

## **“Clever Little Bag” Green Packaging Inovation from Puma**

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### **ABSTRACT**

"Clever Little Bag" a green packaging innovation from Puma. The needs for packaging products in the retail business has taking its toll for the environment due to the large amount of natural resources used and residual packaging waste. Puma, shoe manufacturer are trying to reduce this effects by innovating "Clever Little Bag". This research aims to analyze how "Clever Little Bag" succeeds in reducing Puma's carbon footprint significantly.

Keywords: Visual Communication Design, Packaging, Green Design, Sustainability

### **ABSTRAK**

*“Clever Little Bag” inovasi green packaging dari Puma. Permintaan dan kebutuhan untuk packaging produk dalam bisnis ritel ternyata berakibat buruk untuk lingkungan akibat banyaknya sumber daya alam yang terpakai dan limbah sisa packaging. Produsen sepatu Puma berusaha mengurangi dampak buruk tersebut dengan inovasi “Clever Little Bag”. Penelitian ini bertujuan untuk menganalisa bagaimana “Clever Little Bag” mampu mengurangi jejak emisi karbon Puma secara signifikan.*

*Kata Kunci: Desain Komunikasi Visual, Packaging, Desain Ramah Lingkungan, Ketahanan.*

### **INTRODUCTION**

In the retail world, specifically fashion retail, the effort to attract consumers' senses towards goods to be sold is an important thing that must be considered by producer. The whole human senses have a significant role in consumer experience when processing, evaluating, and deciding to buy a product. (Cutr Lund, 2015) Therefore, manufacturers are trying to display their products to attract potential customers, namely vision, smell, hearing, touch, and taste.

Packaging which become one of the elements has become an important element to attract consumers' attention visually. Good packaging affect the process in decision making by retail consumers. Clement, J. (2007). Moreover good packaging can facilitate in directing consumers by providing visual stimuli when consumers selecting products among other retail items. Altekard describes packaging as an assimilation of art, science and technology to protect, maintain and represent products in order to satisfy consumers.

To produce a packaging, it is necessary to utilize natural resources which unfortunately decreasing. Generally packaging is made from plastic and paper. To create paper packaging, for instance, it requires basic material as wood which is not in a small amount. This certainly has a negative impact on the environment, furthermore considering the short age of packaging. Generally packaging is only used once. After the product is bought by consumers, packaging is usually discarded and turned into waste which pollutes the environment. (Guirong Zhang, 2012)

Due to the bad effects above, the packaging industry nowadays tends to try to produce green packaging design. According to Wang and Yang (2008) Green packaging design is a designing packaging method which aims to reduce, reuse, and recycle the materials used to make a packaging.

This tendency turned out to be accepted by consumers. The results of Rokka and Uusitalo's research show that most consumers prefer green packaging and prefer product which is packaged with green packaging. This point indicates a change of the consumers' mindset and in what way of the ethical side as well as producer awareness towards environment is becoming one of the factors that determine consumer

## **DISCUSSION**

Packaging waste problems are currently becoming a serious problem, companies must not simply ensure that the products they create are well packed. Nowadays with the change of the consumers' mindset, the Company is required to be environmentally responsible and create packaging which is environmentally friendly, or termed as Green Packaging. (Dharmadhikari 2012)

Green packaging does not simply function as a regular packaging which protects and beautifies the product, yet it has an additional function to protect the environment by reducing the use of natural resources and reducing waste. The two main functions of green packaging are achieved through the 4R1D principles namely reduce, reuse, recycle and degradable. (Guirong Zhang, 2012)

1. Reduce. Aim to reduce the material and amount of packaging used in packaging design. When designing packaging, the company must be oriented to reduce the weight and amount of material.

2. Reuse. Aim to design packaging which can be returned to the company and after a simple treatment the packaging can be reused to pack new products.
3. Recycle. Aim to create packaging which can be recycled immediately after disposal, therefore reducing the amount of waste and pollutants.
4. Degradable. Aim to create a package that will self-disintegrate rapidly after being disposed therefore it does not stacked up in nature and become pollutants.

