

YSEALI Academy at Fulbright University Vietnam
2022 Technology and Innovation Seminar
"The Digitization of Trust"
Group 4

A stylized illustration on the left side of the slide. It features a yellow hand holding a yellow film reel. The reel has several blue and pink circular frames. A pink rectangular object, possibly a camera or a light, is positioned below the reel. The background is split into a dark blue upper-left section and a yellow lower-right section.

From Youtubers to Avatars: **HOW SYNTHETIC REALITY IS INNOVATING VIDEO CONTENT PRODUCTION**



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Team members

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- Nay Nay (Myanmar)
- Firly Permata (Indonesia)
- Iswary Letchumanan (Malaysia)

Comparison: Evolution of Video & Photography >

WatchData



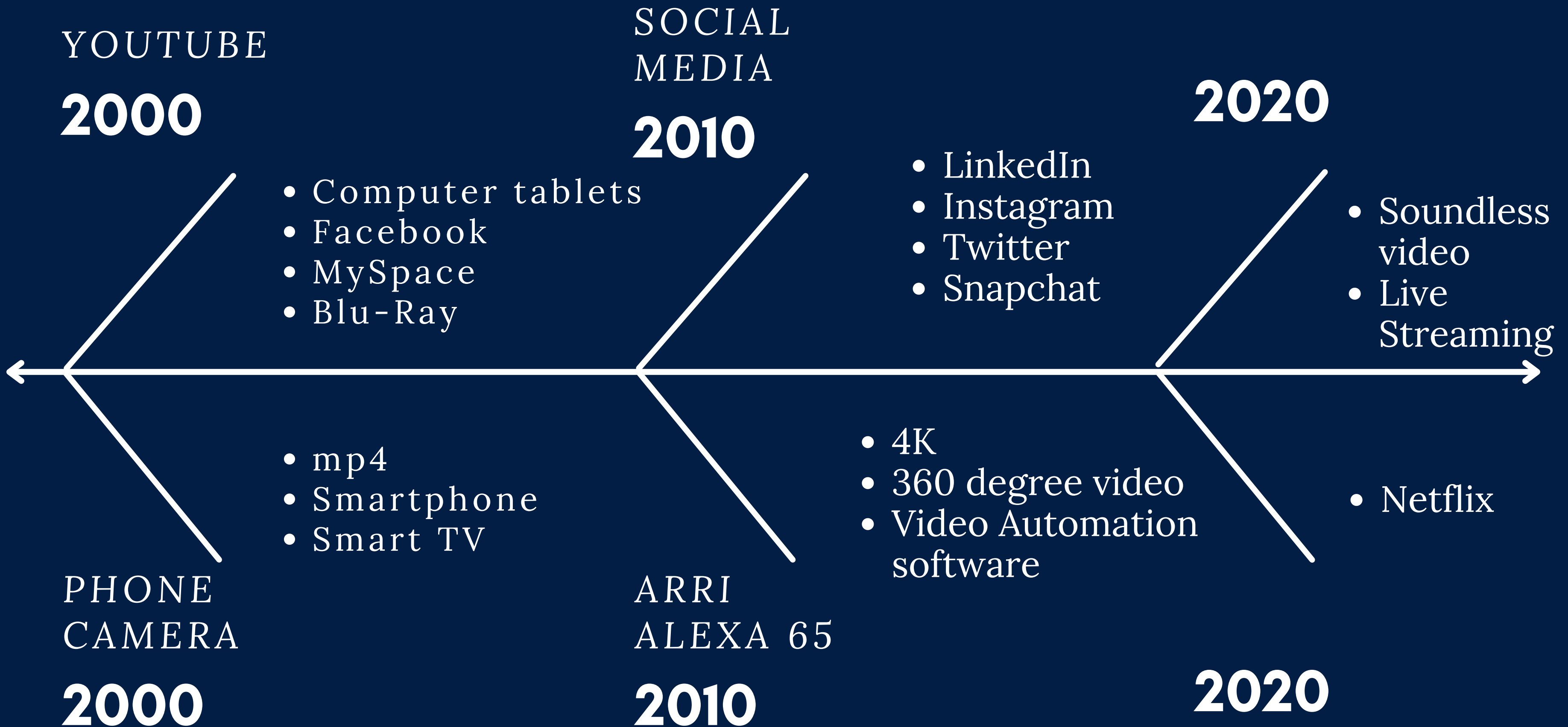
:00



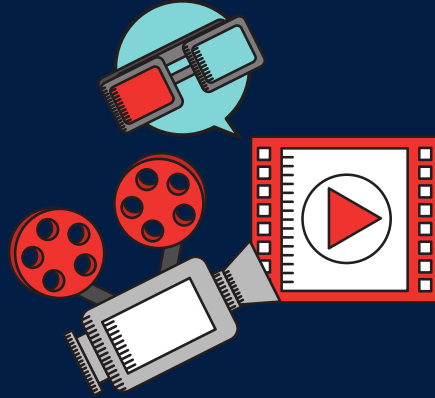
More videos
Tap to see all



THE 2000's VIDEO PRODUCTION



Uses of Video Content



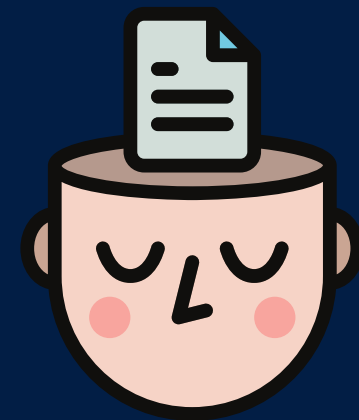
Entertain



Educate



**Increase
Awareness**



**Provide
context**



**Build
relationships**



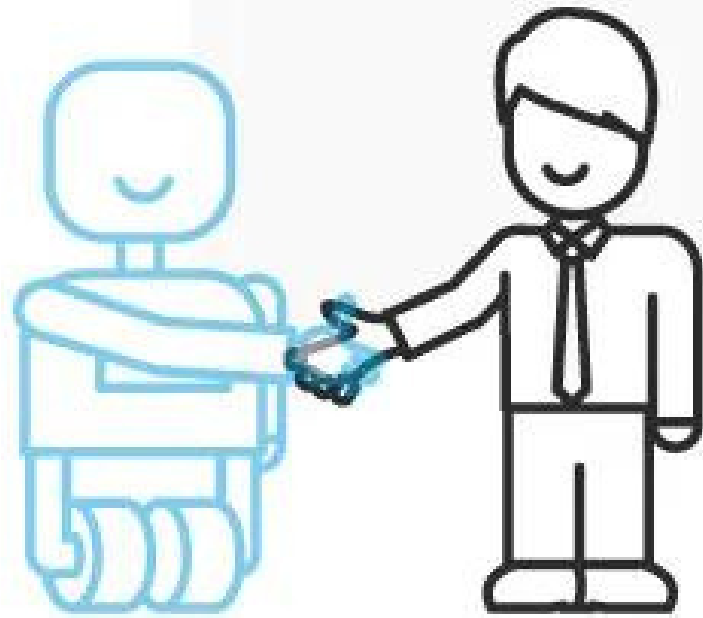
Creating video content is time-consuming and expensive.

The Rise of Synthetic Reality in Video Content Production



Before Understanding What is Synthetic Reality

AR vs. MR vs. VR



Augmented Reality (AR)

a view of the physical world with an **overlay** of **digital** elements



Mixed Reality (MR)

a view of the physical world with an overlay of **digital** elements where physical and digital elements can **interact**



Virtual Reality (VR)

