Need of Augmented Reality (AR) in Marketing Communication in the post COVID Era

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ABSTRACT -In this research will examine the new way of digital marketing technology technique as AR which is combining the real world and virtual world and providing a better user experience. The study also analyses the importance and need of Augmented reality in Marketing advertising (ARMA) especially in a post COVID era. In totality, the primary intention of this project is to bring up or raise the awareness of augmented reality in present and future especially in the marketing and advertising field, in a unique and interactive way to engage audience with the company brand.

Key Words: Augmented Reality, Marketing Advertising, Marketing communication, engagement, brands

I. INTRODUCTION

Digital technology is rapidly rising in relevance and scale in marketing today; digital production, internet video, and social media are all getting more popular. However, because there are so many methods to market digitally, these new marketing channels are continuously threatened by overuse. To put it another way, the Internet is brimming with information, but it's also clogged with online advertising that still uses old marketing techniques ("push marketing"). These methods are frequently incompatible with the modern digital world.

Internet advertising has become a multi-billion-dollar industry as a growing percentage of customer demographics choose to shop online. The "Dot Com Bubble," which lasted from the mid-1990s to 2000, finally burst in 2000. It primarily impacted Silicon Valley. The bubble was inflated by the launch of thousands of new websites and technological start-ups. Due to the significant expenditure in online advertising, these companies lost a lot of money and drained their raised cash. Banner advertisements and pop-ups had reduced click-through rates, and ROI continued to decline.

A key trend in the digital marketing field is how to provide the best experience to the end consumers, in addition to the new tactics that digital and online marketing offer. Interactivity between the user and the material, user absorption, better user experience, and content appropriation are all possibilities.

Over the last decade, using these crucial characteristics to deliver a memorable experience for users has been debated and has grown in popularity in both traditional and digital marketing.

Tablets and smart phones are playing an increasingly important part in the rise of interactive and portable marketing. Portable and interactive marketing are becoming more popular because of the new trends.



Figure 1: AR in marketing communication

It changes how people consume digital content. Consumers can interact with and be consumed by their material without being tied to a certain location using handheld mobile devices.

Marketers' touch points are now available anywhere and at any time. Even so, the consumer remains the center of attention and maintains a commanding position.

The post-millennial digital natives are the people who are used to touching, swiping, and controlling the stuff they want to see and interact with.

However, another group of people known as "digital immigrants," or old-world settlers who migrated to the digital world after living in the analogue era, is also playing a key role in the creation and acceptance of new technologies and marketing media.

The approach is frequently seen from the managerial side to the client from the company's perspective. An outside-in strategy in which the corporation develops plans to meet the needs of its customers. This procedure, however, is not always clear.

Finally, it is the consumer's responsibility to determine whether the company met its aim and whether the plan produced the intended results. Finally, it is always up to the customer to determine whether a service was outstanding. Similarly, according to various studies, it is ultimately the customers who subjectively experience an advertisement based on their own customer history and socio-economic background.

Because of the variance that might occur between the anticipated and final experience of the customer, it is critical for marketers to understand the subjective experience of the consumer in connection to marketing content.

Augmented Reality Browsers have been created to work on Smart Phone devices since they became widely available throughout the world. Smartphones feature all the necessary gear for AR recruitment, such as cameras and sensors (Camera, Graphics, GPS compass and accelerometer).

AR browsers take advantage of the device's sensors (camera input, GPS, compass, and so on) to superimpose valuable information in a layer on top of the image captured by the camera, which is then displayed on the device's screen.

Three traditional and frequently used criteria for Augmented Reality device systems can be utilized to further understand the characteristics of Augmented Reality device systems: first, Combine Virtual and Real, second, Registered in 3D, and third, Interactive in Real Time Marker-less.

AR Systems determines a device's position in the physical environment, which way it is pointing, and on which axis it is functioning using a combination of the accelerometer, compass, and location data (GPS).

The term 'mobile augmented reality' was used to describe the application of the technology with mobile devices such as smartphones and tablets.

1.1 The Advertising industry

The advertising industry is currently in flux, undergoing unprecedented change and challenge to its methodologies, economic models, and industry structures, owing mostly to the introduction of new media.

Analysts predict that Augmented Reality (AR) will become a key disruptive technology and media type for marketers, growing to mainstream commercialization within 5 years and earning billions of dollars in revenue. Some also predict that AR's impact will be more than incremental, signaling a substantial transformation in advertising medium.

1.2 Defining Augmented Reality

Augmented reality is a visual reality idea (VR). AR, according to Wikipedia, is a blend of virtual things with the actual world in which users may interact with these objects in real time. Augmented reality is a fascinating technology that uses computer vision to add music, video, graphics, and other senses to visual and real-world objects captured by a camera. Augmented reality is a novel interactive method of presenting data in the actual environment. By permitting interactions between the actual and virtual worlds, AR can give people a sub immersive experience.AR also provides interactive experience, but rather than creating a fully fictional environment, it tries to supplement the real world. The backdrop and target items for computergenerated annotations are physical objects in the individual's environment.

