



## **Packaging Design For Educational Toys Bornea Toys With Mega-Pack & Well-Organized Concept**

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### **ABSTRACT**

*A packaging is a silent salesman that determines whether consumers decide to buy the product or not. Consumers can see, feel, touch, recognize, and pay attention to good quality toy packaging. Bornea Toys is a product that serves children, in that reason, the researchers designed the packaging in which becomes a storage, protective, and product interaction media with consumers. In phase of design method, researcher used: collecting theoretical foundations, formulating design requirements, making mood & reference boards, designing packaging frameworks, packaging graphics, and prototypes. The final result is a prototype of the packaging design of the Bornea Toys toy, with a concept of 'Mega Pack & Well-Organized', meaning that in one packaging can store 10 different models of animal toys. The novelty of this design lies in the configuration of the storage layout of the toy pieces, where the layout arranged by type of shape so as to present a new experience of storing toys for children, because they have to guess the position and arrangement of these pieces like a puzzle game. There is a manual book in this package that can make it easier for children to play Bornea Toys.*

**Keywords:** Design, Fauna, Borneo, Packaging, Children's Toys

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### **ABSTRAK**

Pengemasan merupakan silent salesman yang menentukan apakah konsumen memutuskan untuk membeli produk atau tidak. Konsumen dapat melihat, merasakan, menyentuh, mengenali, dan memperhatikan kemasan mainan yang berkualitas baik. Bornea Toys merupakan produk yang diperuntukkan bagi anak-anak, oleh karena itu peneliti merancang kemasan yang menjadi media untuk menyimpan, melindungi, dan berinteraksi produk dengan konsumen. Pada tahap metode desain, peneliti menggunakan: mengumpulkan landasan teori, merumuskan persyaratan desain, membuat mood & papan referensi, merancang kerangka pengemasan, grafik pengemasan, dan prototipe. Hasil akhir berupa prototipe desain kemasan mainan Bornea Toys, dengan konsep 'Mega Pack & Well-Organized', artinya dalam satu kemasan dapat menyimpan 10 model mainan hewan yang berbeda. Kebaruan desain ini terletak pada konfigurasi tata letak penyimpanan mainan, dimana tata letak diatur berdasarkan jenis bentuknya sehingga menghadirkan pengalaman baru menyimpan mainan untuk anak, karena harus menebak posisi dan susunannya. potongan seperti permainan puzzle. Terdapat panduan dalam paket ini yang dapat memudahkan anak-anak dalam bermain Bornea Toys.

**Kata kunci:** Desain, Fauna, Kalimantan, Kemasan, Mainan Anak.

## **INTRODUCTION**

Packaging design is an important part of the visual communication design of a product and occupies an important position in everyday life. Whether clothes, food, household appliances, and

even toys cannot be separated from the packaging. Packaging design is the 'coat' of a product so that the product is protected (Nie 2019). In addition to providing product protection, packaging also has four main functions, namely conveying the necessary information to consumers, helping to simplify the decision-making process, creating positive emotional responses, and facilitating broad brand recognition (Mzoughi, Brée, and Cherif 2017). Also, it should be noted that different products will present different packaging designs, this is because different products are needed by different consumers. As the leading salesman of a product, with a specific target market, a product must have a packaging design that has its own distinctive characteristics (Nie 2019).

Product packaging aimed at children, especially toy product packaging, has special considerations that must be made to overcome children's cognitive limitations. Interesting components such as graphic elements, colors, and common cartoon characters are included. These visual elements make packaging more accessible to the child's memory, and less demanding than verbal elements (Brée 2012). In addition to the visual appearance aspect, toy packaging also needs to pay attention to the storage aspect in it, as explained by Suminah (2020) in an interview with the author during a case study at TK Negeri 1 Samarinda, Kalimantan-Indonesia, that children need to be able to put their toys back and tidy them up in their original place.

The product that will be the object of paper is a wooden educational toy product for preschoolers with the theme of the endemic fauna of Kalimantan, named 'Bornea toys'. The concept of 'Mega Pack & Well-Organized', meaning that the packaging can store 10 different models of animal toys in one package and can be neatly arranged. The novelty of this design lies in the configuration of the storage layout for the shape of the toy pieces, where the layout of the pieces is arranged based on the shape so as to present a new experience of storing toys for children, because they have to guess the position and arrangement of these toy pieces like a puzzle game. Equipped with a guide book, which is intended to make it easier for children to play Bornea toys.

## LITERATURE REVIEW

It is stated in the problem limitation, that this design will not focus on the packaging aspect (Pahlevy and Mardiana 2021), which opens opportunities to develop the packaging, based on the explanation of the importance of the function of packaging design as described above. The results of this paper broadly consist of a product line that contains 10 animal toy modules consisting of Hornbills, Rhinos, Borneo rhinos, Mahakam dolphins, Borneo pygmy elephants, Honey bears, Bornean orangutans, Red cats, Sunda clouded leopards, Bekantan (*proboscis monkeys*), and the Owa (*Bornean white-bearded gibbon*). These products are made of pine wood, have a disassembly system, and have many pieces of shape and have their own system characteristics. This product is designed to have the same body shape for every 2 animals, which makes there are 5 body shapes for 10 animal toy modules. Provide a packaging design that is able to accommodate the layout of the storage of these toy shapes so that children are able to sharpen their cognition skills as a separate opportunity.



