

## **Improving Quality of Small and Medium Entreprises Products (SMEs) through Training Product Legality on Science and Technology Program for Entrepreneurship at Muhammadiyah University of Sidoarjo**

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**ABSTRAK:** The legality of a product is the most important thing to measure the quality indicator of a product. Through Science and Technology for Entrepreneurship Program, SMEs disabled participants are given socialization about the importance of product legality e.g. Household Food Industry (PIRT), brand, logo and halal. The purpose of this activity is to improve the quality of SME products through product legality training. The method used is quantitative method with experiment approach. For training method used PALS (Participatory Action Learning Center) methods. The PALS method approach emphasizes on the transformation of existing activities cultivated in the changes towards the improvement of the conditions of SMEs. Stages of the PALS method approach are the awareness stage, the process of capturing product quality and accompaniment. The result is that there is an increasing number of business actors who take care of PIRT, logos and brands. It can be seen from the significance value of paired t-test results, this is at pretest condition (before taking product legality training) and posttest when tenant has attended product legality training. With a significance value of 0.000 smaller than the critical value of 0.005, then  $H_0$  (initial hypothesis) is processed, so that there are significant differences of tenant who have followed the product legality training to improve the ability of tenant in preparing documents of PIRT, brand and logo for his business.

**KATA KUNCI:** *legality, science and technology for entrepreneurship, pals methods*

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### **INTRODUCTION**

To answer the challenge of higher education that produces high quality graduates who can answer the challenges of work, Muhammadiyah University of Sidoarjo (UMSIDA) is one of the Universities located in Sidoarjo Regency in the implementation of teaching and learning process to give entrepreneurship courses to make students able to be empowered and creating a business. In addition, through student organizations, guidance on student entrepreneurship activities units and student creativity week programs held by the directorate of universities (DIKTI), one of the schemes is the Week of entrepreneurial student creativity. There are many business opportunities that can be developed by students around the campus, because the UMSIDA campus is close to the public hospital, where many consumers will use the products they sell. Through science and technology program for entrepreneurship funded by Directorate General of Technology Research and Higher Education which is coordinated by Institute of Research and Community Service to do some activities which followed by tenant (Science and Technology program participants for Entrepreneurship) consisting of students, alumni, small and medium business actors in Sidoarjo. One of the activities undertaken is the training of product legality. It aims to improve the quality of products produced by SMEs to be competitive and sold in a wider market. The legality of the products include Household Industry Products (PIRT), Brand, Logo and Packaging. The legality of a product is the most important thing to measure the quality indicator of a product. Through Science and Technology for Entrepreneurship Program, SMEs participants are given socialization about the importance of product legality e.g. Household Food Industry (PIRT), brand, logo and halal. The purpose of this activity is to improve the quality of SME products through product legality training.

Entrepreneurship, defined as creation and growth of new establishments or firms has been increasing throughout the world since the early 1990s [1]. Entrepreneurship is often defined as the process of starting and growing a business making entrepreneurs those who start and grow businesses [2]. Small and Medium Enterprises (SME's) are of fundamental important to many economies [3]. The improvement of small and medium enterprises (SMEs) is very significant to the development of a nation's economy and public procurement can be very vital source of business for SMEs [3]. SMEs contribute greatly to the development of any nation and account for a large share of new jobs in countries which have demonstrated a strong employment record and are known as a primary driver for GDP