1.3 Mobile Augmented Reality

A new breed of augmented reality (AR) reached the market a few years ago, coinciding with the fast growth of smartphones. Users can utilize mobile Augmented Reality apps to see a heads-up display-style AR visual of data related to their immediate surroundings by holding up their phone. Augmented reality on mobile Apps are designed to provide sophisticated services, apps, and functionality to mobile phone users that are put on top of physical reality.

Such applications incorporate real photos, video, or scenarios into them using the phone's

camera, GPS, touch screen element, and other sensory and motion detectors.

From a marketing standpoint, augmented reality is a goldmine that any firm should be utilizing to gain consumer attention. The technology is engaging, fosters brand loyalty, and is enjoyable to use. AR can be inserted into magazines, newspapers, books, billboards, and even stores to increase sales.

There's also the possibility that, because augmented reality is a new and understudied marketing tool, researchers are prejudiced toward the "Shiny object" syndrome.

Furthermore, Pepsi's usage of augmented reality to promote its Super Bowl sponsorship is a prime illustration of how the technology is finally gaining traction in the media.

It demonstrates that AR is an ideal medium for marketers to engage in moving forward in 2014, and that enhanced user involvement can drive new lead creation.

1.4 Augmented Reality in Marketing

In its most basic form, marketing is when a company uses a variety of tactics to identify the value of a product or service and then communicates that information to customers to increase sales.

The complete marketer should know what they are going to provide and who their target audience is before launching a focused campaign to meet the consumers' needs and establish long-term loyalty.

A digital element superimposed or added to another environment, such as print, television, or the actual world, is known as augmented reality marketing.

1.5 Scope and Objective of Research

The major goal of this study is to look at the augmented reality perspective and the experiences that have been gained in the marketing and advertising fields.

The goal of this study will be to examine the influence of commercialized mobile AR applications in business marketing and advertising, especially in a post COVID era as well as to evaluate the impact of mobile AR applications in advertising and marketing across industries based on:

1) Promotion

2) User Interaction

This study will investigate how mobile augmented reality can be used in the advertising and marketing industry, in the post pandemic world, and whether the consumers are in the favour of this paradigm shift.

The focus will be on the advantages and benefits of Augmented Reality in advertising and marketing, as well as determining the specific target audience of consumers who will connect with the company's products and brand via appealing AR applications.

The study also intends to assess the customer experience with ARM, as well as the impact of the several qualities evaluated (control, interaction, and absorption) on the entire experience. The goal of this section is to have a thorough understanding of how digital natives interact with ARM content.

Another goal of the study, which is related to the first, is to figure out how AR could be used to support a marketing campaign. The digital natives, or young adults in their early twenties, will be the emphasis.

This demographic has been chosen because they could be a great target for ARM. The study's sample population is made up of young adults between the ages of 18 and 45 who live in the Indian Subcontinent.

This sample was chosen once again because it reflects the ideal ARM target demographic. Digital natives are techies who are always on the lookout for new ways to improve their lives.

II. EXPERIMENTAL DETAILS

2.1 Technology of Augmented Reality

Scene collection, scene identification for selecting accurate information for boosting it, scene processing, and visualization for the augmented scene are the four tasks carried out by the AR system. These responsibilities are outlined below:

- •Scene Capture
- Scene Identification Technology
- Scene Processing
- Visualization Scene

2.2 Application and Importance of Augmented Reality

The number of Augmented Reality applications is steadily rising, and the benefits may be seen in a variety of fields, including medicine, education, gaming, marketing, and advertising.

In the digital world, augmented reality is a relative newcomer. The technology has been around for 25 years, but it has only recently begun to reveal its true potential. AR has come a long way thanks to a series of stages and technological advancements.

As previously noted, it represents a new way to interact with clients via mobile devices. The introduction of augmented reality (AR) apps for smartphones and tablets revolutionized the digital world, particularly digital marketing.

Marketing is the process through which businesses market and publicize their products to increase sales and maintain touch with clients.

Customer happiness and experience are at the heart of marketing. Customer satisfaction is frequently measured from two angles: transactional and cumulative. The first is an assessment of the customer's total experience with the brand at various stages of the buying decision process, whereas the second is an evaluation of the customer's perceived value following a single transaction.

As a result, perceived value affects the buying process at several stages, including the prepurchase stage. The most traditional form of advertising (paper) is combined with mobile-connected gadgets by ARM. Through his mobile device, the user is shown a succession of graphics layered on the real world. To put it another way, the technology creates visuals that appear to be superimposed on real-world things. The projected visuals and the real objects appear to be in the same reality.

