

DEVELOPING AN INTERACTIVE PACKAGING FOR

CAT'S VITAMIN PRODUCT



UNIVERSITI TEKNIKAL MALAYSIA MELAKA

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JUDUL: DEVELOPING AN INTERACTIVE PACKAGING FOR CAT'S VITAMIN PRODUCT

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DEVELOPING AN INTERACTIVE PACKAGING FOR
CAT'S VITAMIN PRODUCT

MOHAMAD AZAN BIN KAMARUL AZHAR



This report is submitted in partial fulfillment the requirements for the
Bachelor of Computer Science (Media Interactive).

FACULTY OF INFORMATION AND COMMUNICATION TECHNOLOGY
UNIVERSITI TEKNIKAL MALAYSIA MELAKA
2017

DECLARATION

I hereby declare that this project report entitled

DEVELOPING AN INTERACTIVE PACKAGING FOR CAT'S VITAMIN PRODUCT



Is written by me and is my own effort and that no part has been
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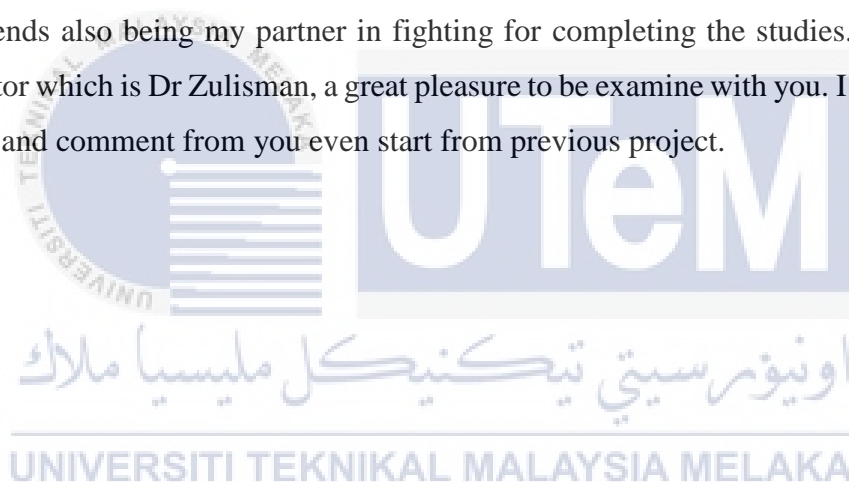
DEDICATION

I would like to dedicate this work to my family that always support and pray for my successful. This not a short-terms but it's about my entire research and studies. Besides, there's more individual and person needs to be thanked to, my friends, all my lecturers that had taught me officially and un officially. These are the strength and spirit that lift me up and encourage me to complete my studies and this project. Additionally, to my supervisor which is Muhammad Helmy bin Emran, thank you for advising and keeps taught me through this project until the end of the submission. For my evaluator, Dr Zulisman bin Maksom, thank you for criticizing and reviewing my project.



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ABSTRACT

Vitamin-B by Khazanah Rimba Cattery is a new product from the company that required a packaging design. The packaging for the product was selected to be a new media element by integration an interactive media with it. Augmented Reality(AR) was one of the technology that currently being widely used and brings into this project to create a different kind of product. By using AR, it may help the product and this project to achieve the objective for this project which is mainly for brand recognition. AR can be previewing many type of media content like video, animation, 3d model and others several formatted. Continuously, this project may create a different environment for a packaging design and deliver a better progress in delivering information.

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LIST OF ABBREVIATION

AR	AUGMENTED REALITY
UTEM	UNIVERSITI TEKNIKAL MALAYSIA MELAKA
SME	SUBJECT MATTER EXPERT
USDA	UNITED STATES DEPARTMENT OF AGRICULTURE



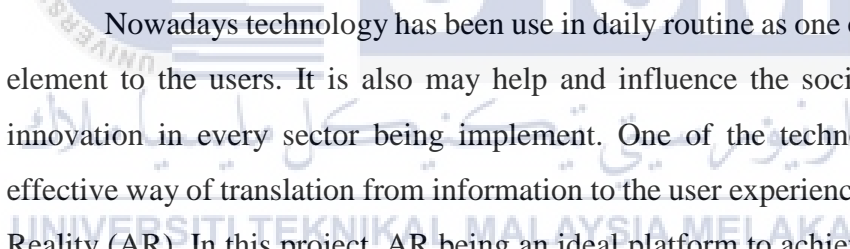
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CHAPTER I

INTRODUCTION

1.1 Introduction



Nowadays technology has been use in daily routine as one of the beneficial element to the users. It is also may help and influence the society in terms of innovation in every sector being implement. One of the technology being an effective way of translation from information to the user experience is Augmented Reality (AR). In this project, AR being an ideal platform to achieve the objective as we know it is suitable for branding and marketing sector. AR may include several senses of human respond which is can deliver a new way of information effectively including new user experience.

1.2 Problem Statement

Nowadays there's a lot of company require a good branding production as their marketing strategies. In terms of strategies, they must ensure the plan they made and choose must deliver a good and positive result for the project. A good branding created for a product or a company will make their product or profile be remembered by audience. In addition, appearance of the company or product must be well designed to capture the attention of the audience through the market field. All this point may be needed when a company want to produce a new product to be fit into the market. In order to achieve the goals, the product must through branding development process to ensure the product performing well among the brands in the market.