Figure 1: 10 Animal figures/toys in Bornea Toys.

Based on those basis, there is an opportunity to develop packaging on a prototype design for Bornea toys - children's educational toy products that take the form of animals endemic to Kalimantan. For this reason, the authors designed the packaging for Bornea toys to have a storage container, protector, as-well a media for product interaction with consumers.

## Packaging Function

*Bizongo (2018)*, said that the role of packaging in toy products is to secure and support the product during transportation and stacking. But the packaging is also easy to open and use, able to be held easily, and should be no sharp edges. Nowadays, when it comes to the form of packaging, the shape tends to be determined or resembling by the toys inside.

In some cases, the packaging itself can be an interactive and interesting tool. There is a wide variety of action figures, puzzles, cars, etc., which make toys part of the package. For figurines or dolls, the packaging can be turned into a 'home' for the toy. For example, packaging is part of the assembly to make the toy (*ALPMM, 2018; Bizongo, 2018; Lien 2020*).



Figure 2: Additional usage in packaging

(source: [alppm.com/design-packaging-for-toys/](http://alppm.com/design-packaging-for-toys/), quoted in November 18<sup>th</sup>, 2020)

## Visual Communication of Packaging

A very important factor to consider when designing toy packaging is the marketing power that the packaging has. The packaging should be attractive to both parents and children. Good packaging can give a higher value to toy products. Adding images that connect with the audience, such as a child playing with the toy, a smiling child holding the toy or something similar can influence consumers.

Educational toys are intended for children, so the packaging must also be designed with children in mind. Designing packaging for children is very different from designing packaging for adults. Children have a lower sense of maturity and cognition compared to adults. They perceive sensory input differently from adults.

Toy packaging should use clean and pure colors that appeal to the child's senses. Illustrations and graphics on the packaging should also be in color to attract children's attention and influence them to buy the product. 3D graphics are also widely used to make the packaging unique and special. The overall feel of the packaging should be colorful and fun to attract children's attention.

Packaging must also be unique in order to stand out in the highly competitive toy market. Toy packaging must be able to communicate with the audience emotionally, and increase the desire to buy the toy. Apart from color, Experimenting with shapes is also important, but make sure the packaging has enough space to add supporting content such as logo, consumer age group, toy function, content, toy rating and brand details (*ALPMM, 2018; Bizongo,2018; Lien 2020*).

## METHODS

The method used is the design method, several stages are carried out including problem identification, then primary and secondary data collection or literature study, implementation of observations (making moodboards & reference boards, packaging framework design, packaging graphic design), followed by analysis, then the author will compile the results of this analysis into a design concept.

Collection of theoretical foundations, formulation of design requirements, and design prototypes. Until finally created a design prototype of this design. Regarding the analytical approach, in this scientific article the author will focus on product requirements analysis tools and design analysis consisting of analysis of forms, systems, materials, and colors. In the design concept process, the author breaks it down into 5 stages: Concept Description, Initial Sketch, Frame Design and Packaging Graphics, Final Design and Manual Book, the last stage is the Design Prototype.

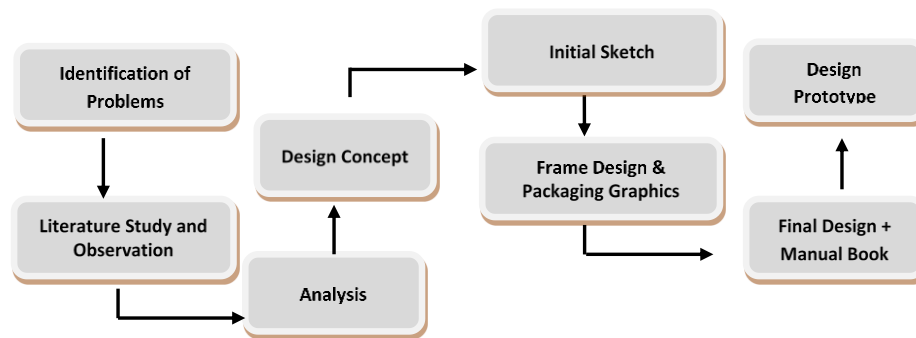


Figure 3: Research Flowchart

Source: Author documentation

## RESULTS AND DISCUSSION

### Product layout design inside the packaging

The placement of toys is arranged according to the division of the animal's body parts, namely the body, legs/hands, head and tail. This makes it easier for children to rearrange toys into packaging and be more disciplined in putting them in their place. This package is made of black mock-up rubber that has been shaped according to the shape of the body, legs/hands, head and tail of each animal.

