



INTERNATIONAL JOURNAL OF CREATIVE RESEARCH THOUGHTS (IJCRT)

An International Open Access, Peer-reviewed, Refereed Journal

DIGITAL CARD USING AUGMENTED REALITY

Prof. Vikas Nandgaonkar¹, KALYANI RAJEBHOSALE², ANKITA SHELKE², ANURADHA PISE², ROHINI DEVKAR²

¹Associate Professor, ²Student, Department of Computer Engineering,
INDIRA COLLEGE OF ENGINEERING & MANAGEMENT, PARANDWADI, PUNE 410506

Abstract: *Augmented reality is a technology in which a person's conception of reality can be enhanced, typically through augmented sound, video or graphics displays. The augmentation is typically implemented via various technologies, such as a headset that may be worn by the person. One or more augmented views may be presented to the person through the headset. Augmented reality actually superimposes virtual objects into the real environment with the real objects for enriching the viewer's experience. Augmented reality with virtual reality in virtual space, also enhances the audience perception by displaying additional information. Due to the increase of interest in Augmented Reality (AR), the potential uses of AR are increasing also. It can benefit the user in various fields such as education, business, medicine, and other. Augmented Reality supports the real environment with synthetic environment to give more details and meaning to the objects in the real world. AR refers to a situation in which the goal is to supplement a user's perception of the real-world through the addition of virtual objects. This paper is an attempt to make a survey of web-based Augmented Reality applications and make a comparison among them.*

Keywords: Augmented Reality, Virtual object, ARSC.

I. INTRODUCTION

Augmented reality is an excited technology which is based on computer vision to augmented of sound, Video, Graphic and other sensors based on the visual and real word object that are using camera. Augmented reality is unique interactive way to present the information in a real world. According to Vallio (1998) AR is the combination of virtual objects and real world and the users are given a chance to interact with these objects in real time. AR can provide users with sub immersive feeling by allowing interactions to occur between the real and virtual worlds (Uematsu & Saito, 2008). First Augmented Reality system was developed by Ivan Sutherland (Sutherland, 1965). Since that time there has been large amount of research done to explore Augmented Reality (AR). Since Smart Phone devices have become presentable in whole world, Augmented Reality Browsers have been developed to run on them. According to Schmalstieg, (2012) Smartphone have the entire basic hardware system recruitment for AR, such as (Camera, Graphics, GPS compass and accelerometer). AR browsers utilize the device's sensors (camera input, GPS, compass, et al) 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. The characteristics of Augmented Reality device systems can be further understood from three classical and widely used criteria for AR systems (Azuma, 1997): 1- Combine Virtual and real 2- Registered in 3D 3- Interactive in Real Time.

II. PROBLEM DEFINATION

One of the biggest problems with using the printed business card is the production of a huge amount of paper waste. Even in the digital world which is flooded with smartphones, personal computers, laptops and tablets peoples are still practicing the use of hard copy business card. To generate Digital Card with the help of Augmented Reality Technology with the help of web AR and AR.js Framework. Users also see the products or service images inside the card gallery. To give people the ability to share who they are, with anyone, wherever they go. To increase the use of paperless business cards.

III. SCOPE

We are looking to the augmented reality view and the experiences have been done in the field of marketing and advertising. To finalize this new technology will create the good brand image of company information with the satisfaction of consumer and viewer. The objective of augmented reality in this project will be focus to study the impact of commercialized AR application in business marketing and advertising and also to compare the impact of AR application in advertising and marketing, in the different industries based on: User Interaction and Promotion.

IV. EXISTING SYSTEM

Business related persons always use websites and paper business card to introduce business. Mostly business persons create static business website which advertise and introduce the business, products, services, contactus form, map location, contact details. After that many issues are generated like as maintain website, proper advertisement, review, ratings, etc. Any business person can't avoid these issues. Paper business cards can crush or rubbish by user. User can find appropriate card at need. Google reviews and advertises show the highest paid websites at the top. Business mans are paid for this top rating. Because they are use the google advertising theory. As per this theory public can trust on things which are show again and again. As per google advertising 'Google Ads, aka Google AdWords, is Google's advertising system in which advertises bid on certain keywords in order for their clickable ads to appear in Google's search results. Since advertisers have to pay for these clicks, this is how google makes money.'

