THE TYPES AND FUTURE OF ELECTRONIC ENTERTAINMENT

COMPILED BY HOWIE BAUM

ENTERTAINMENT -
AUDIENCE-CENTERED, COMMERCIAL CULTURE

Entertainment is a form of activity that holds the attention and interest of an audience or gives pleasure and delight.

Entertainment is any activity which provides a diversion or permits people to amuse themselves in their leisure time, and may also provide fun, enjoyment, and laughter.

MEDIA & ENTERTAINMENT

■ Film ■ TV ■ Video Games ■ Music ■ Publishing

Pie chart values: Film 40%, TV 34%, Video Games 8%, Music 6%, Publishing 12%

OVERVIEW

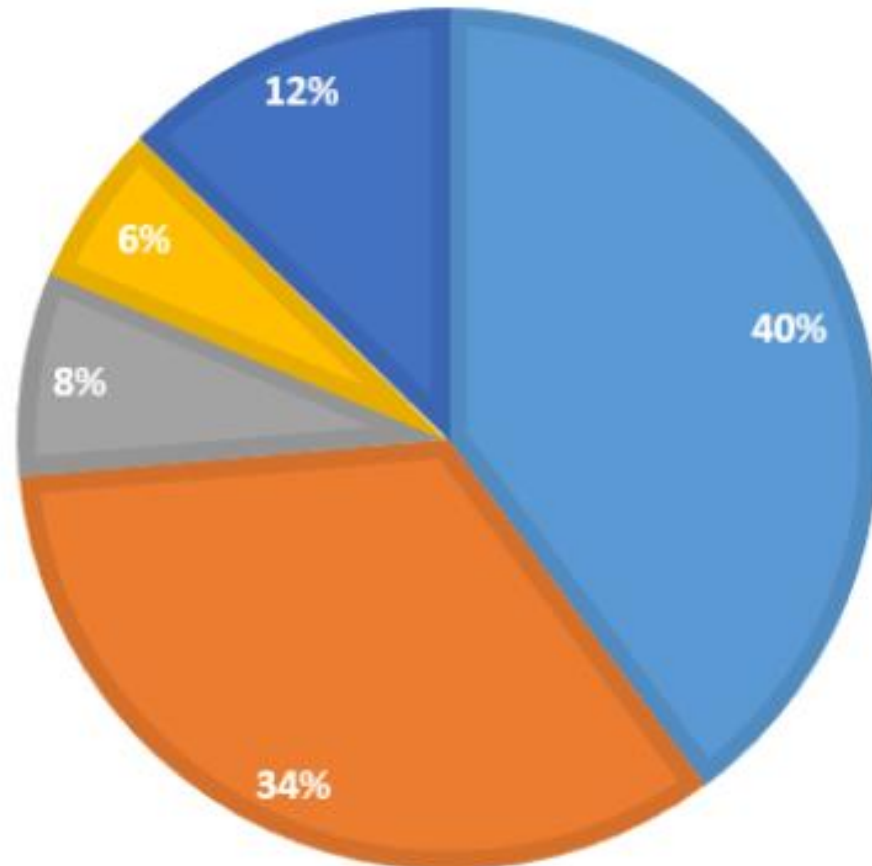**The U.S. media and entertainment (M&E) industry is the largest in the world.**

At $717 billion, it represents a third of the global Entertainment industry, and it includes:

- Motion pictures

- Television programs and commercials

- Streaming content over the Internet

- Music and audio recordings, Podcasts

- Radio

- Book publishing

- Video games

The U.S. industry is expected to reach more than $825 billion by 2023, according to the 2018-2023 Entertainment & Media Outlook by PriceWaterhouseCoopers (PwC).

In 2020 lockdowns, our lives shifted to screens

For Americans, everything is mediated

Q. Which of the following are you currently using or doing more now as a function of the COVID-19 crisis? (Top 8 responses)

37%
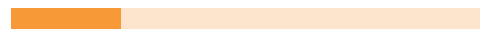Streaming services to watch TV shows/content

37%
Social media
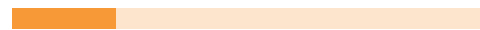
31%
Video chat with friends and family

30%
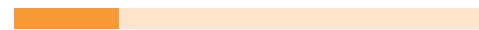Home delivery or pick up from restaurants
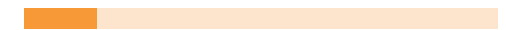
23%
Playing video games

22%
Telehealth doctor visits

22%
Instant messaging

15%
Home delivery of groceries

About 87% of consumers say they'll stick with their Entertainment services, after pandemic restrictions are lifted.

47% of people like watching new release films from home, even if going to a movie theatre or in-person was equally safe.

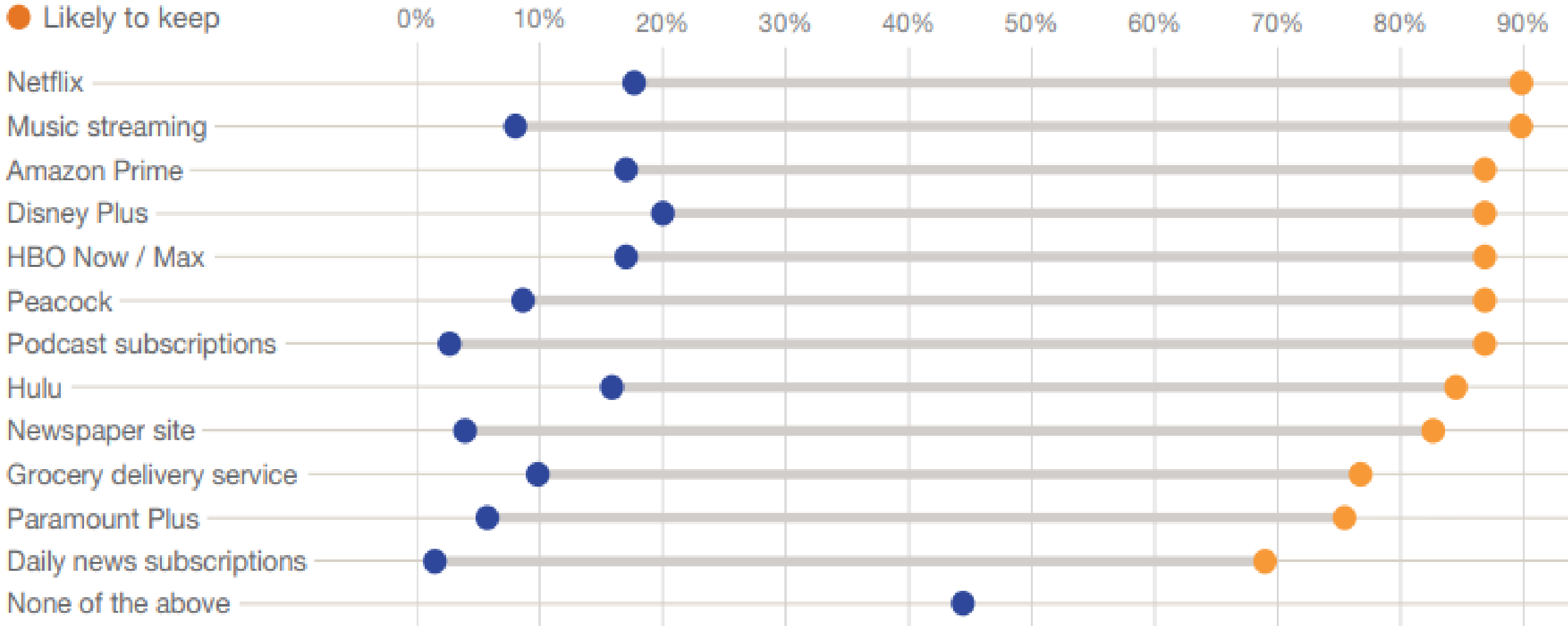# Media has become pervasive ... and we're not going back

What people subscribed to for the first time vs. what they are likely to keep post-pandemic

Q. Which of the following subscription services did you sign up for the first time in 2020?
How likely are you to keep subscribing to this service once pandemic restrictions are fully lifted?

