MARKETING WITH AUGMENTED REALITY

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Abstract- *In early times if we users wanted to buy a furniture objects without visiting the shops it was possible but it was not possible to check how the furniture will actually looks in our home. Now in our system, it is possible for user to buy the furniture objects sitting in the home without visiting the shops. Same way it is hard to imagine what our home or flat will look like when it's finished. But with the help of AR (Augmented Reality) it is possible now. The main purpose of the project is to develop an Android & IOS application for trying different furniture, construction & architecture view in virtual way. With over 1.2 billion smart phone owner's worldwide applications provide the perfect platform for them who want to buy a furniture or want see their home architecture view without going to shop or anywhere else they can easily view the product at home. Very Few systems have been developed till now like this and in India it is still undeveloped. The application aims to make customer problem of buying furniture or home easy to buy it without worry about the who it look in your home. It is software developed for Android phone and IOS phone where customer can easily go through various product and can by it without worry of it is look in his house. Also customer for house can look how the house will look when it is done building. In Addition the application will also have features like walk-mode and VR mode. In walk-mode you simulate like your walk through scenario or product. Also VR mode will give virtual view of scenario or product.*

Keywords- Furniture, Augmented Reality, Application, Online purchasing, Virtual Reality, Android, IOS, Furniture Store, Real World Visualization

I. INTRODUCTION

A mobile application through which the user can purchase furniture with the help of his/her mobile phone. It is platform through which we can purchase furniture for our home with the help of Augmented Reality. With over 1.2 billion smart phone owners worldwide, applications provide the perfect channel for furniture showrooms and builders and architecture to directly engage a younger audience and a inspire a new generation of people to do something to change the furniture and construction industries. Thus, this is our attempt to provide a platform for those who are eager to do something good. This application will make the work easier for purchase furniture. This work will help all the customers and seller to find furniture easily and sell their products. The user can simply register by entering some personal details such as name, e-mail, address and phone number and same as for seller can simply register by entering some personal details such as name, e-mail, organization name, address and phone number. An account for the user will be created and he/she can login to get the required information. The most useful feature of this application is that the user or the seller can find each other in the area specified by them. The private information of the customer will be kept confidential and only registered organizations and authorized person can access it.

These Android and IOS Software applications we are developing for purchasing furniture online purpose which is introducing the availability of furniture try at home. The main purpose of developing this Marketing with AR that can help in purchasing things like furniture and house. The existing system is manual / machine systems where the users must have to perform it manually. Through manually this whole procedure is very tedious and takes a lot of time, but through our application it can be done easily.

Augmented reality is and 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.

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.

Augmented Reality in Marketing

In a simple state, Marketing is companies employ a range of strategies to determine the value of product or service and communicating the information to customer for better sell. In the beginning the entire marketer should know what are going to serve and who are the target audience then can fallow the concentrate campaign in the aim to fulfil the customers need and build long term loyalty. Augmented Reality marketing is a digital element superimposed or added to another environment,

be as print, television, or real world. According to the example: One of the most common forms of augmented reality used today with video includes the superposed 10-yard line on NFL broadcasts.

Scope and Objective of Research

The main objective of this research is 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 research will be focus to study the impact of commercialized mobile AR application in business marketing and advertising and also to compare the impact of mobile AR application in advertising and marketing, in the different industries.

The main focus will be on the advantage and benefit of Augmented Reality in advertising and marketing, and finalize the specific target of consumer who are will be interact with the company products and brand with the uses of attractive AR application.

II. RESEARCH AND COLLECT

There are many companies ranging from small to big that use AR for a few purposes, to engage, connect and amaze. These following companies have used the best out of AR to give their customers a different perspective. The lists are as of following:

1) Jaguar Land Rover

The new Land Rover Discovery was on sale, but it was not available until a certain period of time. Hence, Jaguar Land Rover decided to make a 3-D model within its apps by using Google Cardboard. Giving buyers a chance to tour the car interior as well as the exterior virtually in showrooms by using a Smart phones connected to special glasses although without the existence of the car.

