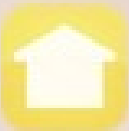


Augmented Reality: A Reflection on its Impact on Education and Consumerism

- Matteo Peroni , Lynn University
- Harika Rao, Lynn University
- Henry Schrader, Lynn University



Purpose

- To explore and analyze the use of augmented reality (AR) in education and business
- To focus on understanding the importance of augmented reality to increase the holistic experience of:
 - (1) on-ground and online education
 - (2) improve consumer interaction with the product.



Virtual reality



Augmented reality

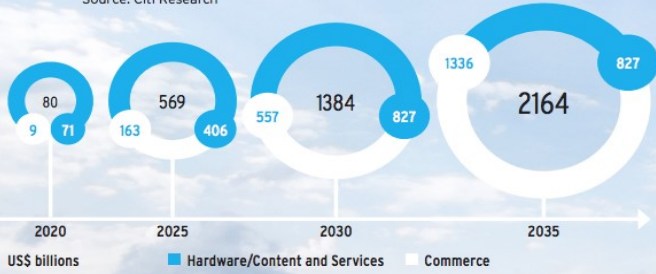


VIRTUAL AND AUGMENTED REALITY TO BECOME AN INCREASING PART OF YOUR WORLD



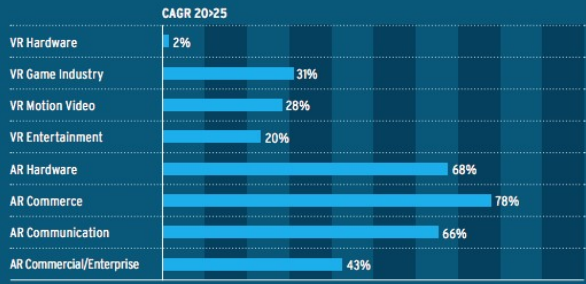
VR/AR market could grow to \$2.16 trillion by 2035 as different industries and applications adopt and make use of the technology.

Source: Citi Research



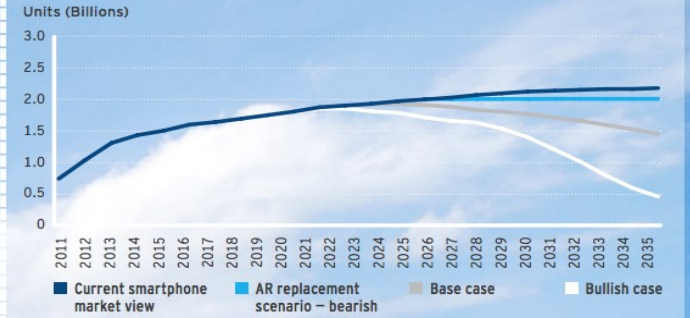
AR hardware and VR/AR applications show strong growth from 2020 to 2025

Source: Citi Research



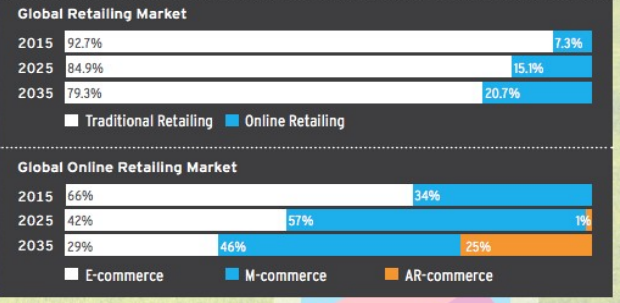
From 2025 onward, we expect the majority of growth in the AR headset market will be achieved at the expense of the smartphone market