● New subscriptions
● Likely to keep

	0%	10%	20%	30%	40%	50%	60%	70%	80%	90%
Netflix										
Music streaming										
Amazon Prime										
Disney Plus										
HBO Now / Max										
Peacock										
Podcast subscriptions										
Hulu										
Newspaper site										
Grocery delivery service										
Paramount Plus										
Daily news subscriptions										
None of the above										

WHICH DEVICE DO WE USE TO VIEW THE CONTENT ?

THE MOST AND LEAST CONSUMED TYPES OF CONTENT
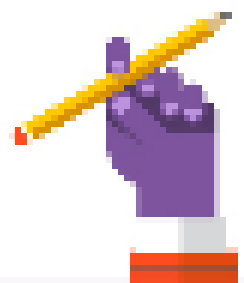
	Millennials	Generation X	Baby Boomers
TOP			
1	Blog articles	Blog articles	Blog articles
2	Images	Images	Images
3	Comments	Comments	Comments
4	eBooks	eBooks	eBooks
5	Audiobooks	Case studies	Reviews
BOTTOM			
5	Quizzes	Quizzes	Memes
4	Webinars	Webinars	Webinars
3	SlideShares	SlideShares	Flipbooks
2	Webinar	Webinar	SlideShare
1	White papers	White papers	White papers

14%

52%

34%

MOBILE
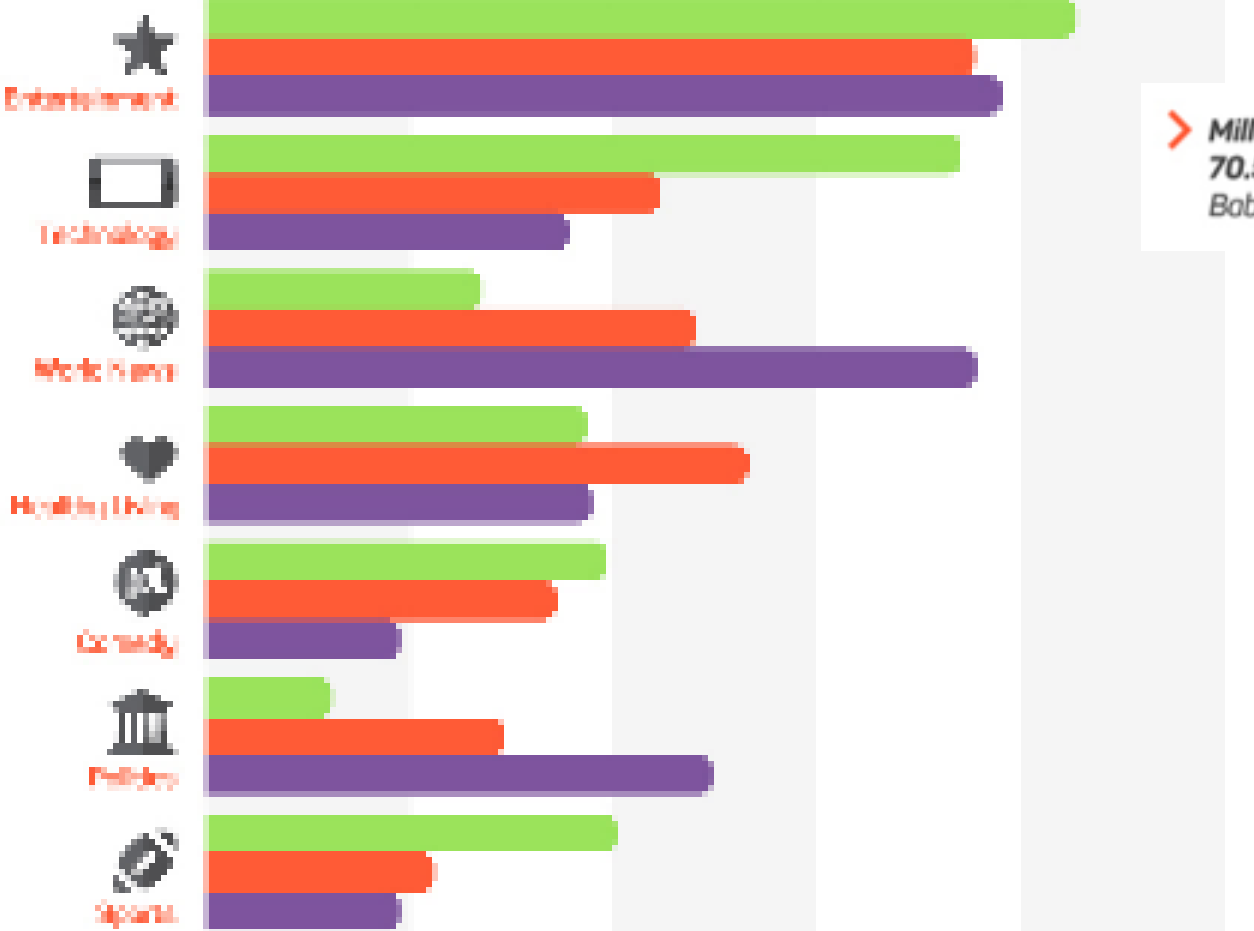
Millennials like tech content **70.5 percent** more than Baby Boomers.

Generation X enjoys content about healthy living **35.4 percent** more than Millennials.

Baby Boomers seek content about world news **94.7 percent** more than Millennials.

Generation X uses Twitter as a primary content sharing platform **70.4 percent** more than Baby Boomers.

Baby Boomers use Google+ as a primary content sharing platform **92 percent** more than Millennials.

INTERNET ACCESS IS NOW A BASIC AND ESSENTIAL UTILITY, ACROSS THE DEVELOPED AND DEVELOPING WORLDS.

CURRENT AND FUTURE PREDICTIONS

- After COVID-19 slumps, the global entertainment industry is set to rebound

- Online entertainment went up 30% during the pandemic.

- Streaming entertainment over the Internet, is the future.

- Many consumption patterns and consumer habits learned during the pandemic will stay the same.

- Live music and cinema are expected to bounce back.

INTERESTING FACTS

- The Internet (Web) has over 1.7 billion websites !

- 4.5 billion people across the world, use it every day !!

- **How long would it take to download everything on the Web, using a high speed connection ?**

- **3 million (3,000,000) years.**

- Every 24 hours, there are 547,200 new websites which equals over 380 websites created every minute !

Items with blue dots are Entertainment sites

2021 This Is What Happens In An Internet Minute

This Is What Happens In An Internet Minute

facebook
1.4 Million Scrolling

21.1 Million Texts Sent

You Tube
500 Hours Content Uploaded

Linked in
9,132 Connections Made

NETFLIX
28,000 Subscribers Watching

Google play / App Store
414,764 Apps Downloaded

$1.6 Million Spent Online

INSTAGRAM
695,000 Stories Shared

SNAPCHAT
3.4 Million Snaps Created

TWITTER
200,000 People Tweeting

69 Million Messages Sent

2 Million Swipes

tinder

3 Million Images Viewed

197.6 Million Emails Sent

imgur

932 Smart Audio Devices Shipped
amazon echo
Google Home

5,000 Downloads
Tik Tok

2 Million Views
twitch

60 SECONDS

Created By:
@LoriLewis
@OfficiallyChadd

THE 35 TYPES OF ENTERTAINMENT

Amusement Parks	Improvisational Theatre	Social Media
Art Exhibits	Karaoke	Spectator Sports
Circuses	Magic Shows	Storytelling
Comedy Clubs	Media	Streaming Media
Cultural Events	Movies	Television
Dance	Museums	Theatre
Dinner Theatre	Music	Theme Parks
Fairs	Nightclubs	Trade Shows
Fashion Shows	Operas	Video
Festivals	Performance Art	Video Games
Fireworks	Podcasts	Water Parks
Immersive Experiences	Radio	