The created pictures enhance clients' perceptions of reality, heighten their senses, and provide a new experience. From the perspective of a marketer, it provides the way for increased personalization and socialization of content, as well as a new and disruptive approach to communicate with clients.

One of the most crucial benefits that ARM can provide is the capacity to capture consumers' attention by creating a distinctive and unique experience, which is especially vital in the post-COVID era. The projection of 3D pictures of products onto the screen of mobile devices may be the most attention-getting AR technology.

Volkswagen released an app (VWjuicedup) that can be downloaded from the Apple Store onto an iPhone or iPad in 2012 to promote the debut of their new Beetle model in Canada. After downloading the software, the user can point his mobile at the marker to see how the car performs. In one example, the automobile smashed through the billboard, while in another, it jumped onto a ramp and began spinning around it.

The objective was to provide a consumer with an advertisement that was as striking as the car.

When the "Digital Lego kiosk" is given to the camera at the store, it builds a virtual model of the Lego toy from inside the box, which is displayed on top of the packaging.

Lego also offers augmented reality (AR) during the post-purchase period to improve consumer experience and brand loyalty. After constructing the Lego toy, the "Lego storyteller" app lets the user to bring their creation to life.

Customers can have a better experience with the product by developing an interactive story that corresponds to the Lego toy. Experiential

marketing is a type of multi-media marketing that encourages two-way communication between customers and brands.

Experiential marketing allows brands to interact with customers on a much more personal level, resulting in higher levels of emotional engagement.

ARM can be injected in a variety of ways at various times. To enhance the real-world experience of the consumer at the point of sale, AR applications can be placed into newspapers, periodicals, and websites, as well as in stores.

For example, the recently renovated Burberry store on London's Regent Street offers clients an engaging and one-of-a-kind experience. The shop is equipped with a variety of technology, including 100 screens and 500 speakers that allow customers to interact with the store itself.

Mirrors with built-in cameras that change into screens show live video of customers wearing the brand's products, providing a quick peek of how well a product fit on the customer and improving the shopping experience.

2.3 Research Methodology and Discussion

The goal of the study is to assess specific characteristics that ARM users encounter. As a result, a quantitative and qualitative approach has been chosen. The information was gathered via interviews in which participants were shown numerous AR advertisements on a tablet and their reactions were recorded.

A questionnaire was also given to the participants, allowing them to convey in their own words the various emotions and feelings they felt while seeing the AR content, as well as whether they thought AR was necessary in marketing communication, particularly in the post-COVID era.

Finally, the focus is on the consumer's subjective experience with ARM.

The study's purpose is to gather data from participants and analyze the information provided by the data.

2.4 Purpose of research

The research methods for the study is discussed in this section. It discusses why a certain method was chosen, how a sample of respondents was chosen, how the questionnaire was produced, and how the interviews were done.

The analysis process will also be presented in detail to assist the reader in understanding how the findings were reached. First and foremost, the study's major objectives must be re-evaluated.

The thesis's initial purpose is to learn how customers interact with ARM by examining some of

the features stated in the preceding chapter, especially in the post-COVID era.

The study's second goal is to use the first part's findings to better understand the technology and assess the possibilities of AR in marketing.

In other words, the goal is to give marketers with an analysis of customers' experiences with ARM and to determine the most effective ways to use AR in marketing.

As previously said, ARM is a relatively new concept, and past research in this area is either scarce or outdated.

Consequently, there are no specific guidelines concerning how to conduct the study how to evaluate the potential of this technology. The studied phenomenon is highly personal and subjective as it relates to the customer experience.

Therefore, a mix of quantitative and qualitative study seemed appropriate as it gave reliable results to evaluate. The idea behind the qualitative study is to collect data from interviews to collect the feelings and emotions experienced by the consumer when using AR.

2.5 Data Collection

The study included data collection from two sources:

Primary data resource was collected by the means of user experience and comments of business

producer on website according to their experience and situations.

A total of 140 respondents were considered for the study, 75 males and 65 females, from different territories of the country.

The goal of this study and data gathering was to determine which aspects of Augmented Reality are useful to brands in terms of creative brand perception, purchase intent, and positive word of mouth.

The interview length varied from 20 minutes to 50 minutes, held at different places like café, library, conference call, and home of the interviewee.

The interviews were held over a period of 7 months.

Books on marketing and advertising with the impact of new technology such as AR and VR, magazines, newspapers, journals of advertising, journals of interactive advertising, journals of marketing.

Also, international journals of marketing, websites of marketing business and advertising, news, papers on the impact of new technology in life, the impact of AR in advertising, and the user interface of augmentable reality were used as secondary data sources.