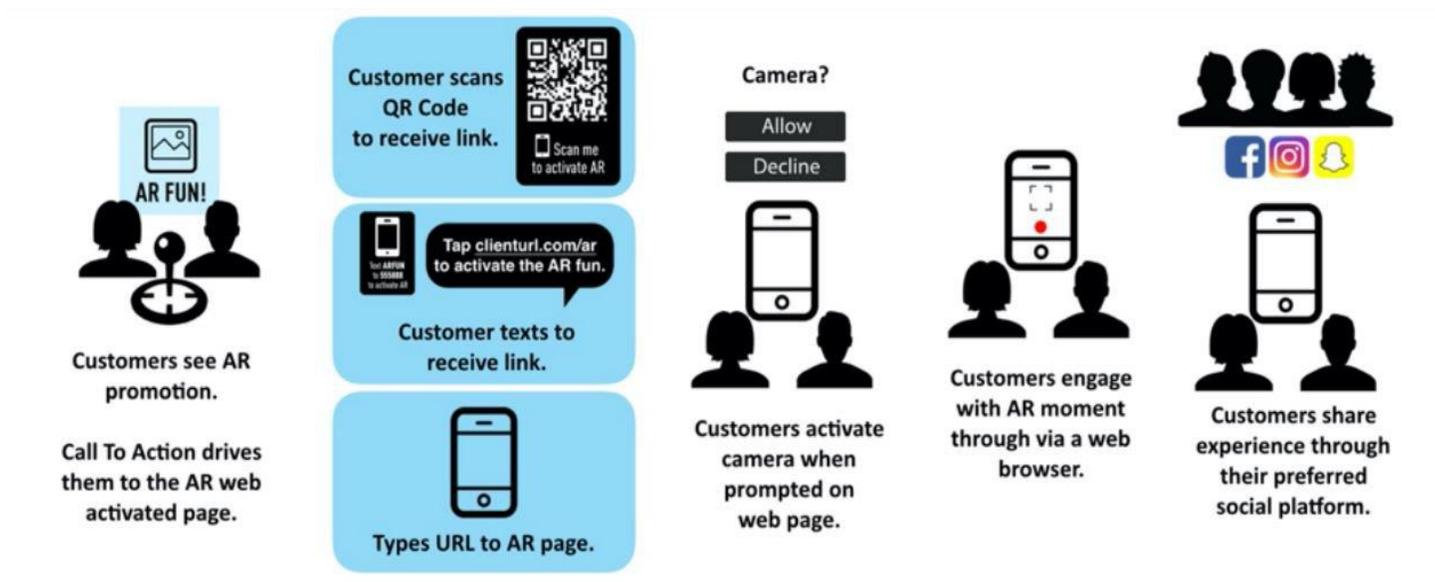
V. RELATED WORK

In the world of software development there lots of developments in the area of Application development and principles. The philosophies and implementation details are changing as the people guiding the buildout of the application. In this tremendous and yet sometimes compound world of software development there are some

tried and true architecture patterns and software development guidelines employed by most architects. Also, your design must have an ability to turn towards innovation instead of lending itself to common practices.

Application development are one such sector where designer must depend on their gifted creative side and hope that their solutions are still triumphant. In this project, we will explain an exciting journey down the road of Android application development. From needs to use cases, to Flutter to user interfaces, we will cover each and every detail of system design required to build an Android application by using Flutter. The reason why we choose Digital Business card Application is everybody who is a professional has an idea of Business cards

VI. PROPOSED SYSTEM



The Augmented Reality Student Card design implementation phase was divided into two main stages, first the card design, and second the marker choice and creation.

Card Design:

In design phase we are developing a QR code.

Marker choice and creation:

The ARSC had been developed using three Augmented Reality Libraries ARTag, FLARToolkit, and FLARManager, as mentioned in the software part (containing camera tracking and Augmentation header files). Some of the used libraries are using a set of preserved markers and others provide rules/constraints for marker creation. Thus, at the marker development stage the work was divided into two phases. First choosing the marker, and second creating the marker.

VII. CONCLUSION

In Digital Card, web application is designed for admin to maintain system. Always registered card holders use this web application for maintain profile, view liked cards and add contacts, share cards and contacts, cards sort by city, pin code, business brand name in table view. Android application of digital business card is useful for registered users, and anonymous users. Registered users do all things like web application without sorting technic. They add cards to contact, like card and share card links. Anonymous users are only use cards and share

them. Digital Business Card project is introduced to promote the 'paperless office'. If everyone use the digital business card, then the paper waste produced will be greatly reduce.

VI. REFERENCES

- [1] Modern Augmented Reality: Applications, Trends, And Future Directions, Authors "Shervin Minaee* , Xiaodan Liang**, Shuicheng Yan†" 24 Feb 2022
- [2] Systematic Literature Review On Extended Reality: Virtual, Augmented And Mixed Reality In Collaborative Working Life Setting. , Authors Vasarainen Minna1 , Paavola Sami1 , Vetoshkina Liubov1 10/2021
- [3] Augmented Reality ,Author Sa.Chin Shankar Bhosale I.C.S.College Of Arts Comm. 04-2021
- [4] Augmented Reality: A Review ,Author Mohmand Younis 2019
- [5] Research On The Development And Implementation Of Augmented Reality Technologies Saule Sarsimbayeva1 And Vladimir Dimitrov 2020.
- [6] Web Ar: A Promising Future For Mobile Augmented Reality—State Of The Art, Challenges, And Insights, Authors By Xiuquan Qiao , Pei Ren, Schahram Dustdar , Fellow Ieee, Ling Liu, Fellow Ieee, Huadong Ma , And Junliang Chen 04-2019
- [7] Augmented Reality Technologies In Education -A Literature Review,Author Daniela Roxana Vuta Jan-2021
- [8] Effective Of Augmented Reality (Ar) In Marketing Communication; A Case Study On Brand Interactive Advertising , Authors Elham Baratali, 2mohd Helmi Bin Abd.Rahim, 3behrang Parhizkar, 4 Zahra Mohana Gebril 04-2016
- [9] A Survey On Web-Based Ar Application,Authors Behrang Parhizkar1 , Ashraf Abbas M. Al-Modwahi2 , Arash Habibi Lashkari3 , Mohammad Mehdi Bartaripou4 , Hossein Reza Babae 2011