TYPES OF ELECTRONIC MEDIA

3D Printers
5g
Blogs
Computer Networks
Computers
Content Delivery Networks
Digital Documents (e.g. presentation slide)
Digital Immersive Environments
Digital Media Files (e.g. video files)
Digital Outdoor Media (e.g. electronic billboard)
Digital Photos
Digital Screens (e.g. computer monitor)
Electronic Storage Devices (e.g. solid-state drives)
Email
Fiber Optics
Film
Game Consoles
Game Controllers
Holograms

Internet
Microphones
Mobile Apps
Mobile Devices
Neon Lights
Online Forums
Printers
Radio
Records, CDs & Tapes
Social Media
Speakers & Headphones
Streaming Media
Telegraph
Telephone
Television
VHS & DVD
Video Conferencing
Video Games
Virtual Reality (environments & gear)
Voice Recorders
Wifi

HERE ARE MORE OF THE KEY FACTS OF WHAT HAPPENS IN AN INTERNET MINUTE:

Amazon customers spend $283,000

12 million people send an **iMessage**

6 million people **shop** online

Instacart users spend $67,000

Slack users send 148,000 messages

Microsoft Teams connects 100,000 users

YouTube users stream 694,000 videos

Facebook Live receives 44 million views

Instagram users share 65,000 photos

Tiktok users watch 167 million videos

MEDIA STREAMING

It's the age of technology where nothing is restricted to a TV or theatres.

Every form of media is accessible digitally to a computer, tablet, or on a smartphone.

Media Streaming has become a huge trend amongst young adults.

The delivery of audio and video over the Internet now offers live sport, music, news, entertainment and on-demand content.

# HOW NETFLIX (AND ALL OF THE OTHER COMPANIES) STREAM VIDEOS

Netflix uses the Internet to stream movies and TV shows from their computer servers to your screen.

The signal goes to the world wide web and then to your Internet Service Provider (ISP) such as Fioptics, Spectrum, DirectTV, etc., and then to your device.

When Netflix hands off your video to your ISP, they must carry it through their network to your home.

If there are no major roadblocks, your ISP will deliver the video right to your screen.

If their network has slowdowns or capacity problems, your Netflix experience will suffer.
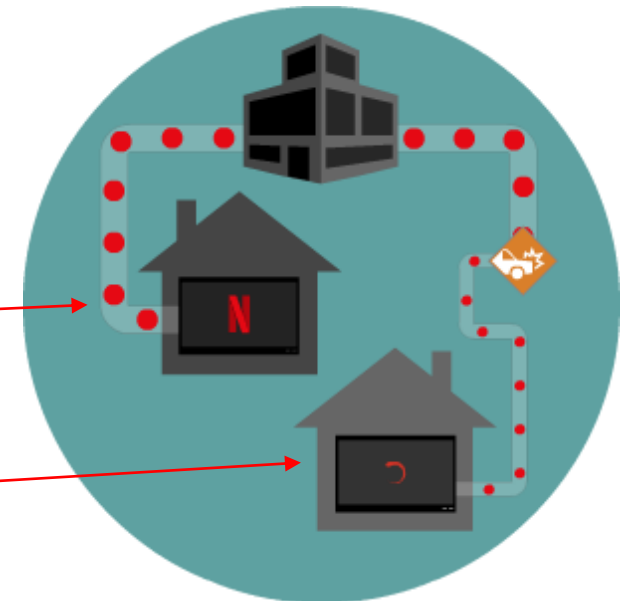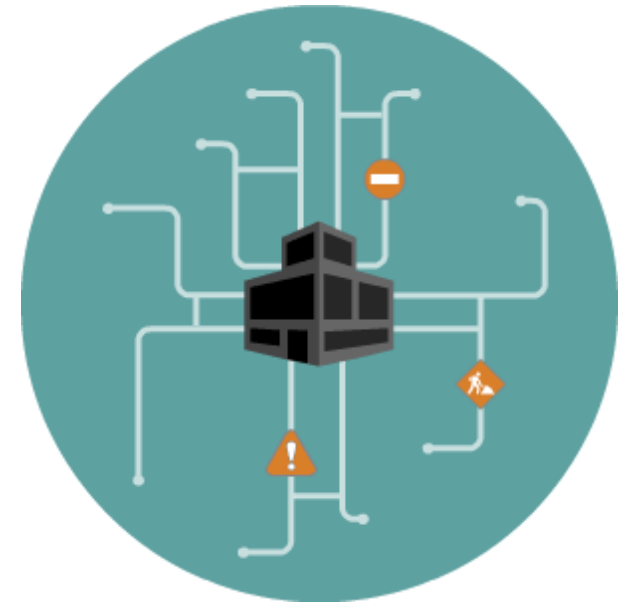
GLOBAL DIGITAL HEADLINES

ESSENTIAL HEADLINES FOR MOBILE, INTERNET, AND SOCIAL MEDIA USE AROUND THE WORLD

INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS

TOTAL POPULATION	UNIQUE MOBILE PHONE USERS	INTERNET USERS*	ACTIVE SOCIAL MEDIA USERS*
7.83 BILLION	**5.22 BILLION**	**4.66 BILLION**	**4.20 BILLION**
URBANISATION: **56.4%**	vs. POPULATION: **66.6%**	vs. POPULATION: **59.5%**	vs. POPULATION: **53.6%**

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GLOBAL DIGITAL GROWTH

THE YEAR-ON-YEAR CHANGE IN GLOBAL DIGITAL ADOPTION

INTERNET USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS

TOTAL POPULATION	UNIQUE MOBILE PHONE USERS	INTERNET USERS*	ACTIVE SOCIAL MEDIA USERS*
+1.0%	+1.8%	+7.3%	+13.2%
JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020	JAN 2021 vs. JAN 2020
+81 MILLION	+93 MILLION	+316 MILLION	+490 MILLION

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THE UNITED STATES OF AMERICA

ESSENTIAL HEADLINES FOR MOBILE, INTERNET, AND SOCIAL MEDIA USE

⚠ CHANGES TO DATA SOURCES FOR INTERNET USERS AND SOCIAL MEDIA USERS MEAN THAT VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS

THE UNITED STATES OF AMERICA

TOTAL POPULATION	MOBILE CONNECTIONS	INTERNET USERS	ACTIVE SOCIAL MEDIA USERS
332.0 MILLION	**353.8 MILLION**	**298.8 MILLION**	**240.0 MILLION**
URBANISATION:	vs. POPULATION:	vs. POPULATION:	vs. POPULATION:
82.8%	**106.6%**	**90.0%**	**72.3%**

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DEVICE OWNERSHIP

PERCENTAGE OF INTERNET USERS AGED 16 TO 64 THAT OWNS EACH KIND OF DEVICE

THE UNITED STATES OF AMERICA

MOBILE PHONE (ANY TYPE)	SMART PHONE	NON-SMARTPHONE MOBILE PHONE	LAPTOP OR DESKTOP COMPUTER	TABLET DEVICE
97.0%	96.3%	4.1%	73.3%	50.2%

TV STREAMING STICK OR DEVICE	GAMES CONSOLE	SMART HOME DEVICE	SMART WATCH OR WRISTBAND	VIRTUAL REALITY DEVICE
36.5%	39.6%	20.9%	27.4%	5.4%

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DAILY TIME SPENT ON MEDIA

THE AVERAGE DAILY TIME* THAT INTERNET USERS AGED 16 TO 64 SPEND ON DIFFERENT KINDS OF MEDIA AND DEVICES

THE UNITED STATES OF AMERICA

TIME SPENT USING THE INTERNET (ALL DEVICES)

