

A Study on Opportunities for Augmented Reality in Future Business Models

S.Kamalaravanan

Associate professor, Department of Management Sciences, Hindusthan College of Engineering and Technology, Coimbatore

Abstract

Augmented reality is actually an improved adaptation of reality where live immediate or aberrant perspectives of physical genuine situations are increased with superimposed PC produced pictures over a client's perspective of this present reality, along the lines of upgrading one's present impression of reality.

In Coimbatore total of 425,115 labourers, containing 1,539 cultivators, 2,908 essential cultivating specialists, 11,789 in house hold business ventures, 531 insignificant cultivators and 20,877 other peripheral pros in Coimbatore. As, the result of the research. Most of the people are known about the augmented reality. They are aware of this technology in Coimbatore. From 150 sample, 97 majority of people experienced augmented reality before. So, market is vast and whoever used it they are interested. It can be considered as a sign of hope. People liked it. 61.3 % people liked it a lot and others actually didn't dislike it. So, it is also a good sign. Job holder's people and students are highly involved in application of augmented reality. They are mostly university going student and highly proactive in technology.

Keywords: AR(Augmented reality), Aromas, Empathy, pragmatic boundaries, VR(Virtual reality), MR (Mixed Reality)

Management Insight (2020). DOI: 10.21844/mijia.16.1.8

Introduction

The capability of virtual reality (VR) was recognized as of now in 1999, when VR pioneer Fred Creeks, Professor of Computer Science at the University of North Carolina, completed a broad ponder on VR in designing controls. In those days, he reported that "It [VR] now truly works, and genuine clients routinely utilize it" (Brooks, 1999). Presently eighteen years after the fact, we're still sitting tight for virtual reality and increased reality to cross the 'gorge' to greater part reception. What's distinctive today? First of all, innovation have progressed enormously, and world's biggest organizations and funding firms are emptying cash into new companies in VR/ARspace.

These advancements can possibly combine physical and virtual world and totally change how we associate with PCs. To begin with when PC's were presented, we imparted with console and mouse, at that point moved toward becoming cell phones and tablets with touch

Corresponding Author: S. Kamalaravanan, Associate professor, Department of Management Sciences, Hindusthan College of Engineering and Technology, Coimbatore

How to cite this article: Kamalaravanan, S. (2020), A Study on Opportunities for Augmented Reality in Future Business Models. Management Insight, 16(2) 50-54

Source of support: Nil

Conflict of interest: None

Received: 08.02.2021; **Accepted:** 29.03.2021; **Published:** 14.07.2021

screens and wiping. Presently, VR and AR empowers the utilization of common motions to speak with virtual questions as in characteristic world. Rather than review level 2 D pictures on a screen, with VR and AR, 3 D items can be seen in an immersive situation. I have done my internship in Swiggy, this research needed to regularly research about the market and activities through social media to ensure the sales and relationship with the clients with the company.

Augmented reality is actually an improved adaptation of reality where live immediate or aberrant perspectives of physical genuine situations are increased with

superimposed PC produced pictures over a client's perspective of this present reality, along these lines upgrading one's present impression of reality.

Statement of Problem

Augmented Reality possesses a major chance to catch the market through an appropriate research and study. This research questions "Are people ready to adopt AR?" "With next few years our country will get a major insurgency through gadgets media and innovations. So augmented reality will make a major commitment for what's to come. This examination and research is essential to know the purchaser and the market. Individuals of Coimbatore are extraordinary and used to shop in fluctuate advertise. Purchasers are altogether different. To get think about the market and how individuals will respond and adjust augmented reality in Coimbatore, this research led an examination about the client status and adjustment for augmented reality. This study helps to understand need of augmented reality and help me to create a unique marketing strategy for augmented integrated products.

Objectives

- To understand the awareness of augmented reality among people.
- To analyze about the market and customer perception about Augmented Reality
- To understand the need of new strategy for AR.
- To analyze about the future existence of Augmented Reality in for coming trends.

Research Methodology Research design

Descriptive method of research is used in the present study. Descriptive Research Design is used for this study to understand and describe the opinion of the employees. Descriptive research is used when the object is to provide a systematic description that is as factual and accurate as possible.

Data sources:

Primary data:

Collecting data is easy but collecting valid and perfect

data is quite tough. Sample was 150. This research have chosen the various people to know their intention and experience about augmented reality. This research made the data in google forms and personally send it to the selected people from my family, friends, friends of friends, neighbor, office colleague, future leaders, top management people in swiggy and the people who are working with technology. In this research the survey questions have sent through e-mail, facebook message, posted in a secret group and face to face interview.

This research tried to catch all class people to make sure the weight of the research.

Secondary data:

Apart from primary data, the secondary data is being collected through text books, records of Swiggy in office, journals, from library, academic reports and interest used for this study.

Sampling:

Sample population

In Coimbatore total of 425,115 labourers, containing 1,539 cultivators, 2,908 essential cultivating specialists, 11,789 in house hold business ventures, 531 insignificant cultivators and 20,877 other peripheral pros in Coimbatore. The research study was conducted in Coimbatore for the population range for 150 respondents.