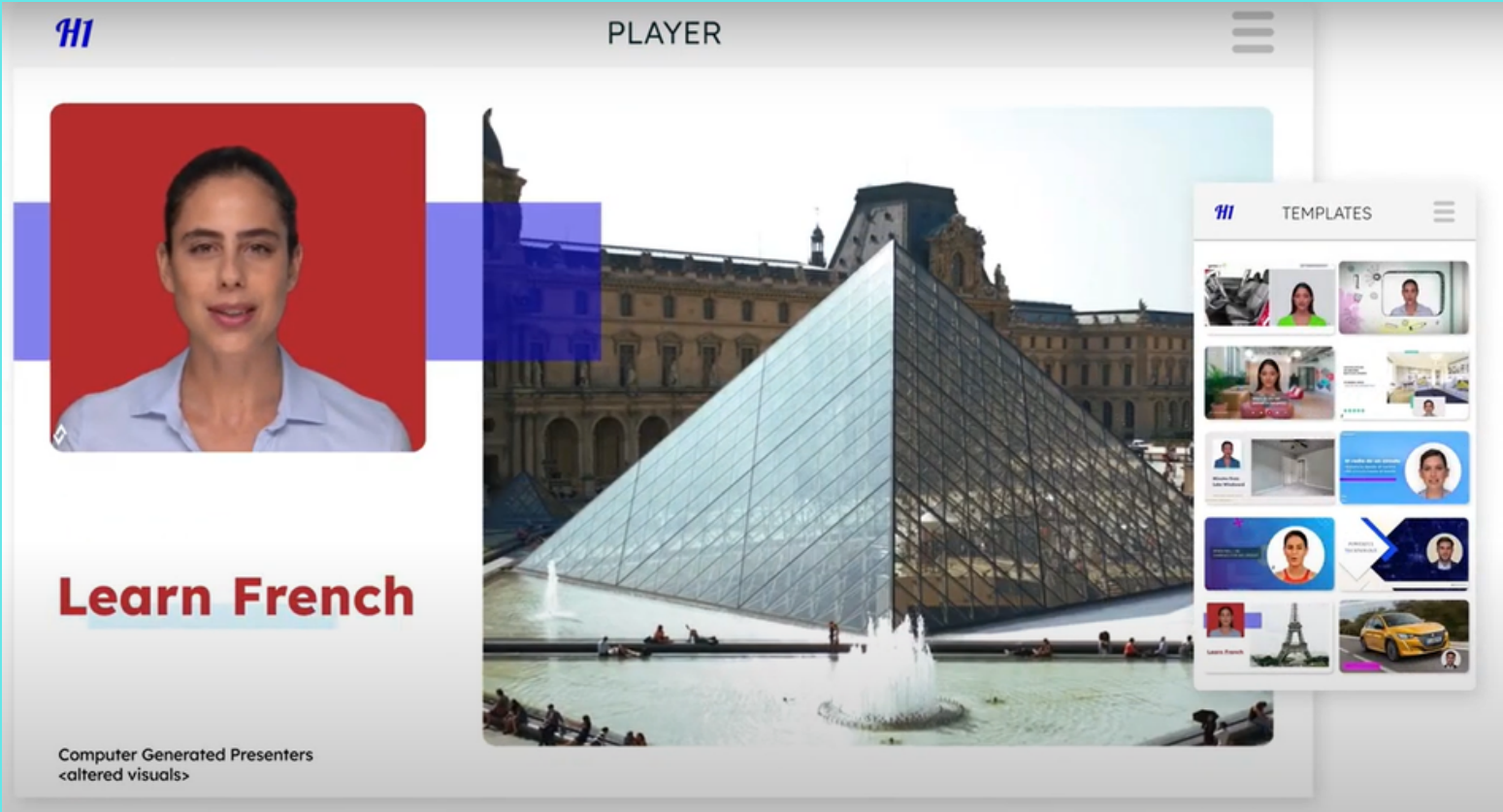
a **fully-immersive digital** environment

Metaverse

Synthetic Reality

Now

Text
Preferences
+
Artificial Intelligence



Art Of The Possible



+
Artificial
Intelligence

Interactive
2D or 3D
Visual
Experiences

Analyse

Predict

Respond

The Beginning: How was Synthetic Reality Used in Content Production



1 April 2015

Universal Pictures trained a model which replaced the face of Paul's brothers (Caleb and Cody Walker) with **Paul Walker** (who died in a 2013 car accident) in various scenes of **Fast & Furious 7**



9 April 2019

Synthesia trained a model to create a video of **David Beckham** speaking in **multiple languages to raise funds** for Malaria No More, from user input text, languages and selected preferences