One type of packaging which consumes a lot of material, takes up a lot of space, and ends up being a pollutant which is non-degradable quickly is the shoe box. (Downing-Perrault, A., 2008)



Figure 1. Standard Shoebox  
Source: <http://sneakhype.com>

Shoe box aims to protect the shoes shape which is stored in it, therefore in general the shoe boxes are made of thick cardboard paper so that the shoes are not damaged during distribution and storage process. When displayed in retail stores, then the shoes are removed from the box so consumers can observe the shape of the shoes. Therefore, in this case the shoe box only functions as a protector, and has no aesthetic value or selling value. In addition, retailers also need a lot of space to stack shoe boxes so it will be easier to find if there are consumers who decide to buy.

Inside the box, the shoes are generally still re-wrapped with paper layer and there are additional scraps paper of paper to keep the shape of the shoe intact even if something happens to the box. The shoe box and all its contents are usually disposed immediately and become waste after the shoes are bought by consumers. The large size of the box and its rigid shapes make it difficult for consumers to store boxes, generally, they choose to buy separate shoe storage containers to protect their shoes collection. This matter, naturally, not only adding pollutants, but also wastes more natural resources.



Figure 2. Standard shoe packaging waste and carbon emissions  
Source: <http://puma.com>

Puma shoe manufacturer is aware of that problem. Used shoebox contribute for millions tons of waste in the landfill and contributes about ten thousand tons of carbon emissions trails in the atmosphere. Therefore in collaboration with San Francisco designer Yves Béhar from Fuseproject, Puma designed the "Clever Little Bag". This box is expected to be an alternative to conventional shoebox designs that are rigid, materials wasteful, and end up being pollutants. This shoe box design saves 65% of cardboard material and saves paper usage as much as 8500 tons, when compared to a standard shoe box.



Figure 3. Natural resources savings by Puma  
Source: <http://puma.com>

In addition, "Clever Little Bag" does not require a laminated print, coating paper or scraps paper. This packaging simply need a small space in shipping as well as storing, its weight is also much lighter when compared to a standard shoe box. Therefore as industrial standards, this innovation is also economically profitable. The use of "Clever Little Bag" eliminates the need for plastic bags or paper bags, therefore when consumers buy Puma shoes, retailers do not need to provide bags anymore because consumers can directly carry "Clever Little Bag" and take it home.

From the data obtained through the Puma’s official website, it is identified that the Puma's carbon emissions trails has decreased significantly from year to year, this indicates that producers are committed to take part of care of preserving environment and reducing the negative impact of their industry towards the environment.

**T.7 CO<sub>2</sub> EMISSIONS RELATIVE TO TURNOVER**  
[tons CO<sub>2</sub> per € million turnover per year]

	<b>2017</b>	2016	2015
Scope 1* emissions	1.9	1.9	2.2
Scope 2* emissions	9.7	10.3	10.5
Scope 3* emissions	50.4	54.3	56.8
<b>TOTAL</b>	<b>62.0</b>	<b>66.5</b>	<b>69.4</b>
Annual turnover PUMA [€ Mio]	4,136.9	3,627.0	3,387.4

Figure 4. Table of 2015-2017 Puma’s Carbon Emissions  
Source: <http://puma.com>

The packaging innovation from the Puma and fuse project is expected to change the face of the shoe industry and eventually, shoe manufacturers are making action to produce packaging which is more economical, practical and environmentally friendly.

Puma's success in designing "Clever Little Bag" thus be able to reduce its carbon trails effectively can be analyzed using the following approaches:

**Avoiding Over Packaging**

Over packaging is one of the sources of pollutants that can actually be prevented. Over packaging is also uneconomical in terms of production, frequently the packaging weigh contributes 50% of the overall product weight, therefore it become inefficient in the delivery process. By reducing the amount of packaging, packaging becomes more environmentally friendly and reduces the amount of waste that might occurs when the packaging is disposed by consumers. In this case, Puma reduces the over packaging by using a patterned cardboard box instead of an ordinary cardboard box. This patterned cardboard provides a structure to support the fabric pouch in order to resemble the shape of a shoebox and protects the shoes inside.