7H 11M

TIME SPENT WATCHING TELEVISION (BROADCAST AND STREAMING)

4H 42M

TIME SPENT USING SOCIAL MEDIA

2H 07M

TIME SPENT READING PRESS MEDIA (ONLINE AND PHYSICAL PRINT)
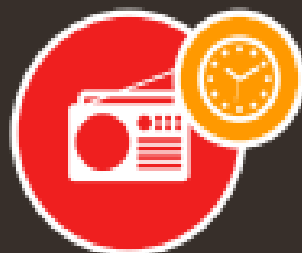
1H 28M

TIME SPENT LISTENING TO MUSIC STREAMING SERVICES

1H 35M

TIME SPENT LISTENING TO BROADCAST RADIO

1H 09M

TIME SPENT LISTENING TO PODCASTS

0H 49M

TIME SPENT PLAYING VIDEO GAMES ON A GAMES CONSOLE

1H 15M

OVERVIEW OF INTERNET USE

KEY INDICATORS OF INTERNET ADOPTION AND USE

⚠ USER NUMBERS NO LONGER INCLUDE DATA SOURCED FROM SOCIAL MEDIA PLATFORMS, SO VALUES ARE NOT COMPARABLE WITH PREVIOUS REPORTS

THE UNITED STATES OF AMERICA

TOTAL NUMBER OF INTERNET USERS (ANY DEVICE)	INTERNET USERS AS A PERCENTAGE OF TOTAL POPULATION	ANNUAL CHANGE IN THE NUMBER OF INTERNET USERS	AVERAGE DAILY TIME USERS AGED 16 TO 64 SPEND USING THE INTERNET	PERCENTAGE OF USERS ACCESSING THE INTERNET VIA MOBILE DEVICES
298.8 MILLION	90.0%	+3.7% +11 MILLION	7H 11M	90.2%

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ONLINE CONTENT ACTIVITIES

PERCENTAGE OF INTERNET USERS AGED 16 TO 64 THAT CONSUMES EACH KIND OF CONTENT VIA THE INTERNET EACH MONTH

THE UNITED STATES OF AMERICA

WATCH ONLINE VIDEOS	WATCH VLOGS (VIDEO BLOGS)	LISTEN TO MUSIC STREAMING SERVICES	LISTEN TO ONLINE RADIO STATIONS	LISTEN TO OR WATCH PODCASTS
92.3%	32.5%	69.6%	39.9%	39.3%

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MET UNIVERSE

MEDIA, ENTERTAINMENT & TECHNOLOGY

Amazon $1.48T
150M Prime Members
- Amazon Prime
- IMDB
- Twitch
- Fire
- Audible
- AWS
- Whole Foods
- WaPo
- Pandora
- Spotify $54.7B — 130M subs
- Sirius $26B — 33.7M users
- Stitcher
- IHeart $500M

HBO/Max 36M subs
Warner TV TNT, TBS, CNN, tru Cartoon/ASwim, Crunchyroll
Warner Bros Studio, DC Harry Potter
AT&T $215.5B 166M mobile 23M video
DirecTV 16M subs

Netflix $216.8B 73M US subs 193M subs

AMCN $1.2B WETV, AMC, SundanceTV, IFC, Acorn, BBCA, Shudder

Hulu 32M subs
Disney $209B 54M D+ subs
- ABC +Stations
- Marvel Lucas Pixar
- Disney Ch FreeForm FX, NatGeo
- MLBam

ESPN 8M +subs 83M PTV
Fox Studios

Facebook $693B
- Instagram 1B users
- FB Messenger 1.3B users
- WhatsApp 2B users
- Oculus FB Watch

Discovery/Scripps $10.9B
Discovery, TLC, Animal, ID 80M subs
Group Nine
Travel
Food, HGTV 80M subs

Verizon $233B 152M mobile 4.2M video
Yahoo HufPo

Viacom/CBS $15.7Bn
Showtime 30M subs
CBS +Stations
CBS & Showtime SVOD 16M subs
MTV, Comedy, BET, Pluto, NICK, Awesomeness
Paramount

T-Mobile $130B 100M mobile

Comcast $192.5B 21.3M Video 29M BB
- SKY
- NBC +Stations
- Fandango
- Peacock
- Universal DreamWorks
- Bravo, MSNBC, CNBC, SyFy, E!

FOX $15.6B
- FOX +Stations
- Fox News 80M subs
- Fox Sports 1 80M subs
- Fox Ent.
- Tubi 25M users

ByteDance $100B — TikTok — 500M users

Snap $36.8B 360M users
Twitter $29B 330M users

MGM $4.65B
Epix
Lionsgate $1.6B
Starz

COX $19B 3.8 Video 5.2 BB
Charter $117.4B 16M Video 27M BB
Dish $17B 9M subs

Altice US $14.2B 3.1 Video 4.2 BB
Cheddar

Activision $67B
Nintendo $53B
EA $41B
Take Two $17B
Epic $18B
Bandai $13B
Square Enix $6.5B

Alibaba $679B
Tencent $656B

Electronics
Playstation 40-50M
Pictures/TV
Music
Sony $97.3B

Roku $19B 40M Active Users

Tegna $2.6B
Nextstar $4B
EW Scrips $750M
Sinclair $1.2B

Samsung $334B 20M Smart TVs US 52M Smartphones US

Apple $1.68T
- Apple Music 72M subs
- Apple TV+ ?? Subs
- Beats

LEGEND:
Circle size = market cap
Content Platform
Studio
MVPD
Telecom
Audio
Social
Tech
Local TV

