge with a score of 111 (moderate understanding).

The post-test result of the human resource management dimension shows that the lowest score is for the indicator of compensation system of 132 (moderate understanding), while the highest score is for the indicator of training and education with a score of 151 (complete understanding). The second position is the indicator of PTK with a score of 137 (complete understanding).

The average score of the pre-test indicates that the MSMEs in our study already have a moderate understanding of human resource management, as shown by the score of 107. While

the average score of the post-test shows that the MSMEs in our study have a better understanding of human resource management with a score of 140. From the post-test and pre-test scores, we see an increase of 40 points. Hence, it can be concluded that the understanding of women MSMEs about human resource management has improved.

### Work Behavior Capability

The result of work behavior dimension can be seen in the following Table 10:

Indicator	Pre-Test		Post-Test	
	Score	Level	Score	Level
<b>KB</b>	110	Moderate understanding	138	Complete understanding
<b>KuB</b>	110	Moderate understanding	138	Complete understanding
<b>KS</b>	118	Moderate understanding	144	Complete understanding
<b>Average</b>	113	Moderate understanding	140	Complete understanding

Source: Processed data, 2020

Note: KB: Desire to Learn; KuB: Desire to be Motivated; KS: Desire to be Successful

The Table 10 above shows the pre-test and post-test results for the dimension of work behavior. In the pre-test result, the lowest score is for the indicators of desire to learn and desire to be motivated with a score of 110 (moderate understanding), while the highest score is for the indicator of a desire to be successful of 118 (moderate understanding). Based on this finding, we can see that the desires to learn and be motivated need to be paid attention to because these two aspects have the lowest scores. The desire to have strong motivation will positively affect the MSMEs.

From the table above, we can also see that in the post-test result of work behavior dimension, the lowest score is for the indicator of a desire to learn of 138 (complete understanding), while the highest score is for the indicator of a desire to be successful of 144 (complete understanding).

The average score of the pre-test result indicates that the MSMEs in our study already have a moderate understanding of work behavior, as shown by the score of 113. While the post-test result shows that on average, their understanding of work behavior is at a complete level of understanding with a score of 140. From the post-test and pre-test scores, we see an increase of 27 points. Therefore, it can be concluded that the understanding of women MSMEs about work behavior management has improved.

### Pricing Capability

The result of pricing capability is related to the setting of the cost of goods sold (COGS). The result is shown in the Table 11 as follows:

Indicator	Pre-Test		Post-Test	
	Score	Level	Score	Level
<b>PHP</b>	118	Moderate understanding	137	Complete understanding
<b>Average</b>	118	Moderate understanding	137	Complete understanding

Source: Processed data, 2020

Notes: PHP: Cost of Goods Sold (COGS)

The Table 11 above shows that the pre-test score of the PHP indicator is 118 or at a moderate level. While the post-test score is 137 or at a complete level of understanding. Therefore, from the post-test and pre-test scores, it can be concluded that the understanding of women MSMEs in determining the cost of goods sold has improved.

**Hypothesis Testing**

**Normality test**

The normality test was performed to know whether the data are normally distributed or not. In this present study, the normality test was performed using Kolmogorof Smirnov test because the test approach uses the Lilefors test. The significance level is  $\alpha=0.05$ . The statistical hypothesis obtained is as follows (Table 12).

Table 12 NORMALITY TEST				
	Class	Kolmogorov-Smirnov <sup>a</sup>		
		Statistic	df	Sig.
Training Results of MSMEs	PreTest	0.095	37	0.200*
	PostTest	0.125	37	0.154

Source: Processed data, 2020

Based on the normality test, it is shown that the significance values for the pre-test and post-test are 0.200 and 0.125. These two values are larger than 0.005. Hence, all data are normally distributed and the further test, namely, the paired sample t-test could be executed.

**The paired sample T-test**

Table 13 PAIRED SAMPLE TEST									
		Paired Differences					t	df	Sig. (2-tailed)
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
					Lower	Upper			
Pair 1	Pre Test - Post Test	-20.892	16.723	2.749	-26.468	-15.316	-7.599	36	0.000

Source: Processed data, 2020

The result of the statistical test above illustrates and compares the conditions of respondents both before and after attending the incubation program by matching the respondent assessment on each material of the program (Table 13). The materials in the incubation program are related to the knowledge capacity and actions of the participants.