Source: Citi Research



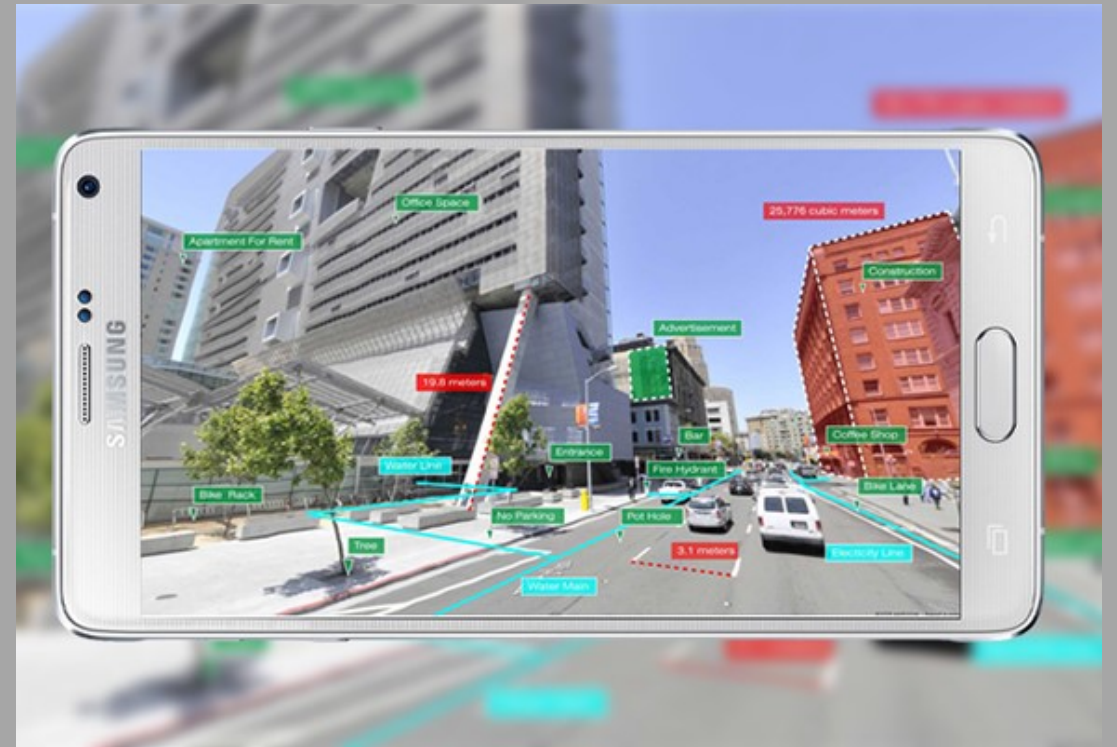
AR commerce is expected to represent 25% of online retailing by 2035

Source: Citi Research



Augmented Reality (AR): an Introduction

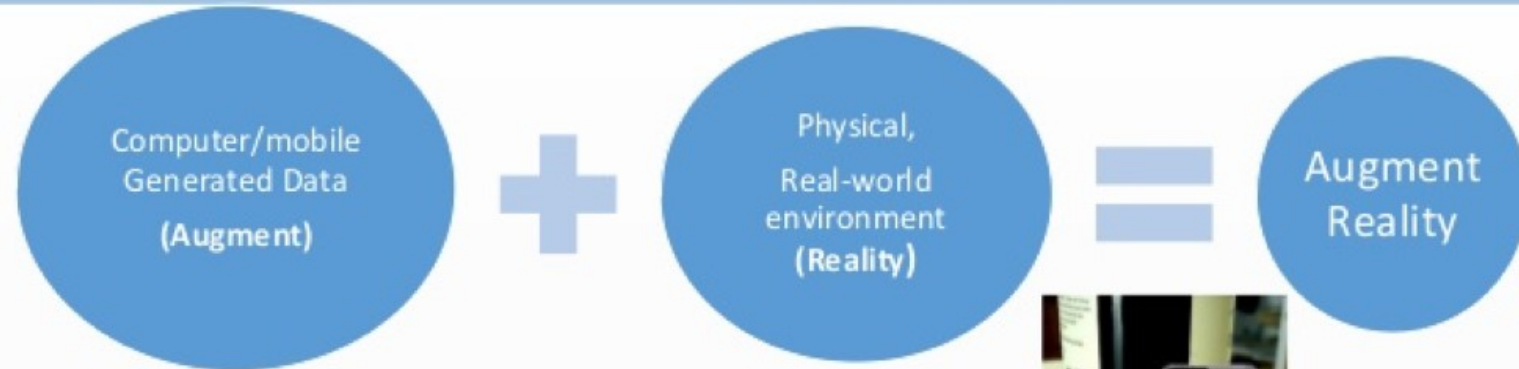
- AR refers to technology that **digitally** superimposes information and objects on real, physical environment, in real time, creating an enriched new environment
- AR overlays images and text onto a user's visual of real surroundings, **enhancing** the experience with animations, sounds, and additional sensory stimuli
- The purpose of AR is to create an **immersive** environment, thus increasing user engagement and attention-retention