Therefore, for those purposes this project will be conduct and plan a good development for a product branding with an enhance of technologies. It is referring to an interactive media which is Augmented Reality (AR) that's been trust as a good media platform for a new product. AR application will deliver the product information and promote itself effectively with the existing of the interactivity and a new attraction for the customer. Next, it also may give a new experience to the customer with the interaction and get to know the product information completely.

1.3 Objective

- To study about the Khazanah Rimba Cattery's vitamin for cat and its competitors.
- To develop an effective branding package for the product with interactive media usage
- To test brand recognition of the product compared to other competitors

1.4 Scope

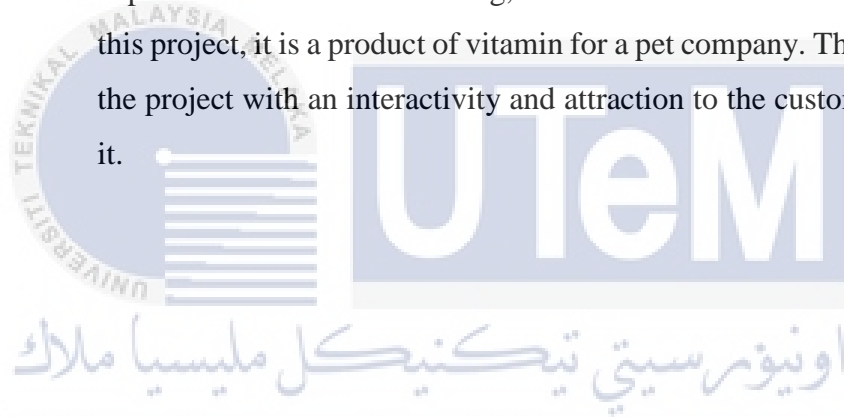
For this project, will be focus on a pet company and developing a brand for their new product which is Vitamin for cat. The product will be design with a new brand profile as the appearance of the new product before releasing it into the market. The packaging itself will be design based on the suitability and reliability of the design layout to ensure the result of the information being well inform to the target user. The product is about a vitamin supplement for cat category to enhance their health and give additional mineral along their growth processes.

Augmented Reality (AR) being selected as an interactive media that will be use as additional for this project element to increase the successful rate of the result. AR application will be added to display specific information of the product. The whole AR will be show a modelling of the product with some information that will be integrate by the interaction from the user. This technique may help the audience being well inform directly from the product and it may help user understand the product much better. In addition, the product itself will be included with some print ads as its formal information display for physical appearance that usually being use for fast description.

In addition, this project focus group mainly will be to the group of cat's lovers which is most suitable as the audience to this project. The vitamin product design will be a challenge to capture the intention and trust for the product among the others in the market. Next, the information or details of the product needs to be well informed and designed to ensure these target audience really get into it and they may compare this product from the rest of it.

1.5 Project Significant

The significant of this project is that it will deliver a new way of interpretation through product design. Hence, information may be deliver to the audience completely with a new way of interaction Augmented Reality (AR) platform. Instead of its benefit for the product information, that's also cause a new way of product compete through the market among the brand. The limitation of the information being delivered to the audience may be enhance by the AR application which it supports a good explanation with 3D modelling, animation and others method. Focus on this project, it is a product of vitamin for a pet company. This AR may help the project with an interactivity and attraction to the customer that buying it.





1.6 Conclusion

Lastly, I can conclude that Augmented Reality (AR) application being useful from those problem statement and objective. This technology may enhance the way of branding and marketing product in the market sale. On top of that, it may help the product itself carrying and deliver that information to the audience effectively. Additionally, by implementing at the product industries may increase the percentage for the product successfully sells in the market. This project may give a positive outcome for the industries to seek a new platform or ways in achieving their company goals especially marketing of new product.

CHAPTER II

LITERATURE REVIEW AND PROJECT METHODOLOGY

2.1 Introduction



Nowadays many demand from various kinds of industries to produce a good way of creating and sell their product successfully through market. Augmented Reality application is one of the newest features that can be implementing on many kind of development project. Specifically, for product packaging design, augmented reality has been used widely in achieving any kind of focus objectives.

Khazanah Rimba Cattery is one of local pet's companies that demand for a solution. They are seeking for a development of packaging product for Cat's Vitamin product. Additionally, augmented reality application may be implementing as enhancement for the product to be differently and competent to be put in the market.

This chapter is about the literature review of the whole project that consists of project domain, existing system and the requirement for the project to be successfully developed.

2.2 Domain

Augmented Reality

Augmented Reality can be defined as one of the latest application that allow the combination of reality and virtual into a platform of user experience. Citing from (McKalin, 2014), it is an interaction of defining the information into the audience as real time integration. It is an 3D perspective of view which was granted much better user experience compare to the traditional way. This technology already be a mainstream for the world, since there's many company implementing task using this application regardless any specific requirements. (White, Schmidt, & Golparvar-Fard, 2014) again stated that Augmented Reality application is a combination of two worlds which is virtual and reality, and the information or images usually been created and generated by computer graphic. An enhanced layer of digital information will use to augment the environment which containing the information. (Ismo, 2009).

