



International Teaching Aid  
**Competition 2023**

Reconnoitering Innovative Ideas in Postnormal Times

**iTAC**

**2023**

**iTAC 2023**  
**INTERNATIONAL TEACHING AID COMPETITION**  
**E-PROCEEDINGS**

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## **PREFACE**

iTAC or International Teaching Aid Competition 2023 was a venue for academicians, researchers, industries, junior and young inventors to showcase their innovative ideas not only in the teaching and learning sphere but also in other numerous disciplines of study. This competition was organised by the Special Interest Group, Public Interest Centre of Excellence (SIG PICE) UiTM Kedah Branch, Malaysia. Its main aim was to promote the production of innovative ideas among academicians, students and also the public at large.

In accordance with the theme "Reconnoitering Innovative Ideas in Post-normal Times", the development of novel ideas from the perspectives of interdisciplinary innovations is more compelling today, especially in the post-covid 19 times. Post-pandemic initiatives are the most relevant in the current world to adapt to new ways of doing things and all these surely require networking and collaboration. Rising to the occasion, iTAC 2023 has managed to attract more than 267 participations for all categories. The staggering number of submissions has proven the relevance of this competition to the academic world and beyond in urging the culture of innovating ideas.

iTAC 2023 committee would like to thank all creative participants for showcasing their innovative ideas with us. As expected in any competition, there will be those who win and those who lose. Congratulations to all the award recipients (Diamond, Gold, Silver and Bronze) for their winning entries. Those who did not make the cut this year can always improve and join us again later.

It is hoped that iTAC 2023 has been a worthy platform for all participating innovators who have shown ingenious efforts in their products and ideas. This compilation of extended abstracts published as iTAC 2023 E-Proceedings contains insights into what current researchers, both experienced and novice, find important and relevant in the post-normal times.

Best regards,

**iTAC 2023 Committee**  
**Special Interest Group, Public Interest Centre of Excellence (SIG PICE)**  
**UiTM Kedah Branch**  
**Malaysia**

## **INNOVATION OF RIFFAA D'HATI CONCEALER USING THE IMPLEMENTATION OF AUGMENTED REALITY TECHNOLOGY AND QR CODE**

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## ABSTRACT

According to Puan Wan Fatimah Binti Megat Saad, Riffaa Group Sdn Bhd started operating on a small scale in January 2018 and only did a business on a small scale and only had a clothing boutique and growing rapidly by selling beauty products. Creative packaging involves state-of-the-art designs and solutions that not only help the product to stand out above the rest but also increase the product's growth and success. The function of the packaging is to protect and prevent physical damage such as knocking, shaking, or crushing. Therefore, the packaging has become something to be displayed and has something to value in its own right because it has its own prestige. Not only that but the new packaging of Riffaa D'hati concealer also provides a more sustainable and cost-effective option throughout the lifespan of the package after the product is packed. The product Riffaa D'hati concealer is an organic cosmetic product that offers a variety of benefits for the skin because it uses organic ingredients. The purpose of the package is to create new packaging for concealer Riffaa and brush to improve marketing products. An innovative printed solution is developed with the integration of Augmented Reality (AR), it enables playable videos and creates an ID as a link between the video and the packaging. Additionally, a Quick Response (QR) code is added and placed on the Riffaa D'hati Concealer packaging box where customers can easily scan using their phones to find out the location of the Riffaa company. With the packaging upgrade, the product will be better known to consumers.

**Keywords:** concealer packaging, augmented reality (ar), qr code

## INTRODUCTION

Innovation creates packaging from product packaging that comes separately to a type of packaging that can accommodate both products in one packaging that has its own compartment. Modifying the original packaging by adding space to load two products in one packaging not only creates an attractive image but is also a step that works to ensure product safety and improve the level and standard of the product. Not only that, the compartment space to place the concealer and brush designed on this packaging to attract customers with different packaging innovations that can make it easier for customers when buying this product. Customers no longer need to take two separate products, even with this design innovation can also save customers time. The most important function of packaging is to ensure product safety and improve product level and standard, this is because the concealer brush is more susceptible and causes hygiene. In addition, the implementation of Augmented Reality (AR) technology is placed on the female vector found on the front of the packaging. So, with this new technology, customers can directly scan female vectors through the "Artivive" application downloaded on Google Play or Appstore of the customer's mobile phone. In this girl's vector, I included a method of using concealer on the eyebrows to make them look neater. This step is also very effective for beginners.

Augmented Reality enhances user perception and interaction with the real world. Virtual objects display information that the user cannot detect directly by his senses. Information conveyed by virtual objects helps users perform real-world tasks. refers to cosmetic packaging that applies additional technology, it can be round in various colors, move, sound, and change.

As a result, the app quickly realized that customers mostly remember not what they see but the emotions that arise in them. Nowadays, infusing additional technology into packaging brings their audience into the digital world, which opens up more opportunities to engage them. By capturing the physical packaging in their smartphone camera and using the "Artivive" application, consumers can see the entire message that the brand wants to convey to them. For example, users can scan the female vector on the front of the packaging box to watch a video of how concealer is applied to cover excess eyebrow hairs. In fact, augmented reality has very useful applications in the packaging industry. This exciting technology can be used to improve product packaging, increase brand loyalty, attract new customers, and stand out from competitors. However, one of the great things about Augmented Reality for packaging is the ease of updates. For example, a company can launch a special campaign related to an event or promotion and enhance it with AR content developed specifically for that purpose for all users. Whereas, a Quick Response (QR) code is a two-dimensional barcode that, when scanned with a tablet or smartphone camera, gives users easy access to whatever online information is linked to them. QR Code is a simple and seamless solution that makes it easier. With a quick and easy scan, users are instantly taken to google maps.