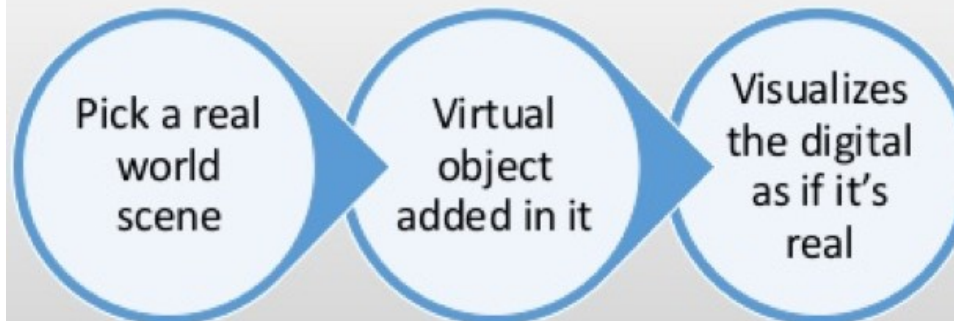
How Augmented Reality (AR) Works

- AR should not be confused with VR (Virtual Reality)
- VR is designed to **block** out the real, physical environment, and replace it with an immersive, fully digital environment
- AR technology is similar to Heads-Up-Displays (HUDs), but it is **customizable, interactive, and immersive**
- In AR, a portable device, such as a headset, tablet, or smartphone, is capable of **superimposing digital content** on viewers' field of view of a real, physical environment, and **interact** with it

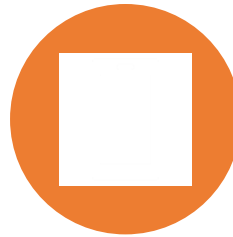
What is Augmented Reality ?



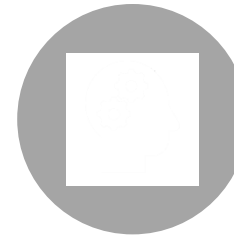
How does it work?