Figure 5. Clever Little Bag by Puma  
Source: <http://puma.com>

### **Using Minimum Amount of Material**

Good packaging design should also pay attention to the amount of natural resources used in creating the packaging itself. The use of natural resources in large quantities is not only bad for the environment but also economically inefficient. Therefore, once designing packaging, designers need to think of a strategy so that the products produced only use natural resources when necessary.

According to data from the Puma shoe manufacturer since shifting to "Clever Little Bag" they have managed to save 8500 tons of paper, 20 million megajoules of electricity, 1 million liters of fuel oil and water. In other words, Puma managed to reduce 60% of the consumption of natural resources annually since the use of "Clever Little Bag".

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Figure 7. The Clever Process by Puma  
Source: <http://stylefrizz.com>

It does not simply saving resources in utilizing raw materials, Puma has also succeeded in reducing their carbon emission trail. Since switching to "Clever Little Bag," which is lighter and space-saving, they have managed to save 500,000 liters of diesel fuel in the distribution process of their products. They also reduce the use of 275 tons of plastic.



Figure 8. Clever Little Bag  
Source: <http://stylefrizz.com>

### Material Quality

Beside reducing the amount of packaging and raw materials used, the selection of materials suitable for packaging can also reduce the negative effects on the environment. Frequently, producers simply choose packaging materials for aesthetic reasons only without considering the needs of the product to be packaged it selves. Environmentally friendly packaging is made from materials that are environmentally



friendly and comply to the 4R1D principle, namely: reduce, reuse, and recycle and degradable. Additionally, producers also have to select materials that are easily processed into packaging and in the producing process do not leave negative impacts on the environment.

"Clever Little Bag" is made from non-woven material, which means reducing waste that usually occurs during the sewing process, and because it does not use plastic materials, all parts of the "Clever Little Bag" can be easily recycled when it is no longer used. Consumers just need to put unwanted packaging in the boxes "Puma Bring Back In" provided by Puma.



Figure 8. Puma Bring Back In  
Source: <http://fashionspeaks.net>

## Secondary Uses for Packaging

Aside from the production and shipping process, it is important to consider that the packaging can be reused by consumers for other purposes to avoid of becoming waste and pollutants. "Clever Little Bag" is designed to be reused by consumers as a travel bag to carry shoes when traveling.



Figure 9. Clever Little Bag  
Source: <http://stylefrizz.com>



Besides as for carrying shoes, "Clever Little Bag" can also be reused for various household needs.



Figure 10. Clever Little Bag Repurpose  
Source: <http://heritagepaper.net>

As one of the important consideration in designing green packaging is how to improve the efficiency of natural resource use, and utilize all packaging components to be useful not only as a medium to protect and selling but also have added value beyond its basic functions (Liu & Zhang, 2010). Aesthetically, "Clever Little Bag" also has added value, therefore it can be utilized by retailers to display products in an attractive way.

### **Conclusion**

Packaging is an important element in retail. It not only serves as a protective, packaging can also be used to facilitate product selling. However with the declining amount of natural resources and the increasing amount of packaging waste, producers are currently begin to switch to green packaging which is more environmentally friendly. With the trend of consumer who currently prefer environmentally friendly products, the decision to modify regular packaging into green packaging can become motivation for consumers when selecting products. (Thøgersen, 1999)

Shifting from standard packaging to green packaging at the first is glance, it seems trivial, however when applied on a large scale and consistent, it can bring a positive impact to the environment.

This instance is proven through the success of Puma replacing its standard packaging with "Clever Little Bag" which can be seen directly at the reduced carbon emissions and natural resource consumption by Puma. Puma proves that replacing standard packaging to green packaging does not mean sacrificing the main function of the packaging itself and the marketing and the company's economic needs. Moreover, Puma succeeded in launching a new brand statement "reducing its paw print." Which literally means "reducing carbon emission trails."

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