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## **EXTENDED ABSTRACT**

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# International Jasin Multimedia & Computer Science Invention and Innovation Exhibition





# 3R Bag

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Abstract—Responsible Consumption and Production (SDG 12) is one of the 17 Sustainable Development Goals established by the United Nations in 2015. SDG 12 has 11 targets to be achieved at least by 2030. This writing aims to ensure that one of the target of SDG 12 is that by 2030, waste generation can be significantly reduced through prevention, reduction, recycling and reuse. This study was conducted using interview methods, website references and library references. The findings of the study show that uncontrolled consumption and production has resulted in a lot of waste at the global level. Irresponsible human greed invites environmental damage. In conclusion, use the Reduce, Reuse, Recycle (3R) method to eradicate global waste and environmental destruction. Be a prudent consumer and producer. When we become a smart consumer, we also actually encourage entrepreneurs to be responsible producers. Responsible Consumption and Production (SDG 12) is one of the 17 Sustainable Development Goals established by the United Nations in 2015. SDG 12 has 11 targets to be achieved at least by 2030. This writing aims to ensure that one of the target of SDG 12 is that by 2030, waste generation can be significantly reduced through prevention, reduction, recycling and reuse. This study was conducted using interview methods, website references and library references. The findings of the study show that uncontrolled consumption and production has resulted in a lot of waste at the global level. Irresponsible human greed invites environmental damage. In conclusion, use the Reduce, Reuse, Recycle (3R) method to eradicate global waste and environmental destruction. Be a prudent consumer and producer. When we become a smart consumer, we also actually encourage entrepreneurs to be responsible producers.

Keywords—responsible consumption and production, sustainable development, recycling

#### I. INTRODUCTION

Our planet has provided us with an abundance of natural resources. But we have not utilized them responsibly and currently consume far beyond what our planet can provide. We must learn how to use and produce in sustainable ways that will reverse the harm that we have inflicted on the planet. Therefore, 3R BAG has been designed to create and implement awareness among the school students of being responsible consumption.

#### II. MATERIALS

3R Bag is created using recycled banner. Sewing tools is needed to complete the process. Students are using their skill from RBT syllabus about sewing technique.







### The Processn of 3R Bag

#### 1. Generate Creative Ideas

Creative ideas result from situations or problems that occur around. We found that there are several piles of used banners lying around in our environment. This pile of used banners without realizing it is actually capable of contributing to the production of a product to reduce environmental pollution. Therefore, they came up with the idea of creating this 3R bag.

#### 2. Sketching the Bag Design

We produce several sketches and consider the size and shape of the bag that will be used as a 3R bag product.

#### 3. Evaluate

Next, we also evaluate each sketch of the bag made and make improvements in order to be able to choose the best sketch that has many functions.

#### 4. Calculate and make a cost estimate.

Because the 3R bag product is made from recycled materials, i.e. used banners, the production cost is cheap.

## 5. Produce products using appropriate tools and materials.

3R bags produced using recycle banners. This bag is durable and does not rot easily.

### 6. Make a product presentation

The finished 3R bag is finally laid out and displayed and performs its function as a place to store items such as books, stationery, food supplies and water bottles.

#### III. METHODS

3R which is Reduce (Reduce), Reuse (Reuse) and Recycle (Recycling)

We reduce environmental pollution by using used materials that are used banners to produce recycled 3R bags.



#### IV. RESULTS AND FINDINGS

The initial findings of the questionnaire found that out of 10 selected respondents, 7 of them did not know that banners can be recycled into something that functions to store tools or goods.

After showing the results of the 3R bag, 10/10 of them know and understand that the materials around us can be recycled and produce other products that benefit the environment.

Based on the survey activities carried out, it is proven that recycling used materials in the environment can help prevent environmental damage and can protect the environment from further pollution.

#### V. CONCLUSIONS

Based on the questionnaire conducted, we had the opportunity to learn new knowledge and experience. Studying the effectiveness of teaching at school can be used as a study later. We saw for ourselves the effect of playing this game, a student can understand and be able to remember and master its components and functions quickly. Through this matching game, the students' learning sessions are more fun and interesting.

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