**AUGMENTED REALITY**

Augmented Reality (AR) is a technology that overlays digital information or virtual content onto the real world, enhancing the user's perception of reality.

**HISTORY**

1960s -The first AR system was developed by Ivan Sutherland and his students at Harvard University and the University of Utah.

1970s and 1980s - augmented reality was studied at institutions such as the U.S. Air Force's Armstrong Laboratory, the NASA Ames Research Center and the University of North Carolina at Chapel Hill.

Early 1990s- the term "augmented reality" was coined by scientists.

➤ Presently-Augmented reality is still in an early stage of research and development at various universities and high-tech companies.

**TYPES OF AR**

**Marker Based AR:**  Uses recognizable markers, like QR codes, to trigger digital content overlay.

**Marker less AR:** Doesn't need markers; uses device sensors like GPS for location-based augmentation.

**APPLICATIONS OF AR**

**Education**: Enhances learning with interactive content like virtual anatomy lessons and historical reenactments.

**Healthcare**: Assists in surgical planning, medical training simulations, and patient care through augmented reality-assisted surgeries.

**Retail**: Improves shopping experiences with virtual product visualization and try-ons.

**Entertainment**: Offers immersive gaming experiences like Pokémon GO and interactive storytelling.

**FUTURE TRENDS AND POSSIBILITIES**

**Advances in AR Technology:** In the near future, we predict advancements in display technology, including lightweight and transparent displays, along with improved tracking for precise indoor positioning, and advancements in AR glasses and wearables.

**Integration with Other Technologies:** AR is expected to merge with AI, IoT, and 5G, enhancing experiences. This convergence is expected to bring personalized content, context-aware apps, and improved collaboration, shaping the future of AR.

**Industry Adoption:** As AR technology advances and accessibility increases, industries are anticipated to adopt AR for various purposes, from remote assistance and telepresence to immersive training simulations and industrial smart glasses.

Slide 1: Intro

- Good morning/afternoon, everyone. Today, we're diving into the exciting world of Augmented Reality, or AR for short.

- As you can see here, Augmented Reality is a technology that blends digital information or virtual content seamlessly into our real-world environment, providing an enriched perception of reality.

- It's a technology that's been rapidly evolving and has the potential to revolutionize various aspects of our lives, from education and healthcare to entertainment and beyond.

Slide 2: History

- Now, let's take a quick trip down memory lane to understand the origins of augmented reality.

- In the 1960s, the groundwork for AR was laid by Ivan Sutherland and his team at Harvard University and the University of Utah.

- Moving through the 1970s and 1980s, AR research expanded across institutions such as the U.S. Air Force's Armstrong Laboratory and NASA Ames Research Center, culminating in the coining of the term "augmented reality" in the early 1990s.

Slide 3: Types of AR

- Now, let's explore the different types of augmented reality.

- First, we have Marker Based AR, which utilizes recognizable markers like QR codes to trigger digital content overlay. For example, as shown in the video, scanning specific cards can bring virtual objects to life.

- Feel free to imagine how this technology could be applied in various fields.

Slide 4: Markerless AR

- Next up, we have Markerless AR.

- Unlike Marker Based AR, this doesn't rely on markers. Instead, it utilizes device sensors such as GPS for location-based augmentation. As seen in the video, a man standing beside a Pokémon exemplifies how digital content can interact with the real world seamlessly.

Slide 5-8: Applications of AR

- Now, let's delve into the diverse applications of augmented reality.

- In education, AR enhances learning experiences by providing interactive content such as virtual anatomy lessons and historical reenactments, as demonstrated in the video.

- Moving on to Slide 6, in healthcare, AR assists in surgical planning, medical training simulations, and patient care, as illustrated by the doctors using AR technology in the video.

(Repeat this pattern for each application: Retail and Entertainment, discussing the applications and showing the corresponding videos.)

Slide 9: Future Trends and Possibilities

- As we wrap up, let's look towards the future of augmented reality.

- We anticipate exciting advancements in AR technology, such as lightweight and transparent displays, precise indoor positioning, and improvements in AR glasses and wearables.

- Additionally, the integration of AR with technologies like AI, IoT, and 5G is poised to enhance user experiences and revolutionize industries.

- As accessibility increases and technology evolves, we foresee widespread adoption of AR across various sectors, leading to innovative applications such as remote assistance, immersive training simulations, and industrial smart glasses.

(End with a closing remark to encourage questions and further discussion.)

Remember to maintain a confident and engaging tone throughout your presentation, and feel free to personalize the script to match your speaking style and preferences. Good luck with your presentation!