Advertisement Using Augmented Reality

S.Sivasubramaniam[1],V.Muthu Dinesh[2], Mrs.R.Ramya[3]

[1,2,3] *Computer Science and Engineering,*

Kamaraj College of Engineering and Technology,Tamil Nadu, India

ABSTRACT

Print Advertisement are the best ads. This traditional advertising like ads in Newspaper, Magazine, templates and lot are able to catch the attention of the people, but do not captivate them. Original look and overview of the product is become different when the buyer buys it. Also the different perception images of the product which is given in the Ad's doesn't attract the buyer. So This paper provide a advertisement in smart phone by using the Augmented Reality. People can view advertisement by using their smart phone. The work process is to develop the virtual advertisements which combines overlaying of 3D graphics in Augmented Reality(AR). It presents the virtual look of the product in creative and efficient way.

Index terms - Augmented Reality(AR).

Key terms - Augmented Reality(AR); Blender; Unity; Vuforia.

I. INTRODUCTION

Advertisement(ad) is an efficient and effective technique to promote goods, services and ideas. The advertisements that we see in the newspapers, magazines and roadside hoardings or watch on television or on the internet it attracts the buyers or customers.

Augmented Reality generates a live vision of the real-world environment in which the virtual objects are enhanced by the system generated inputs. Augmented Reality is used to enhance the natural environments or situations and offer perceptually enriched experiences. With the help of advanced AR technologies

Advertisement using Augmented Reality is the mobile application which is used to publish the advertisement by the advertiser and customer view those product advertisement. It makes a reliable connection between the buyer and the product seller. This Application is an innovative way to impress the buyer to explore the product before buying it. Every nook and corner of the product is analysed by the customer before sending his money.

The rest of the paper will unfold as follows:

Section two will present related work and section three focuses on the methodologies. The section four contains system design and section five contains flow diagram and section six contains future work. Section seven concludes the research

II. RELATED WORKS

[1] Basically the user would aim their mobile phone at the barcode on any item in a store and take a picture. The picture would be analysed using computer vision techniques and the mobile phone would then display 3 dimensional avatars on top of the mobile phones image of the object scanned. These avatars would represent the various types of people from sale associates to previous customers who had information to share about the item in question. Specific avatars could be selected an communicated with via voice commands. They would respond with text boxes. This would allow a user to investigate all the facets of a product before making a sale but would also allow the product to sell itself in a way not possible before making it a help for both the consumer and the producer.

[2] Augmented reality in Marketing advertising(ARMA) have found a unique and interactive way to engage audience with the company brand. Smart phone devices have become presentable in whole world, augmented reality Browsers have been developed to run on them. Smartphone have the entire basic hardware system recruitment for AR, such as (Camera, Graphics, GPS compass and accelerometer).AR browsers utilise the device's sensors (camera input, GPS, Compass) and superimpose useful information in a layer on top of the image from the camera which, in turn, is viewed on the device's screen.

[3] Mobile based communication technology has evolved in many different ways. A QR code has two-dimensional matrix barcode that can be used to access marketing messages by scanning it using a smartphone via a QR reader. The use of AR in marketing attracts advertisers for its ability to fascinate users and increase exposure to their products and services.one of the early adopters of AR in their advertising campaign was Malaysia Airlines, where people were able to scan the sky towards the direction of the nearest airport and obtain flight deals. These require the users to download to the specific app related to each brand. The Star has launched its own mobile app. It includes an AR feature called iSnap, available for users to interact with news and advertisements using the app.

III. METHODOLOGY

The major modules to be performed in the application are

1. Authentication:

The authentication modules contain two major categories - Administrator and Advertiser.

The Administrator has access for the entire system. The Administrator can view all the product details of any advertiser product. Administrator plays a major role in this application.

The Advertiser has access to enter the product details in this application and he can view their product details.

2. Get Product Details:

The Advertiser give the URL of images of the product and product description through the Mobile Application. The Mobile Application stores the values in a spread sheet format which is easily accessible.

3. Design a 3D Modelling of Product Image:

The 3D version of the product is modelled as per the manufacturer instructions using Blender. The material and texturing is performed to give a realistic look for the product this done by UV unwrapping process. The material

and texturing is performed to give a realistic look for the product. The movements and actions are defined using keyframe animation if needed.

4.Composite 3D object with target image:

In this module, the 3D model and the target image which is given by the product advertiser are combined for tracking by the target images. The target images and the 3D models are linked through the unity website in a database.

5. Configure Vuforia Database:

The target images are uploaded in a created database, the images can be in png or jpg format. The uploaded images are rated based on its quality and with the parameter width.

The created targets are downloaded as a Unity project file and the project file is opened.The 3D models are mapped with the target images and the this can be repeated for multiple targets.

6. **Design Mobile App:**

The Augmented Reality app is build and can run on the android mobile devices. Essential features and the UI interfaces are designed in this phase to make the app user friendly. The user can manipulate the product in different ways depend upon the category of the product. Also the product Manufacturer can submit their details to advertise their products through this interface.

IV. SYSTEM DESIGN

The Advertiser give the URL of images of the product and product description through the Mobile Application. The Mobile Application stores the values in a spread sheet format which is easily accessible. The 3D model is created with the respective given references by the advertiser and the 3D models are created using Blender 3D with the defined design workflow already explained. The target images and the 3D models are linked through

the unity website in a database. The 3D models are tracked by the Vuforia AR camera and the 3D models are loaded into the scene. The target images are tracked and verified with the license key of the database which is mapped in the unity scene**.**

V. FLOW DESIGN
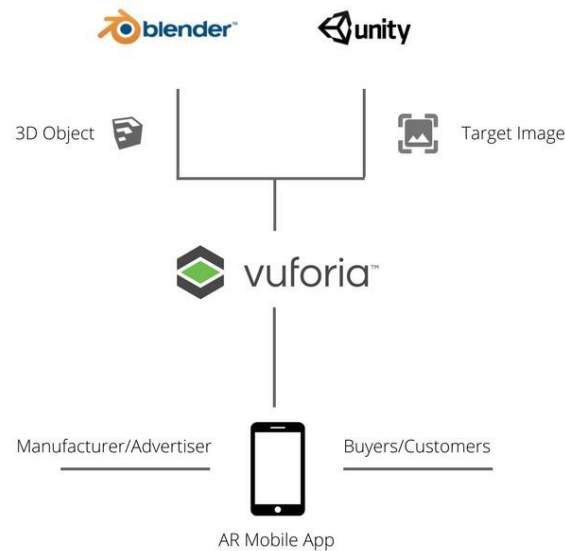
VI.FUTURE WORKS

By concerning growing mobile users and product advertisements we need scale the capacity of the database. So, the models will be uploaded in the Vuforia cloud storage facility. This can be integrated with the help of the Unity Vuforia Cloud Plugin. The manual process of modelling the product models will be reduced and the advertiser can upload the models by their self.

VII. CONCLUSION

From different ways of researching and analysing, most of the data and information convince that AR technology is applicable not only on architecture industry, but also sectors that relating to architecture and design such as construction and visualization. With AR being rather new and innovative in every aspect, we have done a general research on AR technology. This has allowed us to collect more information about AR before we are focusing down my aims and objectives. Simultaneously, these researches also help supporting our Advertisement projects as we get to know what AR can achieve in every aspect.

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