Microsoft $1.6T
LinkedIn 660M users
CloudDrive
Office 365 38M subs
XBox 30-40M

YouTube YouTubeTV 2M subs
Chromecast
Android
Chrome

Alphabet $1.04T
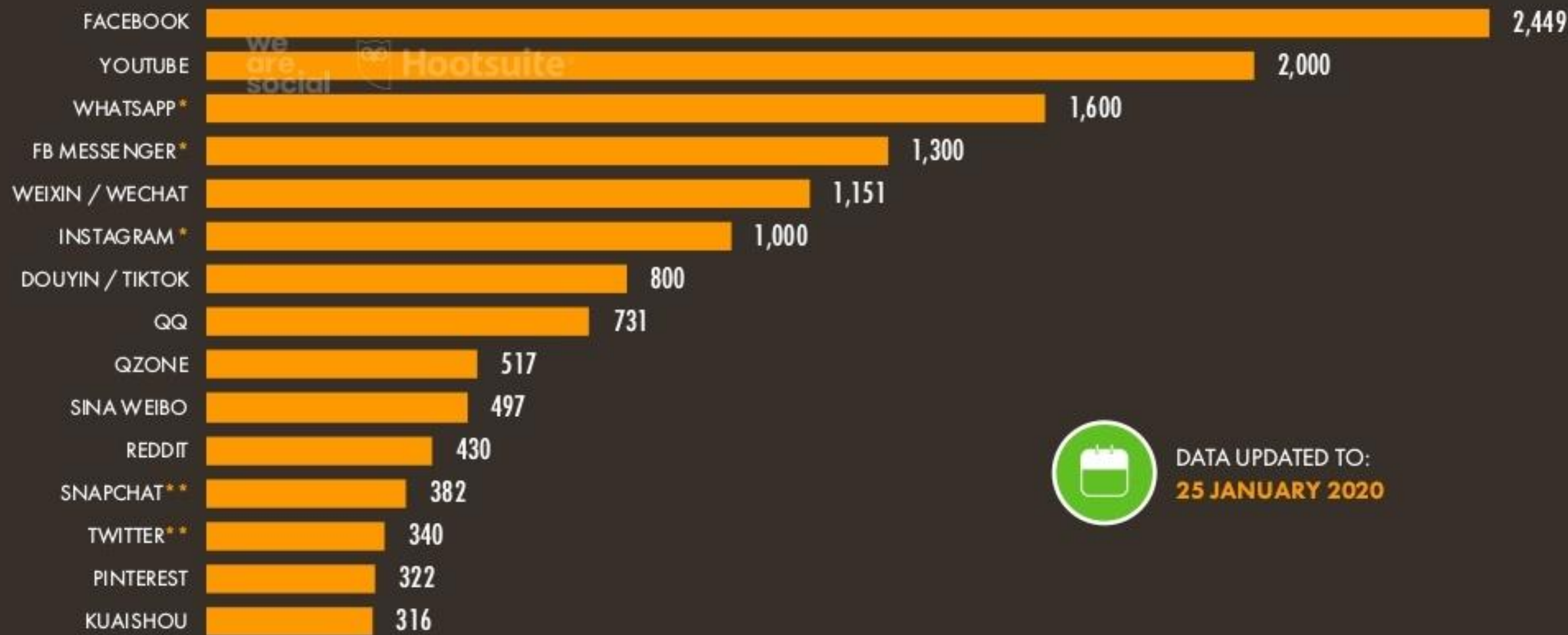
Map by @eshap
Sources:
Macrotrends
Yahoo Finance
Leichtman
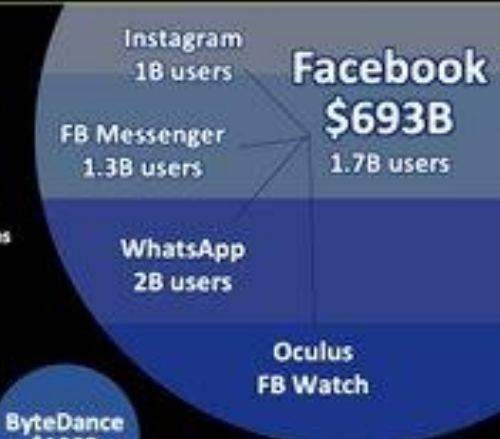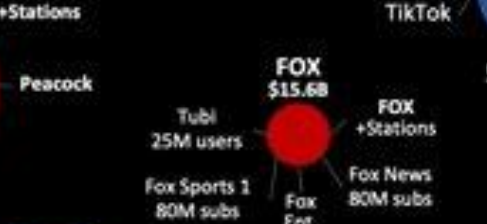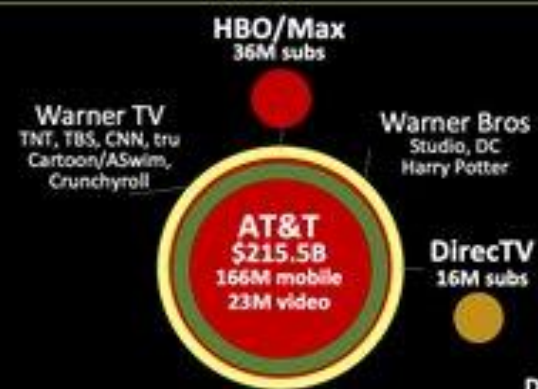
THE WORLD'S MOST-USED SOCIAL PLATFORMS

BASED ON MONTHLY ACTIVE USERS, ACTIVE USER ACCOUNTS, ADVERTISING AUDIENCES, OR UNIQUE MONTHLY VISITORS (IN MILLIONS)

Platform	Value
FACEBOOK	2,449
YOUTUBE	2,000
WHATSAPP *	1,600
FB MESSENGER *	1,300
WEIXIN / WECHAT	1,151
INSTAGRAM *	1,000
DOUYIN / TIKTOK	800
QQ	731
QZONE	517
SINA WEIBO	497
REDDIT	430
SNAPCHAT * *	382
TWITTER * *	340
PINTEREST	322
KUAISHOU	316

DATA UPDATED TO:
25 JANUARY 2020

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Hootsuite

FIFTEEN APPS

PARENTS SHOULD KNOW ABOUT

MEETME
MEETME IS A DATING SOCIAL MEDIA APP THAT ALLOWS USERS TO CONNECT WITH PEOPLE BASED ON GEOGRAPHIC PROXIMITY. AS THE APP'S NAME SUGGESTS, USERS ARE ENCOURAGED TO MEET EACH OTHER IN PERSON.

GRINDR
GRINDR IS A DATING APP GEARED TOWARDS GAY, BI AND TRANSGENDER PEOPLE. THE APP GIVES USERS OPTIONS TO CHAT, SHARE PHOTOS AND MEET UP BASED ON A SMART PHONE'S GPS LOCATION.

SKOUT
SKOUT IS A LOCATION-BASED DATING APP AND WEBSITE. WHILE USERS UNDER 17-YEARS-OLD ARE UNABLE TO SHARE PRIVATE PHOTOS, KIDS CAN EASILY CREATE AN ACCOUNT USING A DIFFERENT AGE.

WHATSAPP
WHATSAPP IS A POPULAR MESSAGING APP THAT ALLOWS USERS TO SEND TEXTS, PHOTOS, MAKE CALLS AND VIDEO CHATS WORLDWIDE. WHATSAPP USES AN INTERNET CONNECTION ON SMART PHONES AND COMPUTERS.

TIKTOK
TIKTOK IS A NEW MOBILE DEVICE APP POPULAR WITH KIDS USED FOR CREATING AND SHARING SHORT VIDEOS. WITH VERY LIMITED PRIVACY CONTROLS, USERS ARE VULNERABLE TO BULLYING AND EXPLICIT CONTENT.
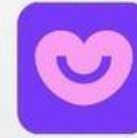
BADOO
BADOO IS A DATING AND SOCIAL NETWORKING APP WHERE USERS CAN CHAT, SHARE PHOTOS AND VIDEOS AND CONNECT BASED ON LOCATION. WHILE THE APP IS INTENDED FOR ADULTS ONLY, TEENS ARE KNOWN TO CREATE PROFILES.

BUMBLE
BUMBLE IS SIMILAR TO THE POPULAR DATING APP 'TINDER' HOWEVER, IT REQUIRES WOMEN TO MAKE THE FIRST CONTACT. KIDS HAVE BEEN KNOWN TO USE BUMBLE TO CREATE FAKE ACCOUNTS AND FALSIFY THEIR AGE.

SNAPCHAT
SNAPCHAT IS ONE OF THE MOST POPULAR APPS IN RECENT YEARS. WHILE THE APP PROMISES USERS CAN TAKE A PHOTO/VIDEO AND IT WILL DISAPPEAR. NEW FEATURES INCLUDING STORIES' ALLOW USERS TO VIEW CONTENT UP TO 24 HOURS.

KIK
KIK ALLOWS ANYONE TO CONTACT AND DIRECT MESSAGE YOUR CHILD. KIDS CAN BYPASS TRADITIONAL TEXT MESSAGING FEATURES. KIK GIVES USERS UNLIMITED ACCESS TO ANYONE, ANYWHERE, ANYTIME.

LIVE.ME
LIVE.ME IS A LIVE-STREAMING VIDEO APP THAT USES GEOLOCATION TO SHARE VIDEOS SO USERS CAN FIND OUT A BROADCASTER'S EXACT LOCATION. USERS CAN EARN 'COINS' AS A WAY TO 'PAY' MINORS FOR PHOTOS.

HOLLA
HOLLA IS A SELF-PROCLAIMED 'ADDICTING' VIDEO CHAT APP THAT ALLOWS USERS TO MEET PEOPLE ALL OVER THE WORLD IN JUST SECONDS. REVIEWERS SAY THEY HAVE BEEN CONFRONTED WITH RACIAL SLURS, EXPLICIT CONTENT AND MORE.

WHISPER
WHISPER IS AN ANONYMOUS SOCIAL NETWORK THAT PROMOTES SHARING SECRETS WITH STRANGERS. IT ALSO REVEALS A USER'S LOCATION SO PEOPLE CAN MEET UP.

