Research Findings: Augmented Reality Background

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1. Background

Luminary Promotions; our client, is keen on creating exciting applications using Augmented Reality.

2. Objectives

Get an in-depth understanding of what Augmented Reality is, its uses and any future developments /ideas for the technology

3. Approach

Look in to research papers, YouTube videos, search engine queries.

4. Findings

- 4.1. AR is the ability to insert an over to digital and virtual information in to the real world.
- 4.2. "The ability to browse life"
- 4.3. Technology started in 1962 when cinematographer Morten Heily created the sensorama, a simulator with visuals, with sound, vibrations and smell.
 - 4.3.1. The first real world application was heads-up-displays in fighter jets, symbols are projected on to a transparent glass screen. Allowing pilots to aim weapons better. HUDs are becoming available in cars.
- 4.4. Can be applied to medicine and education
 - 4.4.1. The technologies rapid development its potential is endless.
- 4.5. Very popular as a marketing medium
 - 4.5.1. In 2013, Ikea had a catalogue that could recognise parts of it and it would visual the furniture of how it works and looks in real life.
 - 4.5.2. Mitsubishi worked with Metaio to create an app that allows customer to see products of actual size inside their homes.
 - 4.5.3. AR is also used to replace manuals, and show real-time instructions/
 - 4.5.4. In art museums the application can replace long audio tours, when you point the device at paintings an overlay of information can be displayed.

5. Further Investigation

- 5.1. The "augmented city" a vision that in the near future, every surface, object, environment, etc., becomes a trigger or portal to the digital.
- 5.2. Google glass, what is it, what happened?

6. Recommendations

6.1. Find an exciting, useful purpose for augmented reality. How could it benefit or improve a user's experience.

7. References

Dovgal, D. (2013, May 11). *Augmented reality. What is augmented reality?* [Video file]. Retrieved from <u>https://www.youtube.com/watch?v=09vxKN1zLNI</u>

Hitlabnz.org,. (2015). *HITLabNZ - Research Area - Augmented Reality*. Retrieved 20 March 2015, from http://www.hitlabnz.org/index.php/research/augmented-reality