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RATU PIRAKAS
Rak Sepatu Pipa Paralon Bekas (Parallel Pipe Shoe Rack)
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Abstract

"**RATU PIRAKAS**" The Paralon Pipe Shoe Shelf is the latest innovation that utilizes used paralon pipes as the basic material for making shoe racks. Shoe shelving can reduce waste or be environmentally friendly and can increase income for students. "**RATU PIRAKAS**" The Paralon Pipe Shoe Shelf was developed as a brilliant student idea, to reduce waste from households that are widely available in Semarang. So with the product creativity of students in the form of "**RATU PIRAKAS**" this can recycle paralon pipe waste into goods that are ready to use, high selling value and environmentally friendly. The method used to make used parallel pipes is to make a shoe rack design, collect used paralon pipes, cut paralon pipes, wash and sandpipe paralon pipes, rack up designs, paint shelves, and pack. So far the resulting product has been good, but no one has been sold due to the marketing process that has not been widespread, especially among the general public. Some problems encountered in the process of making "**RATU PIRAKAS**" this is the lack of manpower for the work, lack of coordination between members and the timing of unscheduled work. Our hope, student creativity products in the form: "**RATU PIRAKAS**" Pallet Shoe Shelf Paralon Used, acceptable to the community, and can increase student income. In addition creativity made from paralon pipes used to contribute to save the world from environmental pollution by using household waste that now generates a lot of waste in the form of used paralon pipes.

Keywords: Ratu Pirakas, Trash, Pipe Paralon Used

1. Introduction

Waste is a material that is wasted or disposed of from the source of human activities and natural processes that do not have economic value (Ecolink, 1996) .The problem of waste is a thing that will not end, because as long as there is life then waste will always be generated. Increasing the birth rate of the population greatly affects the large number of residents so that the use of goods for daily needs increases. It is the daily necessities that produce waste that can pollute the environment if not properly processed.

In line with the increasing number of people in Indonesia, especially in the city of Semarang, more and more houses are established. As we already know that the house is the primary and basic needs that are needed by everyone as a place of refuge and rest after a day of work. Used paralon pipes are non-organic waste that is difficult to decipher by bacteria decomposers. So that the waste of the former paralon pipes can pollute the environment. During this time, the waste of used paralon pipes is left alone without further processing to pollute the environment.

Shoe rack "**RATU PIRAKAS**" is a new innovation of the shoe rack that many outstanding. Our observations show that the paralon pipes still have the potential to be used as shoe racks "**RATU PIRAKAS**" (Paralon Pipe Shoe Racks). In addition to opening new business opportunities for students, making programkreativitas "**RATU PIRAKAS**" also indirectly can reduce waste of building materials and household waste in the form of paralon pipes used in the city of Semarang.

From the description, we see the potential of making shoe rack "**RATU PIRAKAS**" so promising. Moreover, by utilizing the waste of construction materials and household waste that has not been utilized

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optimally. By making shoe rack "RATU PIRAKAS", of course is a benefit for students. In addition to studying through college, students can also entrepreneurship.

2. Methods

2.1 Participants

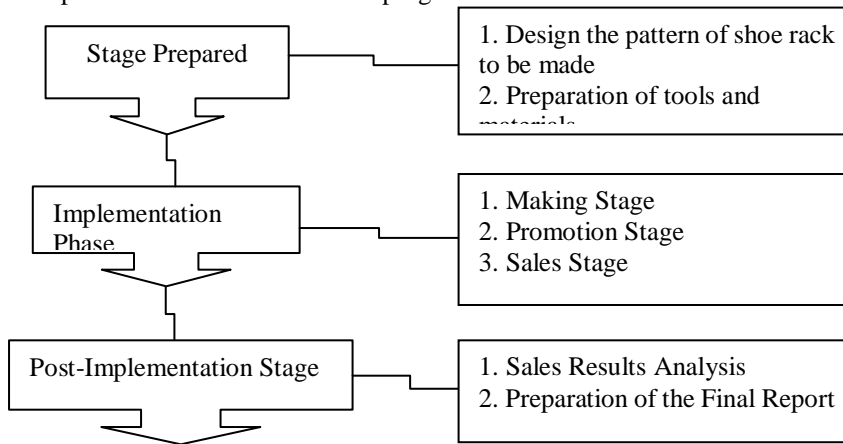
Entrepreneurship Student Creativity Program "RATU PIRAKAS" is chaired by Miftahurrohman, and 3 other members are Tin Rosidah, Erlina, and Tsania Filhil Masyhana.

2.2 Instrument

Instruments used in the manufacture of "RATU PIRAKAS" include paralon pipes used as raw materials, saws, glue, ruler, paint, scissors, and other materials.