The questionnaire in this study uses an ordinal scale, aimed at capturing the respondent perception. By paying attention to the timing, namely, the pre and post of the program, the participants are expected to provide answers which will positively affect this empowerment program by looking at the relatively long incubation duration.

The above statistical test result reveals that participants perceive a significant difference after attending the incubation program. It means the model of business incubation is significant and effective in improving the knowledge and action of the women MSMEs, primarily related to the indicators under this study.

## CONCLUSIONS, IMPLICATION/LIMITATION AND SUGGESTIONS

Based on the hypothesis testing, it is shown that the business incubation program has a significant effect on improving the knowledge and action of women MSMEs. This result is in line with the study of Iyortsuun (2017) and Ayatse et al. (2017), stating that business incubation significantly affects the performance of SMEs. Both academics and practitioners have suggested the empowerment as a 'best practice' to improve firm performance. Without empowerment, entrepreneurship is not sufficient for attracting women entrepreneurs, primarily those who are micro and small scales. Hence, their business will develop. Besides, their mentality and self-confidence will improve. Thus, the business incubation program is intended as a process that can transmit entrepreneurship with higher skills and broader knowledge to women. Hence, they are expected to manage their business more properly. Based on those conclusions, we propose several suggestions. First, the business incubation program must be carried out and directly intervened by the targeted Government policies as well as promoted at least into the sustainable medium-term development planning. Second, there must be involvement of women's organizations or NGOs to stimulate and generate advocacy and communication. Third, the local government officials must issue regulations that protect and support women's participation in accelerating the development of MSMEs, especially in the creative economy. Finally, further research is suggested to extend the period of the business incubation program to see the differences in the ability of MSMEs before and after participating in the program.

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## REFERENCES

- Al Mamun, A., & Ekpe, I. (2016). Entrepreneurial traits and micro-enterprise performance: A study among women micro-entrepreneurs in Malaysia. *Development in Practice*, 26(2), 193-202.
- Al-Mamun, A., Wahab, S.A., Mazumder, M.N.H., & Su, Z. (2014). Empirical investigation on the impact of microcredit on women empowerment in urban peninsular Malaysia. *The Journal of Developing Areas*, 48(2), 287-306.
- Ayatse, F.A., Kwahar, N., & Iyortsuun, A.S. (2017). Business incubation process and firm performance: An empirical review. *Journal of Global Entrepreneurship Research*, 7(1), 2.
- Crittenden, V.L., Crittenden, W.F., & Ajjan, H. (2019). Empowering women micro-entrepreneurs in emerging economies: The role of information communications technology. *Journal of Business Research*, 98, 191-203.
- Gozali, L., Masrom, M., Haron, H.N., & Zagloel, T.Y.M. (2015). Critical success factors of successful e-business incubators framework in Indonesian public universities, 8(2), 119-132.
- Idris, I. (2012). *Business incubator development model Guide*. Jakarta: Deputy for UKMK Resource Assessment.
- Iqbal, A., Agha, K., Ali, A., & Qureshi, M.I. (2016). Financial policy and capital structure choice in Pakistan smes: Empirical evidence from company panel data athar. *Abasyn Journal of Social Sciences*, 358-375.
- Iyortsuun, A.S. (2017). An empirical analysis of the effect of business incubation process on firm performance in Nigeria. *Journal of Small Business and Entrepreneurship*, 29(6), 433-459.
- Setyaningsih, S., Rucita, C. ., Hani, U., & Rachmania, I.N. (2012). Women empowerment through creative industry: A case study. *Procedia Economics and Finance*, 4, 213-222.
- Tahir, P.R., Mohamad, M.R., & Hasan, D.B. (2011). A short review of factors leading to success of small medium enterprises. *Interdisciplinary Journal of Contemporary Research in Business*, 2(11), 519-530.
- United Nations. (2018). About the sustainable development goals.