
Augmented Reality Glasses

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ABSTRACT

Tasked with generating a Design Fiction of my own. I have prepared this short paper which reveals a concept our group have come up with. I unveil a new innovative service which is design centered around interactive engagement with tourism while also providing information boards, thus creating more an income to the city. I have described a scenarios where a user uses the augmented glasses to view the information board outside of a restaurant. In this paper I show how research have guided us to our Design Fiction idea which we hope to be recognized by potential stakeholders.

Author Keywords

Augmented; Visitors; Tourism;
Interactive; Holograms; Design
Fiction; Urban Informatics

Introduction

When exploring new innovative designs that will aid the Smart City movement, we looked at the principles of design fiction to help evolve our concept. We hope to make the city connected through means of technology. I have read several papers related to [1] Augmented Reality [2] Augmented Glasses and [3] Tourism. We hope to merge the experience of using augmented technology and tourism. As computing technologies are always advancing, whether we like it or not, I believe it is time for our City to become more connected through technology. We hope this concept will spark outside interest from potential stakeholders and county councilors who can consider the potential of implementing this design into their cities and other areas infrastructure. connected via technology.

Literature Review

In my research of readings related to Augmented Reality it is clear that an augmented environment can be used as a marketing tool for general consumers and tourism, as it can immediately enhance the users surroundings. In other articles it tells how Modern AR can be used to replace the tourist guide. Thorough readings which combine AR with tourism, the clear problem in the growth of AR is the financial cost to run such projects. I am suggesting an Augmented Reality service which is fueled by consumer use and expenses which could operate in cities around the world.

In the paper In situ with bystanders of Augmented Reality glasses, The article explores the effects that new wearable augmented reality devices like Microsoft Hololense and Google Glass will have on consumers, and the influence it will have on media consumers, and the influence it will have on media usage in the future. The author predicts users to reacting skeptically to these new smart glasses, or the technological barriers like battery life, unfashionable design. They found that consumers with a high innovativeness to technology will likely be the users of such product. We hope that in our own concept we involve all user groups by making the augmented experience easy-to-use. Thus, expanding our target market.

In the paper Augment Reality in Urban Heritage tourism it introduced the possibility of "time-warp" witch allows the user to travel back to experience the city in the past, but we feel the cost of this service would be astronomical. I understand that the interface design of the project is a very important stage to achieve success with our concept.

When coming up with idea for our design fiction I looked at how designs can take influence from art, pop culture movies and literature. The focus of this research outlines how designers can take influence from fiction as a resource. It also looks at HCI and how scenarios solutions can influence how a product is produced. They mention how Motorola took influence from star wars upon release of the Motorola STARTAC. We took influence from "Creative Control" a movie which explores the possibility of using augmented glasses.

As outlined in Limerick's Development and Tourism Strategy 2018-2020 where Tourism is emphasized as one of the key sectors for future

growth in the Limerick 2030. The main areas of development are centered around 4 key

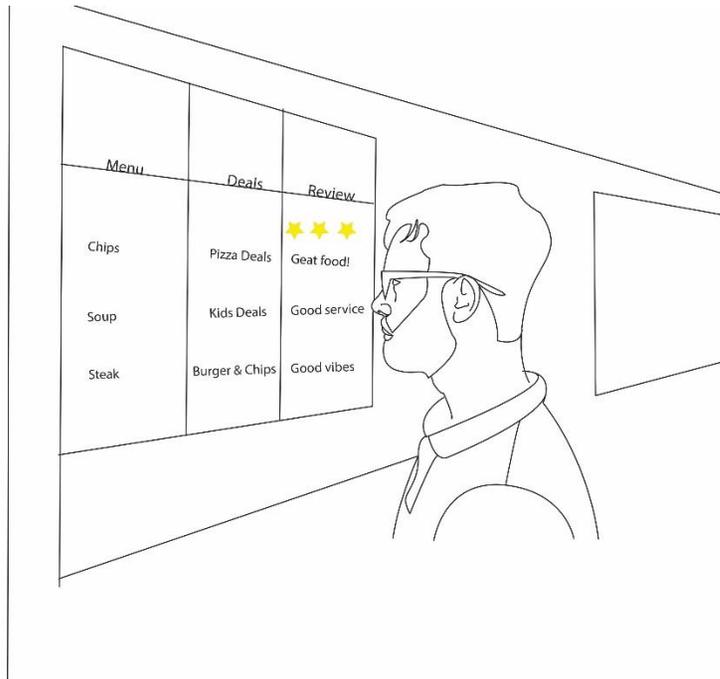


Figure 1. User wearing glasses.