## **METHODS**

The method used in this research is a qualitative through experiment with measure before and after done treatment that is training on legality. Respondents measured were 25 people or population as many tenants who follow science and technology program for entrepreneurship at Muhammadiyah University. The method used in this training is the PALS (Participatory Action Learning System) approach. PALS method is the involvement of students in active participant learning process in entrepreneurship program scientifically with all approaches so as to form a participatory learner interaction system, both personal and communal. The PALS method approach emphasizes on the transformation of existing activities cultivated on changes towards improving the condition of entrepreneurship tenants through: (1). Phase of awareness; and (2). Capacity phase (capacity). The tenant entrepreneurship awareness phase is the starting point phase in building tenant capability, this is by following the stage of tenant recruitment. With the intention and willingness to learn to become an entrepreneur then by itself will register themselves and meet all administrative requirements. Then in the second phase, the phase of entrapment and entrepreneurial facilitation, in this phase of the business legality training both material and practice of preparing the PIRT document, and make the brand and logo. Then the results of the assessment are tested t-test or different test that aims to determine the level of difference before and after the treatment of product legality training. So we can know the level of significance in improving the ability of tenant or small medium enterprises in preparing and understanding the legality of the product.

## **RESULT AND DISCUSSION**

Implementation of the experiment is the first to provide questionnaires in the form of several questions that must be answered by respondents, namely tenant or small medium enterprises (SME) contains the legality of products such as Household Industry Products (PIRT), Brand, Logo and packaging. Then conducted a trial to find out the improvement of ability in preparing the PIRT document, made of brands and logos and the selection of packaging in accordance with the type of product. Implementation of the training is done by PALS method approach, i.e. participatory action learning system, this is tenant or small medium enterprises (SME) given theory and then practice. For PIRT material theoretically given the understanding and importance of PIRT, then PIRT procedure of the next step is to arrange document submission of PIRT to Healthy Department in Sidoarjo Regency. As for the training brands, logos and packaging is done in two ways, namely the provision of theory and practice of making brands and logos according to product type, because brands and logos have a meaning value of the product made.

The results of product legality training were measured by questioning through questionnaires before and after training product legality. And able to explain the procedure of processing PIRT and meaning in the manufacture of brands and logos and the selection of packaging of its business products. Table 1 is the data of pretest and posttest tenant measurements in following the product legality training. Table 2 and table 3 is the result for paired sample test. Based on table 1, shown that training legality product there is a change that is increasing understanding and capability of PIRT document by tenant.

Based on the result of t-test analysis. or different test, it can be seen that significant differences in the implementation of financial management training to improve the ability of tenants in preparing the PIRT document and make the brand, logo and packaging selection according to the type of product.

In table 2, it can be seen that the number of respondents (tenants or SME) N is 25 people, with an average for pretest of 1.16 and the average posttest is 3.40. Based on the result of t test, it can be seen that the

difference of t value at pretest is on sig-2-tailed table smaller than the criterion value that is 0,05 (0,000 <0,05) hence can be interpreted that we reject Ho, where there is difference of significance of result training product legality.

In addition to improving the understanding and capability of organizing documents in managing PIRTs, brands and logos for their business products, several tenants are already in charge of PIRT, their brands and logos through the health and industry and trade offices of Sidoarjo regency.

Tenant/SME	Pretest	Posttes	Tenant/SME	Pretest	Posttes
1	1	4	14	1	3
2	1	3	15	1	3
3	1	3	16	1	4
4	1	4	17	2	4
5	1	3	18	1	3
6	2	4	19	1	4
7	1	3	20	1	3
8	1	4	21	1	4
9	1	3	22	2	3
10	1	3	23	1	3
11	1	4	24	1	4
12	2	3	25	1	3
13	1	3			

**Table 2. Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pretest	1.16	25	.374	.075
	Posttest	3.40	25	.500	.100

**Table 3. Paired Samples Test**

		Paired Differences							
		Std. Deviation	Std. Error	95% Confidence Interval of the Difference		t	df	Sig. (2-tailed)	
				Mean	n				Mean
Pair 1	Pretest - Posttest	-2.240	.597	.119	-2.487	-1.993	-18.754	24	.000

## CONCLUSION

The training of product legality has a significant influence in improving tenant ability in understanding and able to arrange document of PIRT arrangement and brand and packaging for its business. It can be seen from the significance value of paired t-test results, this is at pretest condition (before taking product legality training) and posttest when tenant has attended

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