# OBLOG CARDBOARD FURNITURE THE EXPLORATION OF CARDBOARD FOR BENCH DESIGN



#### Introduction

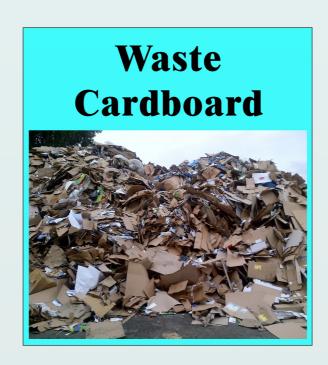
Cardboard is a paper-based sustainable material that made from recycled paper and environmentally friendly. Based on the exploration of material and Eco-Designconcept, the cardboard were developed into an indoor furniture design. Layers of cardboard were stacked, glued and cut into shape and thickness of a bench. The use of material on this bench design, can help to reduce the production cost and subsequently promotes sustainability in product design extensively and environmentally

# **Design Objective**

- 1. To study the use of recycled paper based materials for furniture manufacturing.
- 2. To propose the design of cardboard sitting bench.

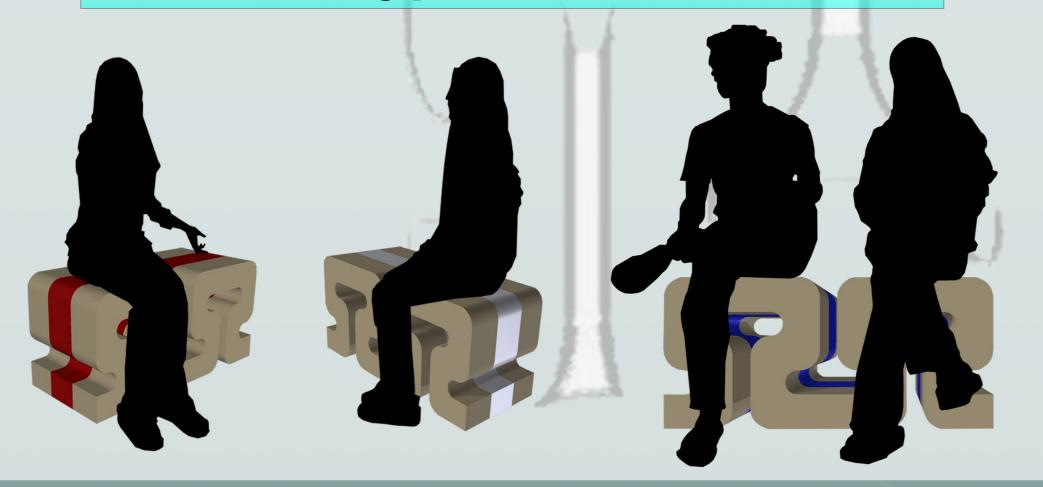
#### **Problem Statement**





Based on the statistic obtained from the Jabatan Pengurusan Sisa Pepejal Negara, Kementerian Kesejahteraan Bandar, Perumahan dan Kerajaan Tempatan Malaysia, over 12% disposal waste in Malaysia is from paper-based materials. Therefore, to reduce wasteproduction and sustain the longevity of sustainable environment, an innovative approach to the this recyclable material into tangible product is immanent. By focusing on cardboard as green material, the potential to synchroze the timber based furniture market look promising for the demand of modern contemporary furnishing.

# The Prototype Colour Schemes



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#### **Commercial Potential**

There are a variety of materials used in the production of timber based furniture designs. At the moment, this composite-based material furniture is recognized for limited edition production. Nevertheless, due to the contemporary lifestyle, that emphasis on the minimalist style of interior furnishing, the demand for unique, one-off, limited edition furniture are luring into people's interest. Moreover, in terms of production, it promotes minimum operating cost in its production and has potential in generating good profits based on the use of low cost material.

### **EcoDesign Strategies Wheel**

New concept development

Optimisation of the end of life system

Increase of the useful life time

Reduction of the environmental impact during use

R

Distribution

optimisation

Reduction of material consumption

Environmentally oriented selection of materials

Reduction of the environmental impact of production process

# **EcoDesign On The Right Track**

#### Zero Emission

harmless to the environment, zero pollution and the natural of the material that can be recycle or recreate or redesign into upcycled product / furniture design

## **Green Material**

cardboard as paper based material to be explore into user-centered product / furniture design

# **Novelty / Invention**

'Oblog' bench design promotes potential product design for environmental sustainability. The design solution sees smart utilization of material that typically sees as waste. Aesthetically, it is beautiful and simple.

#### Reference

- 1. Olive Koyama. 2006, Ornamentum Volume 23, Number 3
- 2. Laura Badalucco, www.perinijournal.it Furniture and Cardboard
- 3. Mick Eekhout, Fons Verheijen, Ronald Visser, 2008 Cardboard in Architecture, Page 28