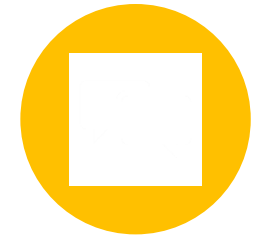
Educational Applications of AR



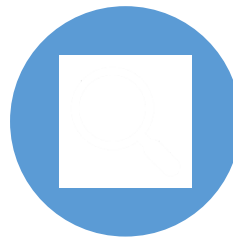
AUGMENTED
REALITY
CLASSROOM



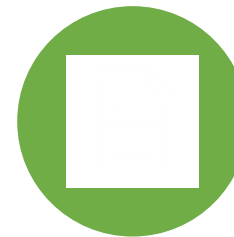
EXPLAIN ABSTRACT
AND DIFFICULT
CONCEPTS



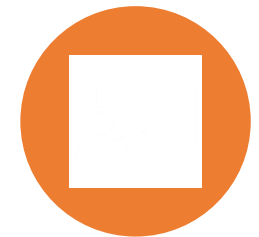
ENGAGEMENT AND
INTERACTION



DISCOVER AND
LEARN



OBJECTS
MODELING



TRAINING



Business Applications of AR

Retail

Industrial Field Services

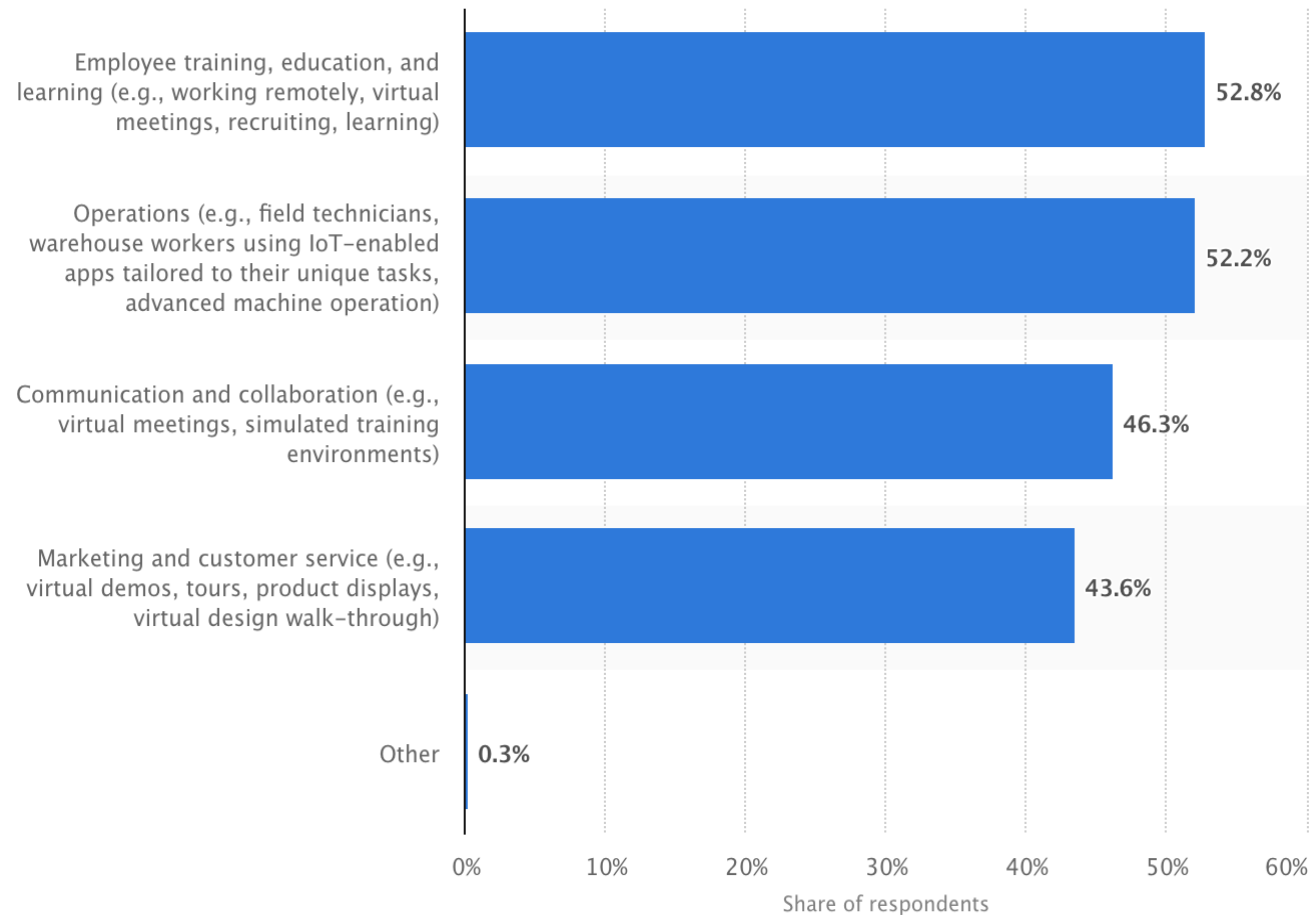
Design and Modeling

Repair and Maintenance

The Possibilities are Endless – Education, Business, Marketing

- 1 Billion AR users by 2020
- Capture audiences' attention for over 85 seconds
- Increase interaction by 20%
- Increase click-through rates to purchase by over 30%.

Mixed reality usage in support of business goals among mid-market enterprises in the United States, as of July 2017



Research Questions



Education

Does AR
improve
student
engagement
and attention-
retention?



Business and Marketing

Does AR
improve
consumer
engagement
and attention-
retention?

Research Methodology

QUALITATIVE RESEARCH METHOD



- 01 Context-dependent finding by evaluating a subject or a predicate
- 02 Popular researches through communication, ethnography, and phenomenology
- 03 Critical analysis and assessment of the findings to identify its veracity and integrity
- 04 Building negative hypothesis and compelling readers to think the other way
- 05 Growing dependency through intellectual decency and confirmation

- Use ElectroEncephalography (EEG) to measure student and consumer Attention and Engagement
- Observe and record Engagement (student and consumer)
- Determine if AR improves Attention Retention



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