Sample method:

This research was made by the survey in accordance with the population of 150 peoples in Coimbatore. So the sample type is simple random sampling method.

Findings:

Simple Percentage Analysis

- Out of 150 respondents majority 56.7 % responses from Male.
- Mostly 49.3 % responses from graduate
- Mostly 34.7 % responses from jobholder
- Majority 54.0 % responses from android phoneusers
- Majority 84.0% responses from AR users with basic

knowledge to use AR.

- Majority 64.7% responses from AR users.
- Majority 64.7% responses from AR users with previous knowledge.
- Majority 54.7 % responses from family members with no AR usage experience.
- Mostly 37.3 % responses from AR users like to use AR in daily basis
- Mostly 38.7 % responses from agreed that AR technology in 5 years will be great.
- Mostly 30.0 % responses from accepted that AR application find around them in daily usage.
- Mostly 31.3 % responses from agreed that AR experience is new and great.
- Mostly 37.3 % responses from agreed that AR technology can be used in their job.
- Mostly 36.7 % responses from agreed that AR technology can help to improve digital test for students.
- Mostly 38.0 % responses from agreed that AR usage helps to improve emotional connect.
- Mostly 36.7 % responses from agreed that AR technology enhance the sense of presence.
- Mostly 34.0 % responses from agreed that AR technology is easy to use.
- Mostly 36.7 % responses from agreed that AR get information about data more quickly.
- Mostly 37.3 % responses from agreed that resources are available to use AR technology.
- Mostly 44.7 % responses from agreed that AR can be combined with other technologies.
- Mostly 32.7 % responses from agreed that respondents have enough knowledge to use AR.
- Mostly 45.3 % responses from agreed that AR apps are excited to use.
- Mostly 34.0 % responses from agreed that AR apps are insecure to use.
- Mostly 33.3 % responses from agreed that AR with VR will be great.
- Mostly 41.3 % responses from agreed that AR with sound will be great.
- Mostly 43.3 % responses from agreed that AR will be used in their websites in future.
- Mostly 37.3 % responses from agreed that AR explore technology in new way for future.
- Mostly 35.3 % responses from agreed that AR with aromas inbuilt can be greater technology.

Correlation

- P-value is .058. Hence Null Hypothesis is accepted. Therefore there is no significant relationship between Age and AR usage help to get information about data more quickly.
- Chi-Square analysis
- P-value is .008. Hence Null Hypothesis is rejected. Therefore there is a significant relationship between perception of AR in 5 years and usage of AR in daily basis.

ANOVA – Analysis of Variance

- P-value is .022. Hence Null Hypothesis is rejected. There is a significant difference between the respondents users knowledge in Augmented Reality and Usage of AR In Daily Basis.
- P-value is .045. Hence Null Hypothesis is rejected. Therefore there is a significant difference between usage of AR can explore technology in new way and Usage of AR in Daily Basis.
- P-value is .019. Hence Null Hypothesis is rejected. Therefore there is a significant difference between adaptability of AR in current jobs and Usage of AR In Daily Basis.

Independent Sample T- Test

- P-value is .011. There is a significant linear relationship between AR usage experience is new and gender classification.

Suggestions

As, the result of the research. Most of the people are known about the augmented reality. They are aware of this technology in Coimbatore. From 150 sample, 97 majority of people experienced augmented reality before. So market is vast and whoever used it they are interested. So it is sign of hope.

People liked it. 61.3 % people liked it a lot and others actually didn't dislike it. So it is also a good sign. Jobholder's people and students are highly involved in application of augmented reality. They are mostly university going student and highly proactive in technology.

After 3-5 years these people will be in higher post in every company. From this, coming years will be technology friendly and augmented reality will be exposed. People do not they can use it but they are interested. Fact is we have to introduce it through mass market and big companies without this augmented reality will not expose. People will know it when the products or application will be in their hand.

In perspective of Coimbatore, this research have to find the gap and application in big products. This research have to reach people through media and application. Customer are ready and they will adopt but there is a big fact that is people does not know it. Whoever knows it, they like it. Making a new brand and mass market should be the target of the company and others to get maximum reach and also profit.

There as on for this examination was to distinguish drivers and hindrances for AR selection in the undertaking to give data about in which utilize cases and businesses these technologies are likely embraced and at what pace. In view of auxiliary research and essential meetings, flow utilize instances of AR could be arranged in three principle classifications; Design, Visualizations for promoting and deals, and Training and Simulations. This is in no way, shape or form a thorough arrangement, yet a valuable structure to take a gander at various utilize cases in AR today.

The vast majority of these utilization cases are transferable to blended reality and some of them to AR too, however it is recognized that this arrangement left out numerous future potential utilize cases for future reception in VR/AR space. As expressed previously, the limits between these technologies are obscuring, and technology progresses so quick that the future 'executioner application' could be something that isn't considered yet. On account of that, this three-section arrangement gives a system to evaluate how these immersive technologies are received now, and how they're likely used sooner rather than later.