ASK.FM
ASK.FM IS KNOWN FOR CYBER BULLYING. THE APP ENCOURAGES USERS TO ALLOW ANONYMOUS PEOPLE TO ASK THEM QUESTIONS.

CALCULATOR%
CALCULATOR% IS ONLY ONE OF SEVERAL SECRET APPS USED TO HIDE PHOTOS, VIDEOS, FILES AND BROWSER HISTORY.

HOT OR NOT
HOT OR NOT ENCOURAGES USERS TO RATE YOUR PROFILE, CHECK OUT PEOPLE IN THEIR AREA, AND CHAT WITH STRANGERS. THE GOAL OF THIS APP IS TO HOOK UP.

TYPES OF DIGITAL MEDIA AND METHODS FOR ENTERTAINMENT

- Artificial Intelligence

- Audio - Music, Speech, and Text,

- Augmented & Virtual Reality

- Broadcast Media

- Chatbots

- Digital Media and Art

- Electronic Display Surfaces

- Facial Recognition & Digital Human modeling for movies

- Holograms

- Immersive Experiences

- Interactive Media

- Internet

- Neural Sensing Headsets

- Photos

- Social Media

- Streaming Media (TV, Radio, and Podcasts)

- Videos and Deepfakes
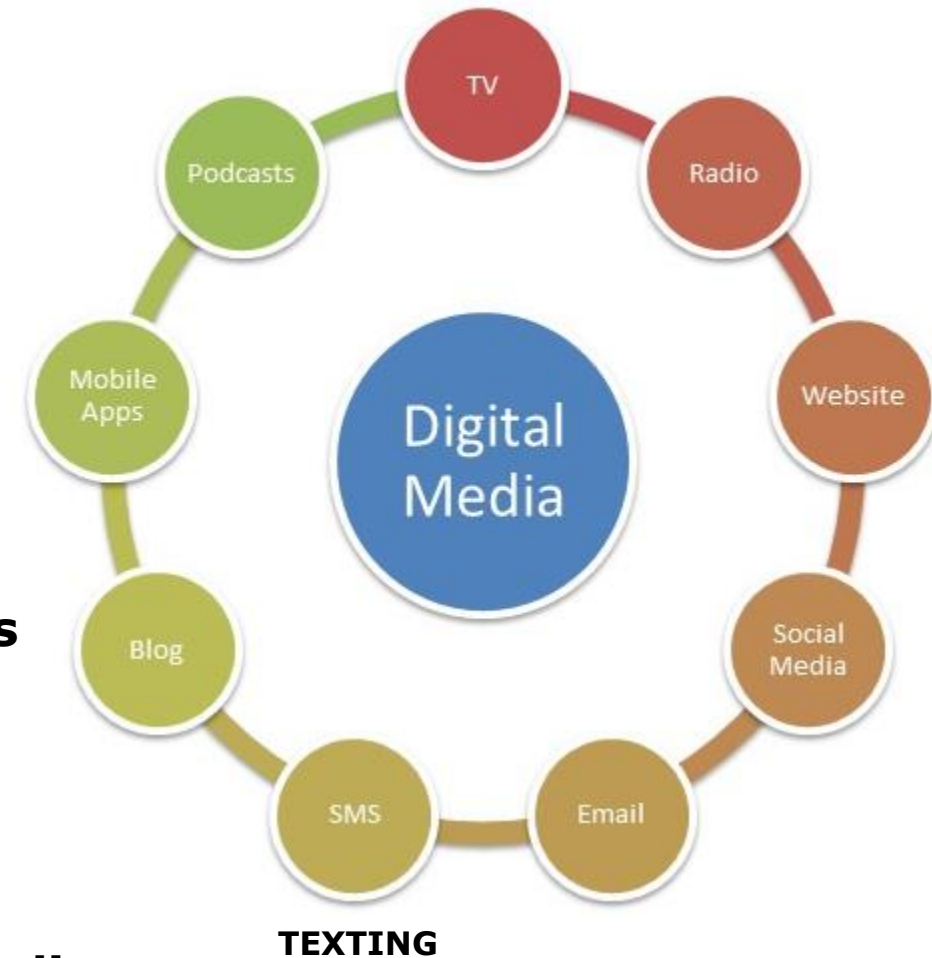
LET'S GET STARTED!

HOW THE CLOCK SCENE WAS FILMED IN HAROLD LLOYD'S "SAFETY LAST" (1923)

ENTERTAINMENT USING ARTIFICIAL INTELLIGENCE
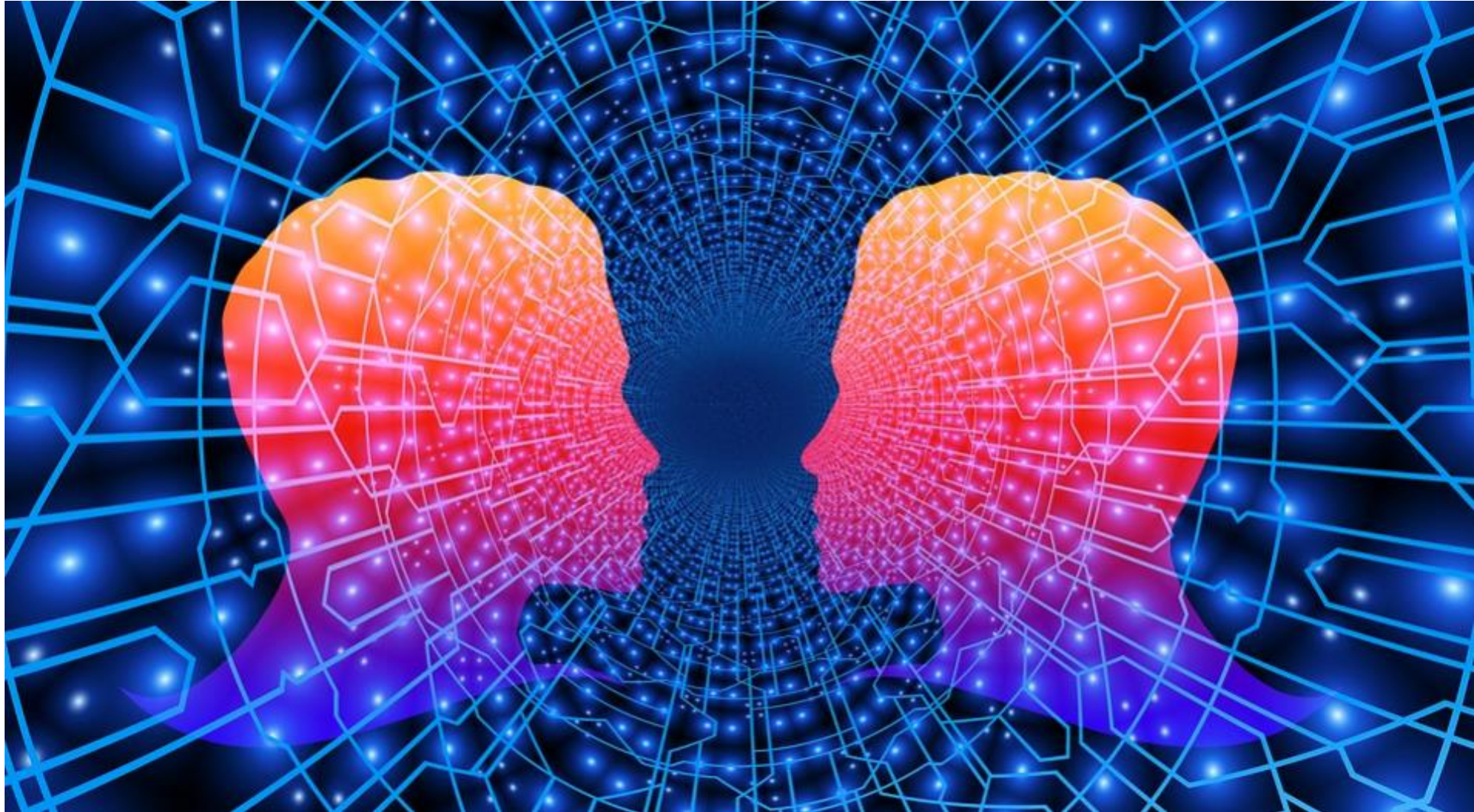
Google announced their **Duplex** system, a new technology for conducting natural conversations to carry out "real world" tasks over the phone.