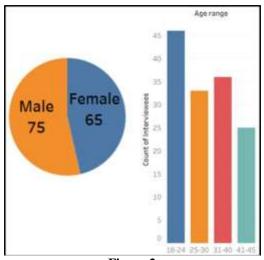


Figure 2



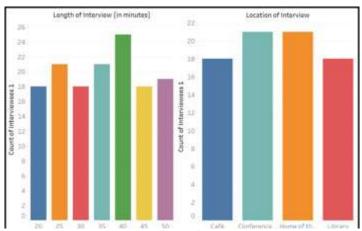


Figure 3

2.6 Sampling

The sample was created using the standard case sampling procedure. Purposive sampling is the term used to describe this technique. A non-probability sampling approach is the purposeful sampling method.

It focuses on sampling approaches in which the researched unit is determined by the researcher's judgement.

Specifically, typical case sampling allows the researcher to utilize the sample to show other

similar samples, but it cannot be applied to the entire population.

The questionnaire was presented to the respondents at the start of the interviews to educate them of the survey's structure.

The questionnaire served as a guide, but many more questions were answered during the chat based on the respondents' attitudes and comments during the encounter.

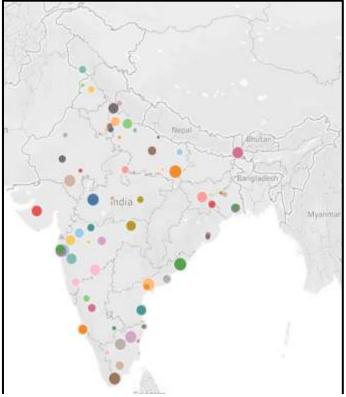


Figure 4 – Location of Respondents

The questions in the survey were like, "Have you bought any non-essential products in the past 3 months?", "Was the purchase offline or offline?", "Have you come across any attractive AR marketing communication in the past few months?".

"What is your opinion on the fact that whether or not more and more companies should drift their marketing communications towards the AR?", "Do feel safe and comfortable trying out new products by coming in direct contact with them?". Were you aware of the brand from before?

2.7 Data Analysis

The results with regards to the different AR marketing communications shown to the respondents were as follows:

S. No.	App Name	Design	User Friendly	Popularity	Score
1	Progressive Lake dash VR experience	8	4	9	7.0
2	Lowe's: Holoroom How To	5	6	7	6.0
3	Oreo – The World of a Flavoured Cookie	7	8	5	6.7
4	NYTVR	7	4	9	6.7
5	One plus VR	3	2	4	3.0
6	IKEA VR App	5	6	1	4.0
7	Lacoste VR App	8	3	6	5.7
8	Converse VR App	6	9	2	5.7
9	ANA - The Room	5	2	8	5.0
10	Tesco AR Discover App	2	8	3	4.3

Table 1

Most of the apps that were highly rated by the respondents were from the lifestyle bracket. This implies that people are more inclined towards the usage of AR in marketing communication when it comes to fashion and lifestyle sector.

Also, 75% of the respondents stressed emphasis on the fact that they weren't comfortable in trying out new products by coming in direct contact with them. It also directly or indirectly implied that they wanted more and more brands to venture out into this space of marketing communication enveloped in AR.

III. CONCLUSION

The study's findings suggest that augmented reality is the way of the future. Many firms nowadays understandably want to assist customers experience what their products have to offer, and augmented reality allows them to do so for free for sophisticated and pricey products. Furthermore, augmented reality enables businesses to establish a competitive advantage swiftly.

Interaction between a firm or a brand and its client has become a key component of marketing success, as previously stated in the theory. Consumers are expecting more and more interaction with businesses, as well as a lot more attention from them. Customers' expectations have been heightened

because of the competition between different businesses, which has driven experiential marketing to a new level.

They expect to speak with the corporation directly. AR advertising and the usage of a tablet have produced a medium that ties the customer with the brand, according to the experience.

The most essential features that came out of the content were interaction with the gadget and the content. Through the interviews and questionnaires, the sensation of control over the situation and control over what was happening was also discovered. As the theory explains, it is a very subjective and personal concept.

AR adverts force the consumer to engage with the device and control the content in general. Depending on the user, the level of control can vary. The most crucial result is that the user believes he is in control, whether this is true.

From the perspective of a marketer, it provides the customer the impression that the brand is offering him something and that he is in control of the situation.

The research method used in this thesis was qualitative, and it was carried out using a small sample size. As a result, as stated in the methodology, the findings cannot be applied to the entire population, but only to a similar group with similar features.

The study's goal was to examine digital native consumers' experiences with AR technology in advertising and determine whether this technology could be utilized in the long run or if it would merely have a "boom impact" before disappearing.

Furthermore, the survey's content and the various ads chosen to be reviewed by the participant were flawed, as many other AR commercials are currently in use and might have served as a better example with perhaps higher quality and features.

The number of commercials chosen provided sufficient insight into users' reactions to AR, but a bigger sample of instances could have shown some other challenges or characteristics of such a technology in marketing.

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