New Media

New media is a new way of discipline on how the media being presented. An additive features in new media from the old media may become a better solution achieving target information. (Weiser-Friedman & Friedman, 2008). Besides that, new media closely related as a medium that allow the user to interact and access under any circumstance. (Manovich, 2002). In addition, new media will continuously evolve and upgrade through the years. Commonly new media may

hold generated graphic images, hyperlink, and others part of digital information, yet these applications may continuously be upgraded and overcome any limitation through the new media itself. (Is & Media, 2015)

Packaging Design Product

Packaging design is about the appearance, information and outer layer of a container that represent the product identity to the customer. The process creating the layout may become a simple layout or complex package, hence producing a good packaging may successfully deliver packaging information, reaching target audience and the product being noticed in the market cinema. (Allen Rabinowitz, 2017). According to (Kumar M, 2006), packaging design can be defined as the layout composition that must be considered before it can be marketable. (Pathak, 2014) said that a packaging container that seem strong and firm to hold the shape, functional and other design element may contribute for the customer to buy and looking for the product.

Creating a very good packaging product, the design and architecture of the product must be well-planned. According to (Rusko et al., 2011), the element of package design generally being decided by this two component which is graphic and structure. The first component was related with the color, typography and images in the packaging. Additionally, choosing a right color may influence on the appearance and perspective for the audience to get and buy them. Second component consist of shape, size and material features which is defined as a critical task to be designed which it's needs to produce an approach for a solution layout based on form and material of packaging. The function of designing a good package is about the communication. (Rusko et al., 2011) also stated that, there's three main function of package which is to provide information, conveys meanings and helps decision making. Next, a verbal or non-verbal type of sign may be used in product communication. Non-verbal sign is a style of conveying data through

images and sign without any written languages. It is much stronger and reliable than verbal sign but still both styles of sign may be implementing on a package design.

In terms of package communication that needs to be suit on the packaging layout, two components which is color, typography and images being categorize in graphical elements while shape, size, and material in structural element category.

i. Color

(Rusko et al., 2011) has indicated that colors may help the potential buyers to recognize the identity of the product, critically in the market arena. Colors also may differentiate the product with the others by it's color brand and purposes. Colors also being used to represent the company identity and show their qualities and significant value in the product.

Based on (Rusko et al., 2011), colors roles can be identified into three roles:

1) Colors attract attention

Colors may become a good feature to attract audience towards them by matching the color to represent the product inside. Hence, choosing a color to indicate the product and brand should balance.

2) Colors stimulate to beauty selection.

Nowadays, every user may see products in the market differently based on their interest. Next, by using colors to create a beauty touch on the package and make it looks competitive may motivate user choosing it compared to others product. However, the target user must be clarified as (Rusko et al., 2011) gives an example about Geisha chocolate colors discussion, half of the voice may said that the pink color was the main branding while the rest may have said it is too girlish and contradict with food product.

3) Colors contain information and type

Colors on packaging may be understood based on general knowledge of user, for example dark colors were considered mature while light colors were feminine. Based on these examples, it shows that colors may carry early information as an introduction for the users.

ii. Words, typography

Words and typography are essential demands in literal communication to the audience. Typography can be used to emphasize some information on packaging products. Typography may consist of font types, font size, text placement and other elements. Literally, typography creates a direct language on the packaging that brings the information for the user to read and understand.

iii. Images, Symbol, Logos

Visual layout on the package is crucial to display or visualize exactly the product looks like. Images may give a great impression on picturing the product quality. As a product of flour, pictures of a delicious cake are one of the examples of image usage showing the qualities of the flour.

iv. Material

Most commonly known materials are paper, plastic, metal, glass and there's more of it. Each of them has its own strength and weakness based on specific functionality. In addition, paper is one of the finest materials due to its capability to be recycled, safe and cheap to use. Although, other materials like plastic, aluminum and tin are bad for the environment but they're still being used due to their high quality. (Rusko et al., 2011) has mentioned that customers are more attracted with transparency features on packaging.

v. Shape

Package shape concerning about how's the product being together which is referring to the gap between them. Rectangle shape seems to be a lot easier to be implemented and organize into storage. Thus, this may help for the product to be well handling by wholesalers and retailers.

vi. Size

Many products have been created in various size of package and they're usually related with type of product in it. Most importantly in sizing matters, it's related with satisfaction for the customer deals with it. Additionally, avoiding creating a big packaging for a smaller size of product may mislead the customers to experience it.

2.3 Existing System

(Manovich, 2001) said that new media focusing on distribution and demonstration rather than production basically. Usually, existing product may have printed element on it but new media may enhance them by additional digital layer. Besides that, (Manovich, 2001) also defining the technologies that allowing media being efficiently accessible, representing and comprise simply into a set of data. This situation may contribute a huge impact into product marketing at any cost including product packaging design. Instead of focusing on the design element, new media may help the product itself by establish the other element of interactivity to the user.