The technology is directed towards completing specific tasks, such as scheduling certain types of appointments.

For such tasks, the system makes the conversational experience as natural as possible, allowing people to speak normally, like they would to another person, without having to adapt to a machine.

"Hi, I'm calling to book a women's haircut for a client."

https://www.youtube.com/watch?v=GoXp1IeA5Qc 1.25 min

DEEPFAKE VIDEOS USING ARTIFICIAL INTELLIGENCE (AI)

Deepfake videos are mostly known for their capability to swap the faces of actors or politicians from one video to another.

The "deep" in deepfake comes from the use of deep learning, the branch of AI that has become very popular in the past decade.

WHAT IS A GENERATIVE ADVERSARIAL NETWORK (GAN) ?

A generative adversarial network, or GAN, is a deep neural network framework which is able to learn from a set of training data and generate new data with the same characteristics as the training data.

For example, a generative adversarial network trained on photographs of human faces can generate realistic-looking faces which are entirely fictitious.

GENERATIVE ADVERSARIAL NETWORKS

Two neural networks trying to outsmart each other are getting very good at creating realistic images.

Can you identify which of these images are fake?

And in a more recent paper on GANs, Nvidia researchers used a "style-based generator" to create hyper-realistic images.

Art auction house Christie's sold its first ever GAN-generated painting for a whopping $432,500.

Portrait of Edmond Belamy, 2018, created by GAN (Generative Adversarial Network). Sold for $432,500 on 25 October at Christie's in New York. Image © Obvious

ARTIFICIAL NEURAL NETWORK (ANN)

An ANN is based on a collection of connected units or nodes called artificial neurons, which loosely model the neurons in a biological brain.

Each connection, like the synapses in a biological brain, can transmit a signal from one artificial neuron to another.
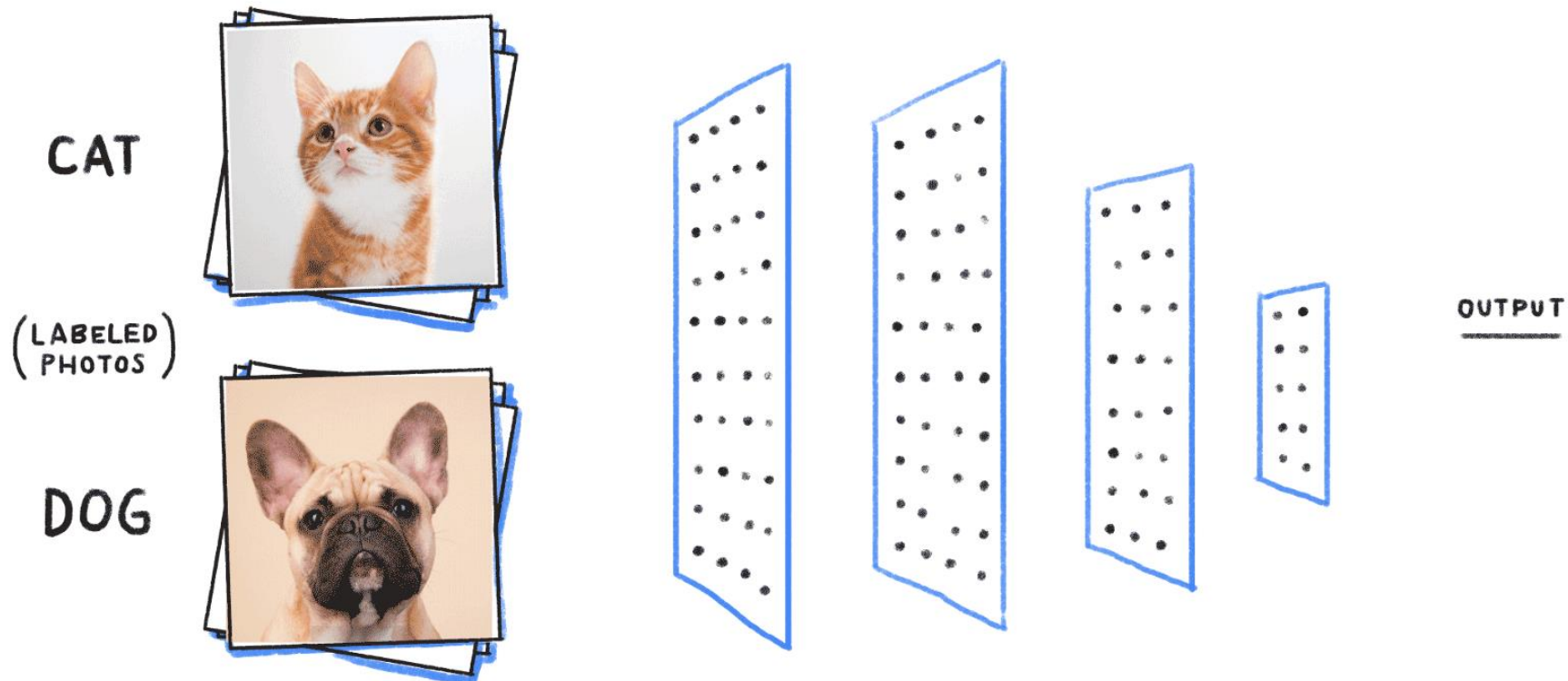
DeepMind is a subsidiary of **Google** that focuses on the development of **artificial intelligence**.

It is built around the framework of **neural networks.** This means that the A.I can learn from its experiences and become more efficient at whatever it **does**.

The way that the character moves is NOT pre-programmed to move like this.
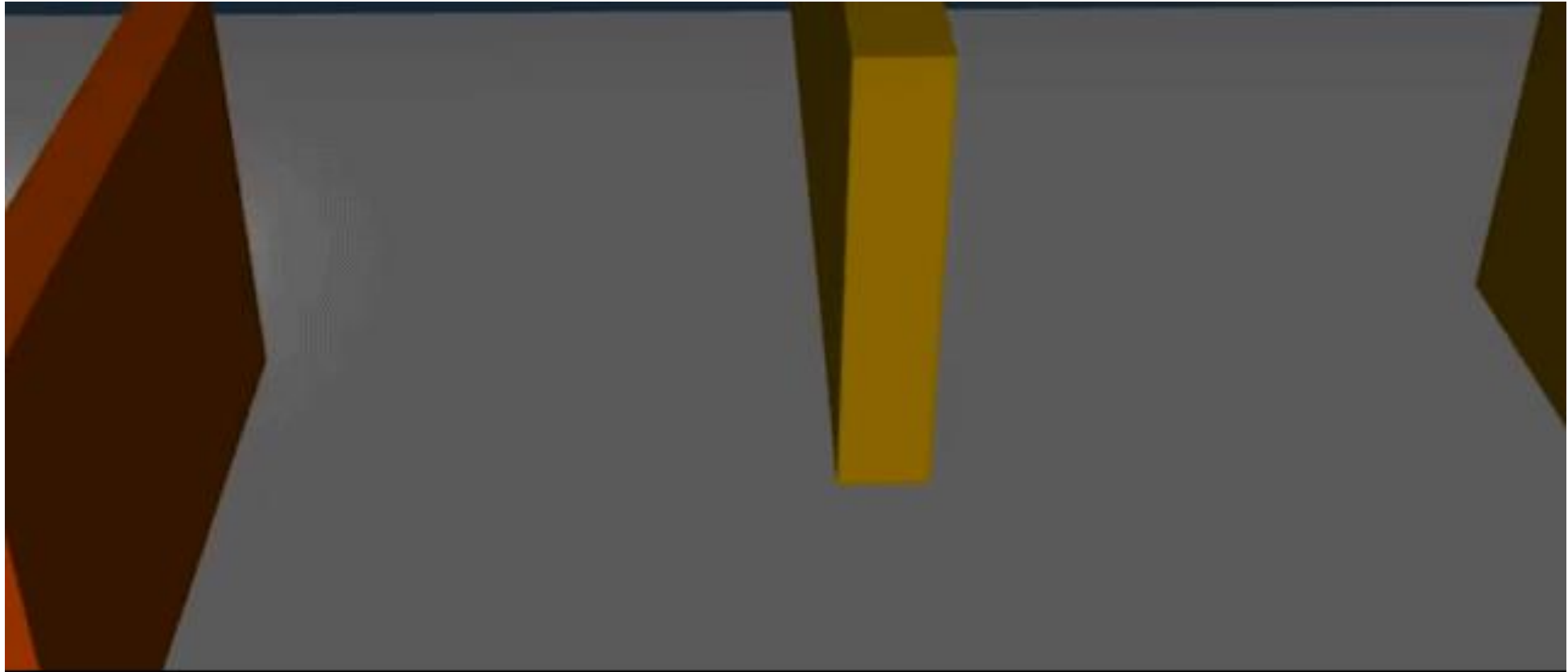
AND A LITTLE HUMOR ABOUT ARTIFICIAL INTELLIGENCE !!