9 November 2019

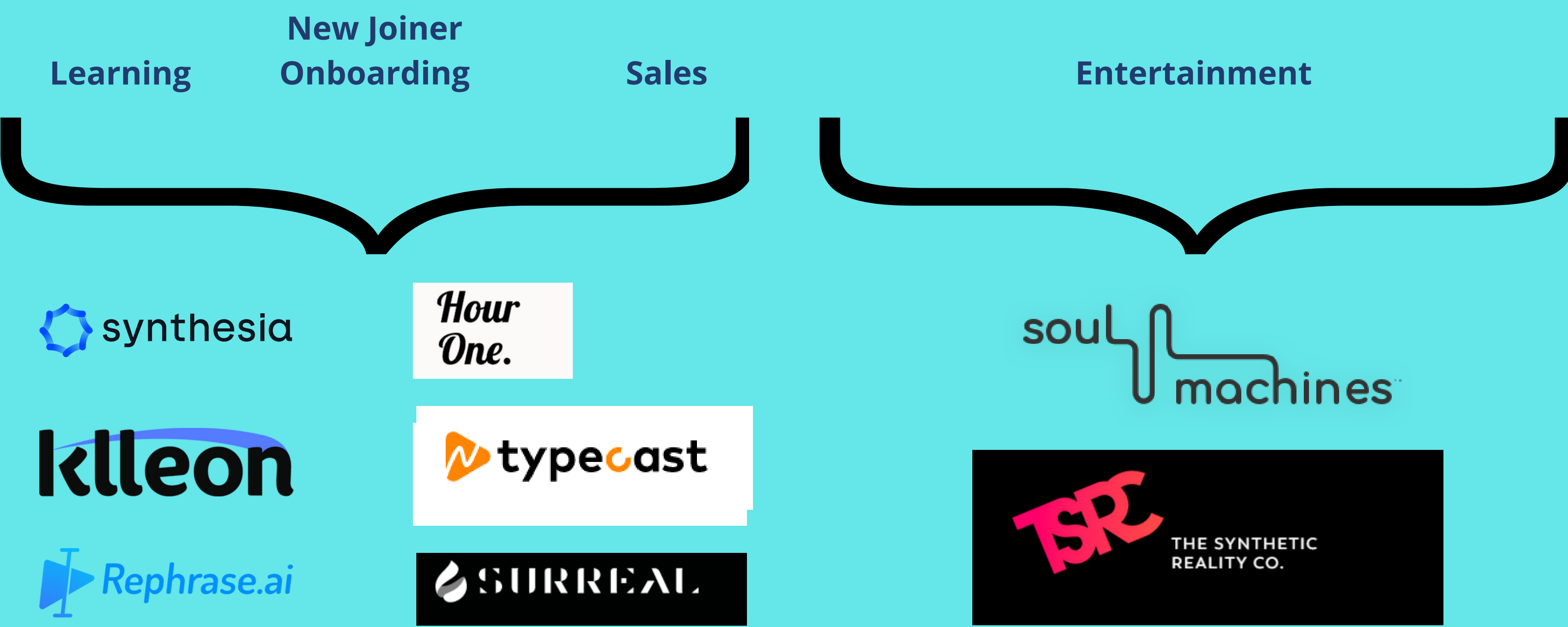
Canny AI trained a model to create a video of **world leaders spreading a message of hope** by lip syncing to the song Imagine by John Lennon from audio and video inputs



16 December 2019

Lucasfilm blended computer-generated imagery with outtakes of **Carrie Fisher** (who died in 2016) from previous Star Wars films in various scenes of **Star Wars: The Rise of Skywalker**

