BUSINESS CARD USING AUGMENTED REALITY

Snehal M. Sankpal[1], Smita S. Patil[2], Shashikala K. Londhe[3], Sangita G. Naik[4,] Snehal S. Patil[5], Prof.Ajinkya S. Yadav[6]

[1]*Snehal M. Sankpal, Computer Science & Engineering, DYPCET, Kolhapur, India*
[2] *Smita S. Patil, Computer Science & Engineering, DYPCET, Kolhapur, India*
[3]*Shashikala K. Londhe, Computer Science &Engineering, DYPCET,Kolhapur,India*
[4]*Sangita G. Naik, Computer Science & Engineering, DYPCET, Kolhapur, India*.
[5]*Snehal S. Patil, Computer Science & Engineering, DYPCET, Kolhapur, India*
[6]*Prof.Ajinkya S.Yadav Computer Science & Engineering, DYPCET, Kolhapur, India*

ABSTRACT

Augmented Reality (AR) business cards offer a unique and interactive way to engage with potential customers and clients, providing a memorable experience that sets your brand apart. By incorporating AR elements into business cards, you can increase brand visibility, make strategic connections, enhance customer experience, generate leads, and stay top of mind with your audience. Augmented Reality (AR) overlays virtual objects onto the real world, enhancing the observer's experience. AR college business card technology, you can use your smartphone or a compatible device to scan the business card. Once scanned, the card triggers an augmented reality or virtual reality experience right on your screen. This can include 3D animations, videos, links to websites, or even interactive games. It's a fantastic way to showcase your college, highlight key information, and leave a memorable impression on potential contacts or employers. It adds a whole new level of interactivity and innovation to the traditional business card.

1. Introduction

Augmented Reality (AR) is an innovative technology which blends the virtual world with the real world, improving how users perceive and engage with their environment, Augmented Reality (AR) is a technology which overlays digital content onto the real world, enriching it with images, videos, sounds, or data. Unlike VR technology, which immerses users in a completely digital environment, AR enriches the physical world by seamlessly integrating virtual components. This creates an interactive and blended experience that can accessed through various devices such as smartphones, smart glasses, tablets and wearable devices. It enables users to seamlessly integrate digital content into their immediate environment, allowing for a wide range of applications across different industries.

In today's fast-moving business world, it's important to stand out from the crowd. With AR business cards, you can make a lasting impression on potential clients and customers. By incorporating this cutting-edge technology into your marketing strategy, you'll be ahead of the curve and ready to take on the competition.

1.1 Applications of ARVR Technology: -

In Networking ARVR business cards can make a lasting impression during networking events or conferences. Instead of a traditional card, you can showcase your skills, portfolio, or even a virtual tour of your workplace. Recruitment Companies can use ARVR business cards to attract potential candidates by offering immersive experiences that showcase their company culture, projects, and job opportunities. In Education ARVR business cards can be used in educational settings to provide interactive learning experiences. Students can scan the cards to access additional resources, virtual field trips, or even interactive quizzes. Marketing and Sales ARVR business cards can be a powerful marketing tool. Companies can create engaging experiences that showcase their products or services, allowing potential customers to visualize and interact with them in a unique way. Branding ARVR business cards can help companies stand out and leave a lasting impression. By incorporating interactive elements and immersive experiences, they can showcase their brand personality and values.

2. LITERATURE SURVEY

In paper [1], we studied method to improve the accessibility and display of traditional business card. This business card has narrow space & only can be used for primary introduction.

There project also had the limitations like layout of the business card is not well designed, that may cause some

problems while detection. Another limitation is that sensitivity of AR buttons works quite good but not fully.
Further work for this project was we can import audio files and can add google map application.
In paper [2] , the research discusses the concept of augmented Reality (AR) and its various types and application and advantages and disadvantages .Its highlights the use of AR in conjunction with greeting cards, enabling users to experience interactive and 3D animation's & videos. The objective is to create fully functioning android AR applications that allows users to visualize 3D model and other a brand-new version of traditional 2D greeting cards in an imaginary 3D format.
There were some limitations like limited Screen Dimensions and resolution on mobile devices and the need for a stable internet Connection for optimal AR functionality.
Paper[3],This paper examines research on user experience and perception in augmented reality applications, focusing on how AR can enhance the presentation and acceptability of information. Provide examples of businesses or individuals who have successfully implemented AR-based solutions to enhance their professional networking and communication

3. Problem Statement, Objectives and Proposed Work

3.1 Problem statement

"Design and develop a business card for college using Augmented reality".

Typical business card with some aspect ratios. These business card often includes the giver's name, companies' affiliation (with logo) and contact information such as addresses, contact number, email addresses. Today, a professional business card also includes one or more aspects like map of the address location, etc. It is difficult to allocate more information due to limitation of space hence there is need to find a way to solve such a problem.