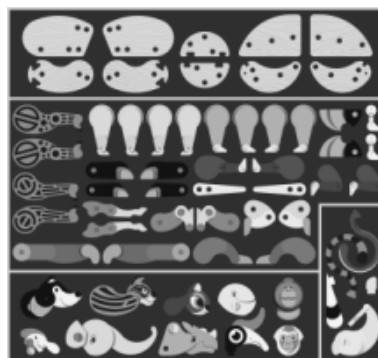


Figure 4.: Layout of toys

source: Author documentation

### Framework Design

The packaging is made in a square shape with a framework made of 3 layers of corrugated paper so that with a packaging size of 40 x 40 x 5 cms it will look sturdy. On the frontside of the package there is an opening with a lockage that is easy to open and close again, so that children do not have to require parental assistance to open it. On the inside of the package there are dividers for each layout of the body, legs/hands, head and tail. To put the toy on the inside of the package, there is a black rubber mockup with holes for adjusting the shape of the body, legs/hands, head and tail.

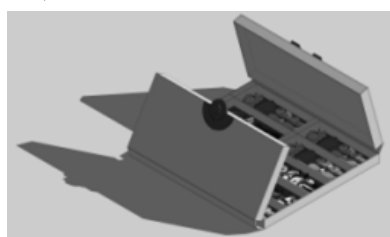


Figure 5: How to open the packaging

source: Author documentation

## Graphic Design

The packaging graphic is designed to display 10 animals contained in the Bornea toys, this is to show the identity that there are 10 Bornea animals in the package. The colors used match the colors of the Bornea toys, combined with the forest atmosphere, by adding some green in the form of plants that reflect the forests in Kalimantan. Added a brown color to the written circle of Bornea toys to visualize the wood which is the shelter for the animals in the Kalimantan forest.



Figure 6: Packaging folding line

*source: Author documentation*

## Final Design

The packaging graphic is a combination of 10 animal images in Bornea toys. On the frontside, the graphics are divided into 2 because there is a lockage in the middle of the package. All animals are arranged in a circle on the words BORNEA TOYS by showing some of the animals, namely the head of each animal. On the rearside of the packaging, all the animals are arranged horizontally with the words Bornea toys on the top and bottom.

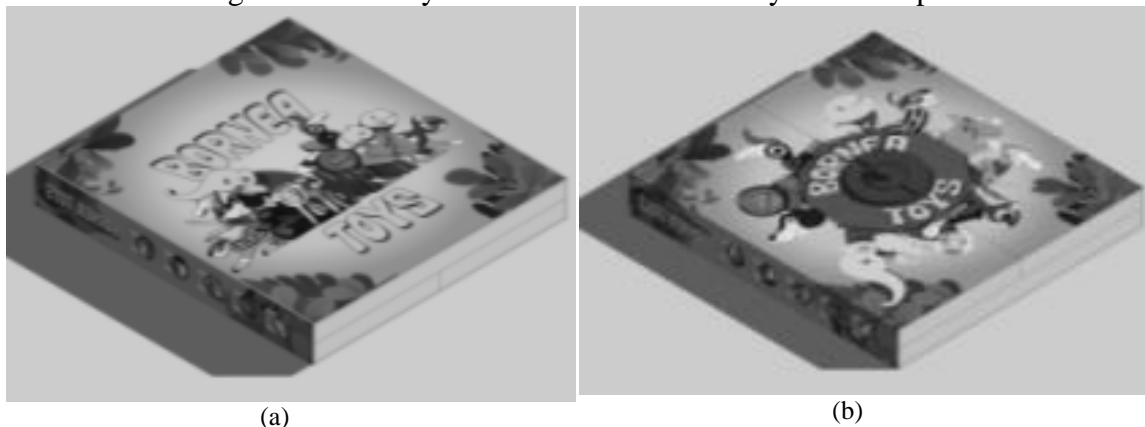


Figure 7: (a) Rearside graphic display (b) Frontside graphic display

*source: Author documentation*

## Manual Book

In this package there is a manual book that will help children to arrange the toy parts in Bornea toys. The manual book is arranged according to each animal, so that children will easily understand it well. The manual book is divided into a Front Page, a List of Contents, How to Arrange each animal from head to tail. In this manual it is clearly described where the connection is in the body with other parts (legs/hands, head, tail). This clear picture will make it easier for children to read visually and can arrange these Bornea animal toys well. The colors of the animals displayed in the manual book are also adjusted to the actual colors of the bornea toys, so that children have no difficulty imitating how to arrange the animals.



Figure 8: Front page of manual book  
source: Author documentation





Figure 9: Manual book 5 Bornea Toys Animal  
source: Author documentation



Figure 10: Manual book 5 Bornea Toys Animal  
source: Author documentation

## CONCLUSION

The packaging with the concept of "Mega-Pack & Well Organized" can store products containing 10 models of Bornea toys in one package and can be arranged neatly. The novelty of this design lies in the configuration of the storage layout for the shape of the toy pieces owned by Bornea Toys, where the layout of the toy pieces is arranged based on the type of body shape, legs/hands, head and tail so as to present a new experience of storing toys for children, because they have to place their toys in a different position. and the arrangement of these toy pieces is like a puzzle game. With an easy-to-understand manual book on the packaging, it can help children arrange toys easily without the need for help from parents.

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