## INTEGRATION OF AUGMENTED REALITY IN SLEEVE PACKAGING FOR FOOD INDUSTRY

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#### **ABSTRACT**

Twelve Slices Cafe is a bakery business that sells bread, dessert, and traditional cakes. Its products are regularly ordered as a celebratory dish for events such as weddings and birthdays. Besides that, it also offers a food delivery service. However, products sold formerly were packed in just plastic bags. Therefore, unique packaging is needed to enhance product visibility and branding. The purpose of this project is to introduce a sleeve packaging that adds handle-carrier to its newly defined concept shape. Not only it would differentiate the café's products from its competitors, but the significant design of the packaging would also attract their target market. Furthermore, after a thorough exploration of creative design and evaluation, sleeve packaging is selected as the most suitable type of packaging for the cafe's range of products. This type of packaging will reduce the use of plastic, and it could also display the product visually. Information on the packaging will also help to convince consumers of the quality of the products. Moreover, the integration of augmented reality in the innovative printed-based packaging would also improve customers' experience.

**Keywords:** sleeve packaging with handle-carrier, design, augmented reality (AR)

### 1. INTRODUCTION

This research is focused on Twelve Slices Company as a company that sells various cakes and desserts. Being relatively new to the market, the business lacks proper packaging for their product. Currently, they are using a generic plastic bag which does not reflect their business identity and also harm the environment. As Twelve Slices are involved in food delivery to customers as well, they are seen far behind in the use of new media for their packaging that could bring a different experience to their customers. The aim of this research is to create a sleeve packaging carrier. Not only limited to protect the product, sleeve packaging is also used to display the product visually and informatively to convince customers of the product quality.

#### 2. METHOD

To help define the design brief and marketing plan, structured research has been conducted to identify opportunities and gather information such as company background, visitor profile & characteristics and current trends to formulate insight.

#### 2.1. Opportunity Identification

In the opportunity identification phase, the researcher has conducted through a participative observation and interviewing. The observation in Twelve Slices made famous by there is Mille Crepe cakes. The interviewing equipped with recommendations for packaging with an interesting custom print enhances product appearance, giving the right impression to customers.

#### 2.2. Concept Exploration and Refinement

A packaging with an interesting custom print enhances product appearance, giving the right impression to customers. Customers will be persuaded into making a purchase hence, product sales potential could be increased substantially. Sleeve packaging with carriers, making it easy for customers when buying it.

#### 2.3. Technical Requirements

The technical process needed to make sure the quality control is being kept an eye on such as the material selection, preflight, output of plate before printing process. Thus, the specific requirement of printing processes needs to be considered to ensure printing efficiency and minimized wastage.

#### 3. FINDINGS

The sleeve packaging with an interesting custom print enhances product appearance, giving the right impression to customers. Customers will be persuaded into making a purchase hence, products sales potential could be increased substantially. Thus, the addition of QR code and the Augmented Reality (AR) for customers can scan and easily have access with their websites about the product with interesting experience with 3D objects.

#### 4. CONCLUSION

Packaging design is as important as the brand itself. The product packaging design plays a very important role in branding items in the retail environment. The new innovative concept of sleeve packaging design combined with carrier holders can attract the customers through the creation of different and unique product packaging. Thus, the researcher came out with the latest technology innovation as value added to make a huge impact which is Augmented Reality (AR).

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