3.2 Objectives

1. To design and develop an augmented reality application for college.
2. To display clearer information of college through the mobile phone AR technology within the space limitation contain.
3. To enhance the functions of traditional business card like displaying 3D models, videos and other interactive
4. To design well layout of the card to avoid problem in detection.
5. To create immersive user experience by seamlessly blending virtual content with the real world.
6. To get better understanding of AR technology

3.3 Proposed Works

The project aims to overcome these limitations and enhance the business card experience. This entails designing a visually appealing layout that accommodates essential details while leaving space for AR enhancements. AR content such as clickable links, 3D models, and maps will be created to augment the card. A user-friendly interface will facilitate accessing AR content. Prototypes will be developed and iterated based on user feedback to ensure functionality and usability.

4. Design and Implementation

4.1 System Design

This system architecture diagram shows that the AR marker well be downloaded from Vuforia engine database on which we'll create the multimedia elements like text, audio, video, 3D model. When the mobile device scans the AR marker, the system uses the AR Framework to track and recognize the marker. The system then builds an AR scene using the inputted text, images, and multimedia elements. The AR scene is then displayed on the mobile device, allowing the user to interact with it. The system can also export the AR scene as an APK file, which can be shared with others. This allows others to view the AR scene on their mobile devices.

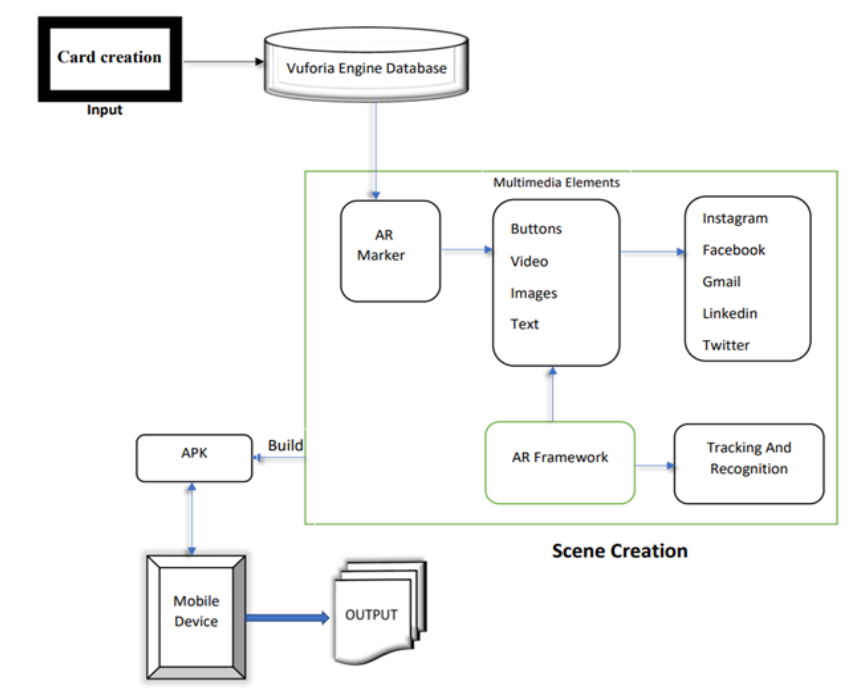

Figure1: System Diagram

5. Result Analysis

From this project, we have concluded that AR business card positively influences the perception of your brand or business. Monitor feedback and reactions from users to understand how the AR experience reflects on your brand identity.

When we'll scan the business card (AR marker) it will display the image sliders, videos, social media virtual buttons like Instagram, Facebook, twitter, linked in, g-mail, and 3D models.

Image 1: Business card for college

This showcases our college's commitment to innovation but also provides users with an interactive experience that leaves a lasting impression.

6. CONCLUSION

In conclusion, the development of an augmented reality (AR) business card for our college represents a significant leap forward in modernizing communication and networking within our community. By seamlessly integrating AR technology, we've created a dynamic and engaging platform that goes beyond the limitations of traditional business cards.

This AR-enhanced business card not only showcases our college's commitment to innovation but also provides users with an interactive experience that leaves a lasting impression. Through features like AR object placement, image sliders, videos, virtual buttons, and 3D models, we've transformed static information into a visually rich and immersive tool for connecting with students, faculty, and parents.

7.References

[1] Professional Information Visualization using augmented reality, AR visiting card [2020 2nd International conference on sustainable technologies for industry (STI), December 20 Dhaka department of electrical & computer engineering.

[2] Greeting card app based augmented reality [International Journal research in applied science & engineering technology (IRJASET)].

[3] Enhancing Quality Control in Web-based Participatory Augmented Reality Business Card Information System Design.