2) Ray-Ban

Ray-Ban a famous sunglasses company also started using Augmented Reality to promote their product. This time round, Ray-Ban has created a mirror application that has to be downloaded for usage. The application name was FIT3D and it allowed customers to try on the Ray-Ban sunglasses without any hassle of going to the actual shop and can just try it online

via webcam that will attach the sunglasses to your face through AR.

3) National Geographic

National Geographic has also recently created a campaign that uses AR to project images of animals. To engage with the AR experience, participants stood at the center of an empty area. After that, image of dinosaurs and animals will appear to allow participant to interact in front of the display screen.

4) Nivea

Nivea has also created AR by using a webcam to scan the particular product in front of your computers. Collaborating with Rihanna in the AR advertisement that creates a visual image of Rihanna singing in front of your computer.

5) Pepsi & Co

Pepsi Max created a screen right next to a bus stop that has the elements of AR. It is a screen that captures the image of the view behind acting as a glass. Videos of cyborgs, cheetah and aliens that emerge through the screen then shock unsuspecting commuters at the London Bridge, not knowing it was all created from AR. From this advertisement itself, it caught numerous shares and views in YouTube that lead them to generate WOM.

The number of Augmented Reality applications is increasing continuously and the outcome are clearly in many domains e.g. Medical, Education, Game, Marketing and Advertising.

III. LITERATURE REVIEW

1). Description of Technology Used

GPS device is used to track the location of the user. As a GPS device the smart phone is used in this application. Using the device, current location is traced and can be utilized for further requirements.

2). User Interface
The user interface is designed in XML. User can easily use this application and need the internet connection.

Requirements

1) Efficiency Requirement
Here the application is developed on the android and ios platform, thus the application data and processes are handled

implicitly by the android unity and ios unity. Also if the user is required to clear the app data, the user can explicitly clear the cache memory and increase the application speed.

2) Reliability Requirement

If in case if the co-ordinate input by the user are not proper it will not match the data (coordinates) fetched from the map and thus there are chances of the failure to occur. In other case if the internet connection in the user mobile device is running at low speed it is possible that the map will not be loaded completely and the required alert may not be generated.

3) Usability Requirements

The application is user friendly as the user can easily operate the application. One click access to every function is provided in the application.

IV. RESEARCH METHODOLOGY AND DISCUSSION

4.1 Purpose off Research

The purpose of this research is to get the behave and attract of the marketer or business producer in a right side and the experiences, feeling of consumer in another side to be compare with the new user face technology.

4.2 Data Collection

Since the study use quantitative research method on behave of consumer and attract of the market or business producer in a right side, tow data have been collected during of this course study and research as a primary and secondary. Primary data resource was collected by the means of user experience and comments of business producer on website according to their experience and situations. The aim of this research and data collection is to get known which Augmented Reality beneficial for brands to creative brand perception, intention of purchase and positive word of mouth. Secondary data sources are as books of Marketing and advertising with effect of new technology like AR and VR , Magazine, newspaper, journal of advertising, journal of interactive advertising, journal of marketing, international journal of marketing, , Website of marketing business and advertising , News, Paper of effect of New technology in life, Impact of AR in advertising, user interface of augmented reality in marketing and advertising mobile and interactive of AR/ VR in marketing and advertising.

4.3 Sampling Method

In this stage researcher used the quantitative method on behave of consumer and attract of marketer or producer in a right side. The sample method of this research is to get the feedback of users from the majority of application that have been launched. All data and information will collect from the user review true on website and mobile application.

4.4 Advantages of AR

Augmented Reality Experiential Marketing may not be a good idea in marketing some particular products, but it gives companies a head start on marketing. The advantages are as of below:-

1) Go Viral

An obvious example would be the Pepsi Max AR that managed to set up a trend on YouTube, causing it to go viral. These are obviously the results that a company would want to get ideally, to plant their name in consumers' heads, giving it a positive WOM. This concept also allow customers to share their content to other potential customers, causing it to go viral as a good cause.

2) Unique/Different

As compared with normal advertisements, its main objective was to capture targeted audience but looking at how AREM advertise, it was a complete makeover from the usual advertisement. Fun, interactive and fascinating features are added not to only capture targeted audiences and prospects but also to those who had not interact with the product before.