HI user Scenario

Sam is a local resident of the city. He realizes how popular these new Augmented Glasses are amongst tourist, so he decides to sign up. Sam goes online and purchases a membership for his AR glasses. A letter arrives for Sam only a couple days after the purchase, Sam then goes to the docking station with his new card. He then scans his card at the station, a pod opens and Sam puts on the glasses. Sam is then presented with the following options, (1) Tour Guide (2) Where to go?. Sam selects option (2). He then puts on his glasses. Sam then goes to his usual local store. He

themes; waterways, heritage, art and culture.

reveals itself. He can now view a list on information provided by the store. He sees a Menu, Rating and a Review system. Sam was surprised with how well his local store is rated on here.

Augmented Reality Glasses Today

What is Augmented Reality, it is a technology which overlays information on physical objects. Augmented reality has a potential future, but it is only in its infinite stage. Large tech firms like Google, Apple and Facebook have all experimented with AR. Google released a platform for users to created Augmented apps called ARCore likewise Apple have released a similar platform called ARtoolkit. The ARToolkit has been used by Ikea called Ikea place app, which allows the user to scan the room and virtually place Ikea objects around the room. Gatwick Air port in London have had huge success with their use of AR, they have introduced a system which allows passengers to use AR to navigate airport terminals.

stands outside the store and an Augmented board

The Augmented Reality Experience

Subscription: Users sign up online, then wait for the card to arrive in the post.

Collection: Users collect the technology at a designated pickup/drop-off point.

Product: The glasses come with an earphone that is connected to your glasses. There is a tracker inside the glasses that prevents people stealing them.

Users: Users would consist of both residents and tourist in the city.

Capabilities: The AR glasses tour guide can be set

to multiple different language to suit tourists
visiting from abroad.

The Future

As augmented reality slowly becomes reality
To many. We hope that our design could compete with the
upcoming trends. We would like to see stations around cities.
We would like to see people create their own tours, treasure
hunts. Companies could use our technology for showing
people how their companies operate. I see a great potential
for this area and would like to see Augmented and Virtual
Reality scenarios in day-to-day situations

References

Conor Linehan, Ben J. Kirman, Stuart Reeves, Mark A. Blythe, Joshua
G. Tanenbaum, Audrey Desjardins, and Ron Wakkary. 2014. Alternate
endings: using fiction to explore design futures. In CHI '14 Extended
Abstracts on Human Factors in Computing Systems (CHI EA '14). ACM,
New York, NY, USA, 45-48.

Haugstvedt A.C., Krogstie J. mobile augmented reality for cultural
heritage: A technology acceptance study in proceedings of 2012 IEEE
International Symposium on Mixed and Augmented Reality (ISMAR)
.pp2447- 255, 2012.
[https://www.sciencedirect.com/science/article/pii/S187705091301245
3](https://www.sciencedirect.com/science/article/pii/S1877050913012453)

Denning, T., Dehlawi, Z. and Kohno, T., 2014, April. In situ with
bystanders of augmented reality glasses: Perspectives on recording
and privacy-mediating technologies. In *Proceedings of the 32nd
annual ACM conference on Human factors in computing systems* (pp.
2377-2386). ACM.

Jung, T.H. and Han, D.I., 2014. Augmented Reality (AR) in Urban
Heritage Tourism. *e-Review of Tourism Research*, 5.

Limerick Development and Tourism Strategy (N.D) Limerick.ie,
available: [https://www.limerick.ie/council/services/business-and-
economy/business-supports/limerick-tourism-strategy](https://www.limerick.ie/council/services/business-and-economy/business-supports/limerick-tourism-strategy) [Accessed 26th
March 2019]