## **INNOVATION DEVELOPMENT**

Packaging is the presentation or covering of materials used in protecting the product for distribution and storage. The use of suitable material for the product on the packaging of this cosmetic box is 270gsm Art Card. The packaging is printed on a single piece printed using a single die-cut block. Based on the old product packaging, they promote their product with only the concealer in the box, but the concealer brush comes separately in a plastic case. Improving packaging for the better can actually add to give variety and uniqueness to packaging innovation. To create innovation, this cosmetic packaging awards outstanding flexible package solutions that meet or exceed requirements through innovation in materials, graphics, structure, new uses, extended shelf life, and sustainability. Innovative packaging that allows consumers to easily bring the product home after purchase. In addition, the new packaging has a compartment that can protect the product in the packaging and protect the product from breaking and dropping. In particular, creative and eye-catching innovations that make packaging visually appealing can help attract new customers to buy. Nowadays, augmented reality technology applications provide opportunities for packaging design innovation, provide ideas to improve the packaging design experience, and increase the interaction between the packaging design and the consumer as well, thus making the product more attractive.



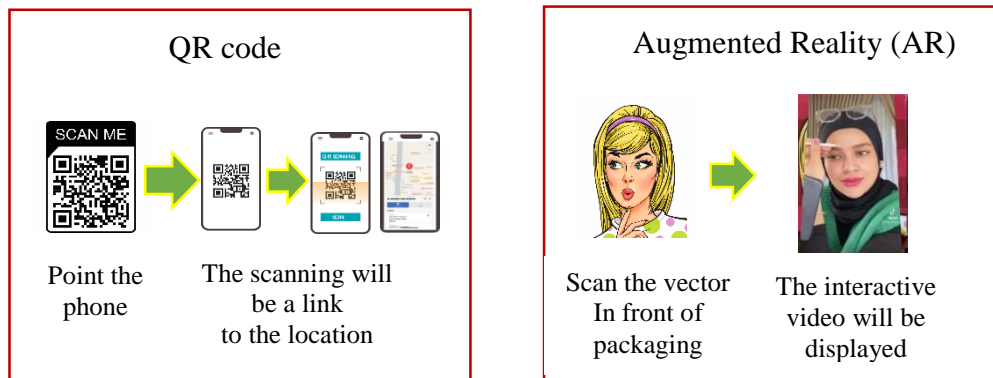
**Figure 1.** Innovation Cosmetic Packaging Technical Drawing

Cosmetic packaging usually has the same function with a variety of shapes and visual designs but they can innovate with a combination of Augmented Reality (AR) and QR Codes. AR allows digital information to be superimposed and integrated into our physical environment where AR is a tool that can help us transform our immediate environment into a learning, work, and entertainment space as something new, as shown in Figure 3. The creation of Augmented Reality (AR), is an innovative practice to combine real life with virtual life by using applications and images that combine content or products together in the real world. When used in packaging, it requires visual appeal beyond eye-catching colors and graphics design and is futuristic. It provides users with more than just extras information, but an immersive experience from the moment they interact with the product. For example, users can scan the vector of a girl on product packaging to watch the video and sound how concealer is used to cover the fine hairs on the eyebrows. Through an application downloaded on a mobile phone, any smartphone with a camera and the capabilities of the internet will allow its users to access the world of augmented reality. In particular, product packaging aims to protect the product from any damage. Good packaging serves both technical and presentation purposes. Technical changes to the packaging aim to better extend the shelf life of the product and protect the product from all harm. Packaging made using good and strong material. So the packaging is the presentation or attachment of materials used in protecting the product for distribution and storage.



**Figure 2.** Cosmetic Packaging Innovation





**Figure 3.** Cosmetic Packaging with Augmented Reality (AR) and QR code

## COMMERCIAL POTENTIAL

The commercialization potential of this cosmetic box packaging is capable attract more customers to buy it. Packaging can help protect and serve the purpose of commercialization to provide the right information and details about the product. With the new technology available, customers can scan the packaging box to watch a video of how the concealer is applied. Mind, the customer the experience will be enhanced and the brand can earn their trust. Packaging made using good and strong material. So cosmetic packaging is the presentation or attachment of the material used in protecting the product for distribution and storage. Therefore, the product is suitable for placement marketed in the future and attractive for customers to buy. Furthermore, through the innovation of Augmented Reality (AR) and QR code downloaded applications, any smartphone with a camera and internet capabilities will allow its users to access. By physically capturing packaging in their smartphone camera and using an AR application, users can see the overall message that the brand wants to convey to them while going through the QR Code, and users can go directly to their website



**Figure 4.** Innovation Product Mockup

## CONCLUSION

In conclusion, the use of cosmetic packaging is very helpful to use because it works to protect the product from damage and loss. The production of cosmetic packaging that has a special compartment to place concealer and brushes can also provide convenience to manufacturers in marketing them and not only this cosmetic packaging has also been innovated by combining Augmented Reality (AR) and QR codes so that users or others can find out more information how to apply concealer on the eyebrows, in addition to benefiting beginners who are new to the world of makeup.

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