3) Personalization

The idea of allowing a customer to upload his own media onto social media actually helps to create a content or personalized media for the user himself. This could mean those customers are more engage and feel more connected compared to a standard video or image.

4) Accessible

It will be accessible by all, meaning that anyone can use AR to actually generate a sense of interaction into the video which is what makes AR a wonderful concept.

5) Interactive

As mentioned above, companies that use AR mainly make it very interactive and of course, highly entertaining because the main purpose is to create an element of surprise for the consumer. When there is element of surprise, it will stimulate other users to do it too. Hence again, creating a viral loop.

4.5 Discussion

As has been explain earlier in case studies it is believable that separate part of business process and have this ability for better marketing communication and brand interactivity connection. Also from the survey and data collection from the user's review which carried out from this research, it can be admitted that augmented reality is an effective tools for supporting companies when planning to create the brand interactive and innovative with marketing campaign and advertising events. This technology (AR) enables campaign to achieve supporting from business and users. Trough business process innovation it has been observe that augmented reality can be used to put complex and expensive product in the hand of potentials costumers at a cost of zero. The technology also has increase as engagement customer's loyalty can be used to create or extend business opportunities.

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Companies will definitely achieve success in a certain way by using AR. AR doesn't not only provide great feedback but also generate revenue in return but attracting or convince consumer that was not your customer previously to purchase your product due to the WOW factor. Needless to say, it is also user-friendly and does no harm to the environment with the excess of AR. Hence, I do believe that it could be one of the essential marketing tools in the coming future. Looking into the brand attitude perspective, it manages to give the customer a secure feeling and also confidence towards the product; therefore allowing companies to gain attention from the crowd that is unaware of the product. AR is very good for small "building" companies that wants to get their name up on the billboard FAST with just a little expenditure on advertisement which could be even more than normal advertisement when its consume more engagement. It could also merely alter the fundamentals of customer interaction with brands.

V. RESULT

The result of our system application includes an android application as well as an IOS application. In our application customer can buy furniture products by sitting at home. Customer has to just open an application and select live view option in the application. Then customer will be present by their camera view. Customer has to set a desire place in their home or anywhere they want to set furniture objects in camera view. Then Customer has to select there furniture model from the list of the furniture objects shown in the application. Once Customer select the furniture it will display in the camera view with the help of AR (Augmented Reality).Customer can change color or material of the furniture objects. Also can get information about that product. Then customer can buy that furniture object directly from the application.

VI. CONCLUSION

This study and research of this thesis have been started with the idea about the ability of technology to manage and expand the marketing communication in order to manage the better relation with consumer and brands. In order to achieve the objectives researchers looked and search augmented reality from the beginning to start. During the case study and course writing this thesis, it became clear that it is not only in the business world that there is little known on mobile augmented reality in relation to innovating business process and improving value of ads. Base on the reaction of the users that actually use and re-use the applications, it seems that developers also have a hard time to figuring out how to apply and build augmented reality applications in such a way that it provides value for end-user. On the other hand, the result from the research implies that augmented reality is the future. Many brands now a days correctly want to help consumers truly experience what their products have to offer, and augmented reality enable them to do that and at a cost of nothing for complex and expensive products. Furthermore, augmented reality helps organizations to quickly gain advantages on their competitors.

In completing this research paper, a new era has begun in the marketing context of advertising. Augmented Reality is being understood now as a stepping-stone for all companies that chose to take up this technology. Companies who took up this technology have seen an obvious increase in their brand awareness due to the crowd that they created. According to the literature review, many are not familiar with the brand itself; it was AR that captured their attention that soon lead to WOM. AR should also be a fundamental process that has to be adapted by many as a tool in order to further position their brand. Time

would be the main factor for AR to prove it's worthy high-tech trick for the consumer. Next thing consumer know was just pointing a phone on a barcode, a brochure of that particular company will be on your doorstep of your house. Over the perspective of this research, some believe that Augmented Reality was just something to create crowd and engage with customer in a different way compared to personal sales, but as what Thomas Edison quoted, just because something doesn't do what you planned it to do doesn't mean it's useless.

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