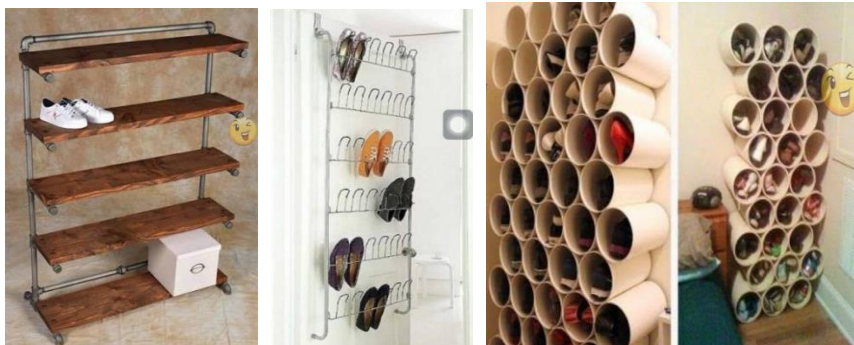
2.3 Procedures (or research design)

The procedures undertaken in this program are:



The procedure for making a shoe rack "RATU PIRAKAS" is described below:

a. Making shoe rack design to be made



Shoe rack design is derived from references on the internet and own innovations.

b. Collection of raw materials used paralon pipes



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Used paralon pipe materials collected were obtained from used-goods collectors around Semarang and the RSGMP construction project at UNIMUS.

- c. Pulling of used paralon pipes



Paralon cuts are adjusted to the size of existing rack designs.

- d. Washing and sanding of used paralon pipes



Paralon washed with clean water and soap to clean dirty paralon pipes.

- e. Making shelves according to design



Shoe racking is tailored to a predetermined design.

- f. Shoe shoe painting



Painting is done by color selection according to consumer wishes.

3. Results

The name of the product we will make is "**RATU PIRAKAS**" Shelf Pipe Paralon Used. Products made are household appliances made from used paralon pipes. Characteristics of this product in the form of household appliances that is shoe rack. We will make shoe rack products "**RATU PIRAKAS**" have various

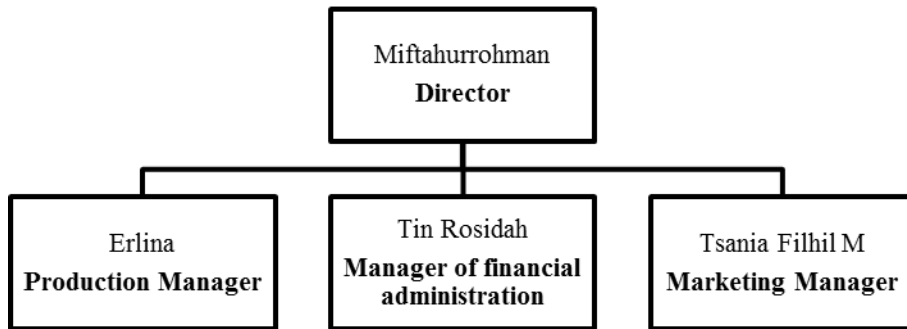
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types and forms vary. Even shoe rack products "RATU PIRAKAS" can be added with colors and attractive images in accordance with the request.

RATU PIRAKAS has the following business profile:

Company : **RATU PIRAKAS**

Field of Business: Household Industry



The achievement of the output targets can be seen in the table below:

No.	Target	Target Achievement (%)	
		Done	Not reached yet
1	Market survey	60%	40%
2	Fulfillment of tools and ingredients	50%	50%
3	Production place	70%	30%
4	Implementation of production	50%	50%
5	Marketing	75%	25%
	a. Product display	40%	60%
	b. Social Media	80%	20%
	c. Brochure, banner	60%	40%
	d. Expansion to another city	25%	75%
6	Report	50%	50%

Based on the information from the table, it can be seen that "RATU PIRAKAS" has conducted activities according to the schedule of activities.

Marketing strategies that have been done include making stickers, brochures, social media accounts, and offer to the community directly. Here's the design stickers and brochures that have been made:





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4. Discussion

The availability of shoe rack products "RATU PIRAKAS" with different types and shapes and different colors in the market requires students to always make innovations, it can improve students' creativity. Inorganic waste from household or construction material waste in Semarang area is also utilized to be innovative goods and useful for society and high selling value. In the process of product development of course there are difficulties that arise from within and from outside, including the lack of manpower for the work, lack of coordination between members and the timing of unscheduled workmanship. The design is still small and marketing strategy that is not running smoothly requires the team to always make innovations to the product and marketing for the purpose of this program is achieved.

5. Conclusions

"RATU PIRAKAS" is a shoe rack that is produced by utilizing used paralon pipes in order not to pollute the environment as well as through applied technology so as to improve social life in the form of student income. The implementation of this program has been going well but no one has been sold. The difficulties faced by the team in running the program are the lack of manpower, lack of coordination among members and the timing of unscheduled work.

6. References

[1] Ecolink. 1996. Sampah dan Lingkungan. Jakarta: Sinar Indonesia.