The Present: How can Synthetic Reality be Used in Content Production



SYNTHETIC REALITY INDUSTRIES



Tourism



Entertainment



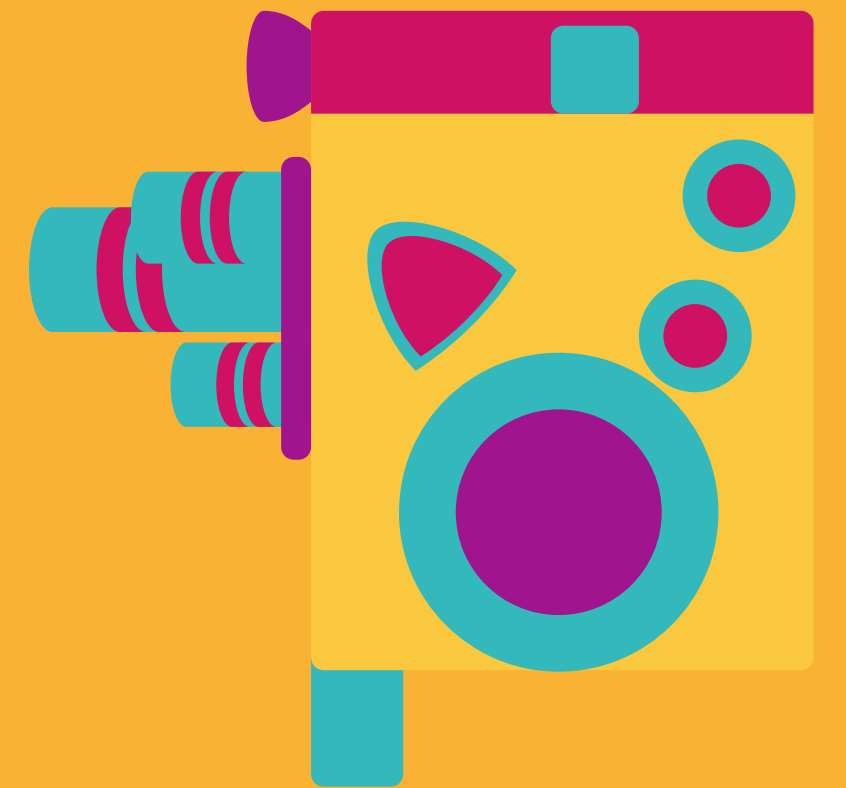
Education



Corporate

INTENDED BENEFITS

- Highly scaleable
- Cost-effective
- High quality
- Humanized communication



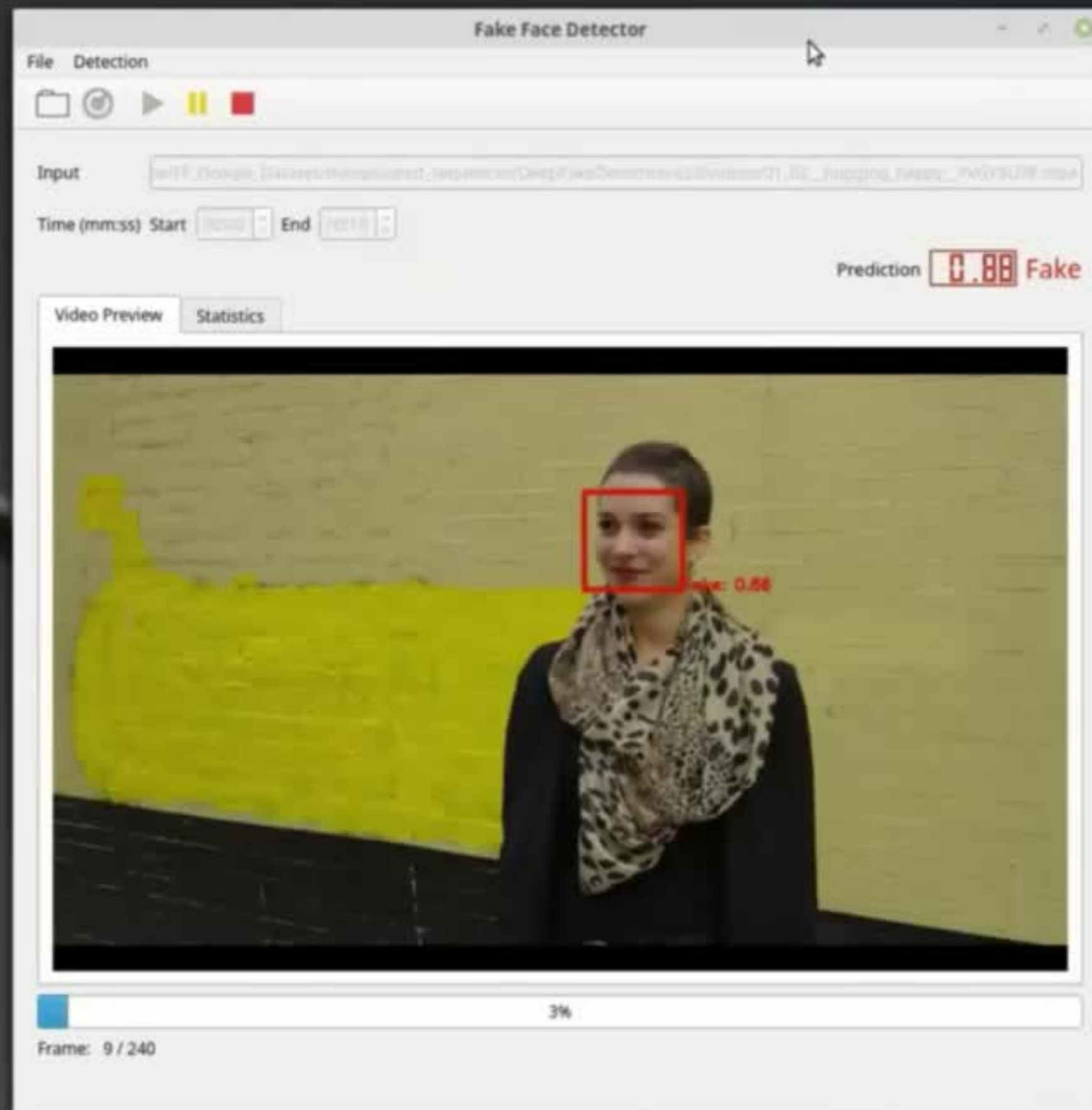


UNANTICIPATED BENEFITS

- Digital "resurrections"
- Risk communication through self-representation
- Digital twins

Taxonomy of deep fakes

- **Deep fake Pornography**
- **Political Campaigns**
- **Reduction of Transaction Costs**
- **Creative and Original Deep Fakes**



ETHICS & LAW

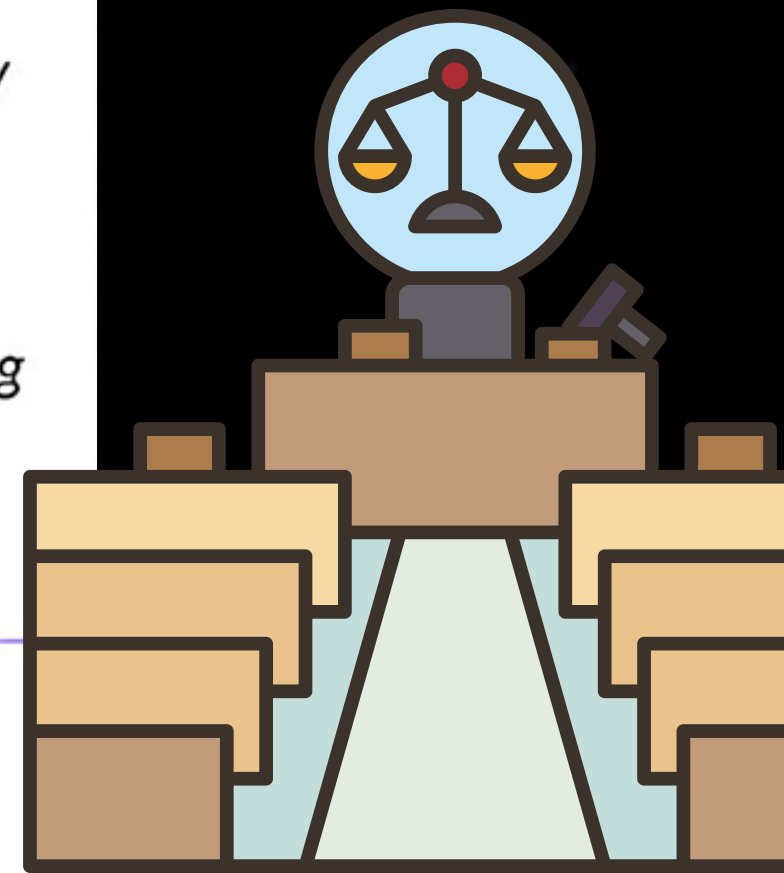
ETHICAL

Regulation
Privacy
Mitigation of Bias
Transparency
Relevance



LEGAL

Governance
Confidentiality
Liability
Accuracy
Decision Making



THE FUTURE OF SYNTHETIC REALITY



1. THE EXPANSION OF VIRTUAL REALITY

2. DIGITAL IDENTITIES

3. THE SR ADOPTION IN SMARTPHONES

4. NEW FILMS WITH A DEAD STAR USING THEIR LIKENESS

5. GAMING INDUSTRY AND ESPORT

6. HOLOGRAM VERSIONS OF DECEASED CELEBRITIES

7. INTERACTIVE MEDIA

8. TECH INNOVATION BEYOND HUMAN IDEAS





SUMMARY

- ✓ **The rise of synthetic reality from it was first used in video production to dialogue replacement.**
- ✓ **In the entertainment industry, mostly the SR is used to recreate performances or videos by celebrities.**
- ✓ **Effects of synthetic reality in video production, how SR is helping to build and humanize virtual worlds.**
- ✓ **Laws seeking to address the use of Deepfakes and SR being used for video production.**
- ✓ **Reality is seen as increasingly less stable, and potential for manipulation in the future is on the rise.**