Distinctive elements influencing AR reception in each utilization case were then distinguished utilizing a controlling system for meetings and examination. These elements, that were sorted in light of the rule, were estimated in a subjective seven-point scale in

light of their impact for future selection. Since the positioning of these components is subjective and in light of a set number of meetings, singular discoveries shouldn't be viewed as a goal truth, but instead as a potential speculation to be tried in a more focused on and possibly quantitative research.

There are two impediments on that ought to be considered before settling on administrative choices in view of these discoveries. In the first place, the extent of this examination was wide, which caused that utilization cases considered weren't homogeneous in all circumstances.

Each interviewee had particular conditions for utilizing AR, so chose interviewees may not be illustrative as far as appropriation of the entire business or gathering that they have a place in. It is conceivable that a portion of the detailed hindrances are just trademark especially for that organization, in which case, single discoveries could twist the measures exhibited in the rundown above.

Truly, one must be careful without making excessively numerous speculations in view of single discoveries in this examination. In any case, interviews were spread crosswise over a wide range of ventures and capacities for a justifiable reason. The 69 reason for existing was to pick up a general comprehension of the condition of selection today and gauge the future potential in various ventures. Subsequently, every individual finding could be utilized as a theory to be tried in a more focused on research.

Besides, there are confinements that are trademark to quantitative examinations. Discoveries are naturally influenced by the creator's own recognitions to some degree when information is changed from meetings to revealed discoveries, and it is conceivable that a few points of interest lose all sense of direction all the while. To mitigate this issue, each meeting was painstakingly coded and reactions classified directly after each meeting. This prompt reflection considered subtleties in reactions that may have been lost in the meeting circumstance. However, it's reasonable each individual answer can't be incorporated into the report, so citations decided for this report may not speak to the entire perspective of that individual.

With everything taken into account, vital topics recognized in this examination are upheld by wide proof and they give an establishment to future research to develop on. The idea of this essential investigation was descriptive and the design were to inspect and comprehend this wonder, in this way discoveries ought to be additionally thought about in like manner.

Conclusion

In the end, Many organizations have been by and large inspired with the execution and conceivable outcomes that AR gives, and the technology can possibly change numerous current methods for working. In any case, there are still some pragmatic boundaries identified with technology and basic hindrances in associations before AR can be all the more generally embraced. By the by, it's never again an inquiry whether these technologies will be embraced all the more generally, yet when and in which utilize cases. Current utilize instances of VR in the undertaking were arranged in three principal classifications; Design, Visualizations for advertising and deals, and Training and Simulations.

In view of discoveries in these three classes examined all the more particularly, VR/AR will be most positively embraced in Design, trailed by utilize cases in Marketing and Sales, and ultimately received in Training and Simulations, which has most obstructions for selection. At the point when the technology progresses, numerous utilization instances of VR can be changed in to MR, yet VR is presently less complex option, hence it will probably be embraced first. AR thus, has incredible potential in field tasks, yet more extensive reception still has critical common sense obstructions. Making the fundamental foundation of computerized twins for physical items is a noteworthy test, and the ease of use of AR glasses still should be made strides.

References

- Bacca, J. B. (2014). Augmented Reality Trends in Education: A Systematic Review of Research. *Educational Technology & Society*, 17 (4), 133–149. , 133–149.
- Dr. Oscar Peters, N. Z.-P. (2018). Appropriation Of Wearable Augmented Reality. *MobileHCT'18* (pp. 978-1-4503- 5941-2). barcelona: Doctoral Consortium .
- Gary White, C. C. (2017). Augmented Reality in IoT. The 8th international workshop on context aware and iot service (pp. 252-357). hangzhou: china.
- György Molnár, Z. S. (2018). Use of Augmented Reality in Learning. *Acta Polytechnica Hungarica* , Vol. 15, No. 5, .
- Harborth, D. V. (2018). Augmented Reality – A Game Changing Technology For Manufacturing processes?
- Twenty-Sixth European Conference on Information Systems (p. 145). Portsmouth, UK: ECIS2018.
- İbrahim İLHAN, E. Ç. (2016). Mobile Marketing: Usage of Augmented Reality in Tourism. *Gaziantep University Journal of Social Sciences* , 15(2):581-599.
- Ikhlas Watan Ghindawi, A. P. (2016). A Survey: Medical Augmented Reality . *International Journal of Emerging Trends & Technology in Computer Science (IJETTCS)* , 2278-6856.
- Ivan Pinčjer, N.M.(2018). conversion Of virtual reality in to a mixed Reality. grid(p.p70).NoviSad, Serbia : Department of Graphic Engineering and Design.
- Neelanjan, K. S. (2018). Augmented Reality in Kidney Cancer. London: Intechopen.
- Siti Salmi Jamali, M. U. (2014). A Review of Augmented Reality (AR) and Mobile- Augmented Reality (mAR) Technology: Learning in Tertiary Education. *THE INTERNATIONAL JOURNAL OF LEARNING IN HIGHER EDUCATION* , 2327-7955 .