My AI

Reads facial expressions

Detects emotion

Responds to voice, touch, gestures

Listens....sometimes

Very good at specific tasks

Constantly learning

Virtual Reality

Uses computer technology to create an immersive 3D experience

Augmented Reality

Overlays digital images into the real world to make it more meaningful & interactive

leverage edu

WHAT'S THE DIFFERENCE BETWEEN VR, MR, AND AR?

Virtual reality (VR): An artificial world in which you interact with virtual objects. You wear a light but closed headset.

Augmented reality (AR): Virtual objects added to the real world, like Snapchat filters.

Mixed reality (MR): Real objects added to a virtual world, or virtual objects added to the real world, or just virtual objects in a virtual world.   Example: Microsoft Hololens

REC ROOM IS VR'S FIRST 'UNICORN' STARTUP.

An emphasis on community and user-generated content has driven success for the game-based virtual world.

Last month, the Seattle-based gaming company announced its valuation at $1.25 BIllion, making it the first official software unicorn to emerge from the VR industry.

During the last year, it tripled its player base, recording more than 1 Million monthly active VR users and 15 Million lifetime users.

FUN ON THE SNAPCHAT
WEBSITE !!
(Augmented Reality)

THE MAGIC OF AUGMENTED REALITY AT DISNEY

The folks at Disney's research division are working with augmented reality technology to make drawings literally come to life.   They're using an app on a standard, consumer-grade tablet, and a normal coloring book colored with normal crayons.
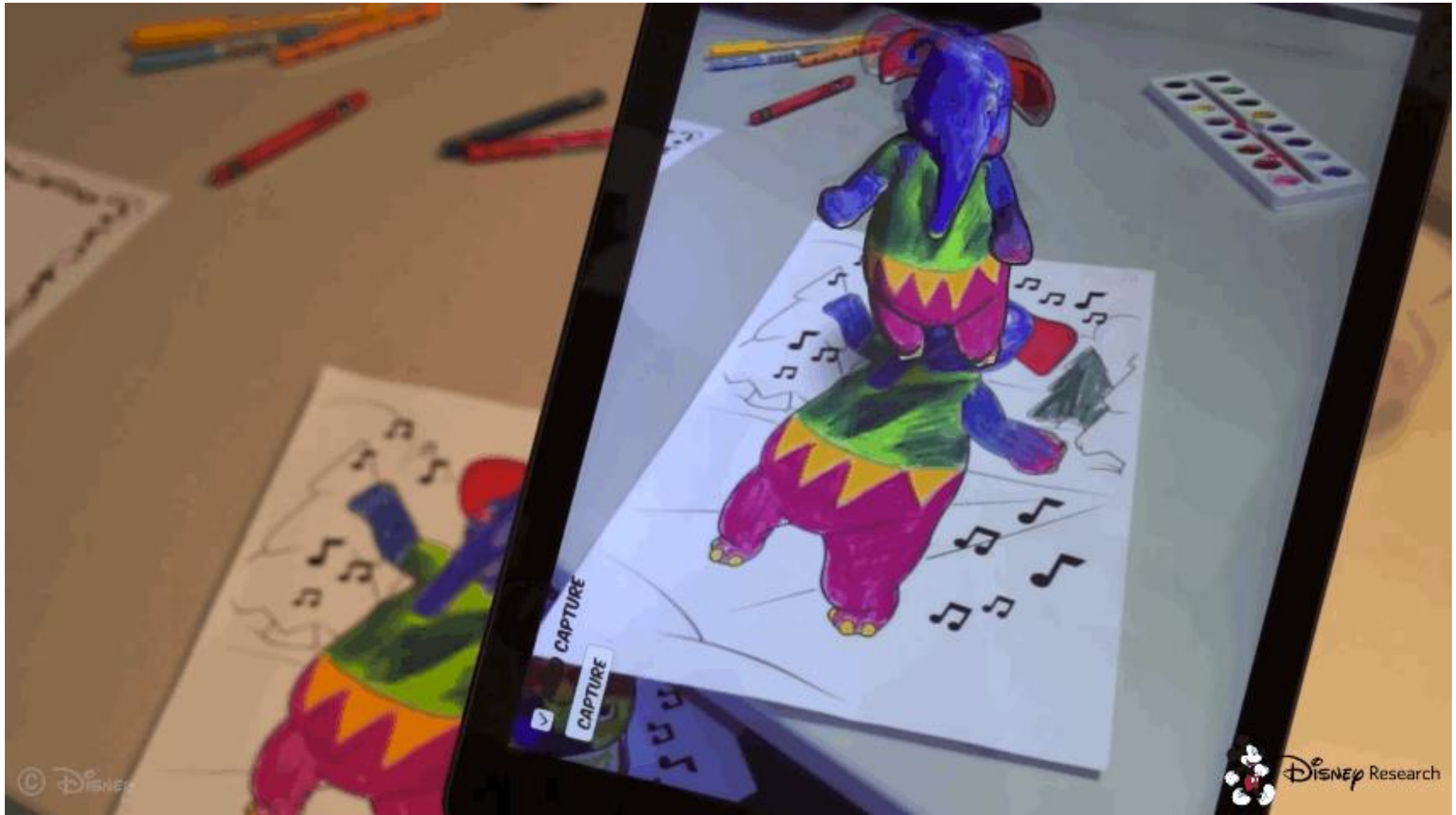
You, or a child, colors in the character on the page and the app does the rest of the work of bringing that drawing to life.   First: You color in your drawing:

THE COLORING IS ALMOST DONE AND NOW ITS TIME TO ADD SOME BRIGHTER COLORS

AND HERE IS YOUR FINISHED COLORED IMAGE THAT IS SO HAPPY THAT IT IS DANCING !!

Marc-O-Matic, aka Marco Ryan, is best described as a multidisciplinary immersive media artist.

While his skillset includes everything from animation to interpretive design, he has a particular talent for combining artistic storytelling and technology – specifically augmented and virtual reality – to create some incredibly captivating and immersive artworks.

https://www.youtube.com/watch?time_continue=3&v=12D6zzCEKzA go to 1.03

USE FOR CHOOSING THE RIGHT PAINT COLOR FOR YOUR ROOMS
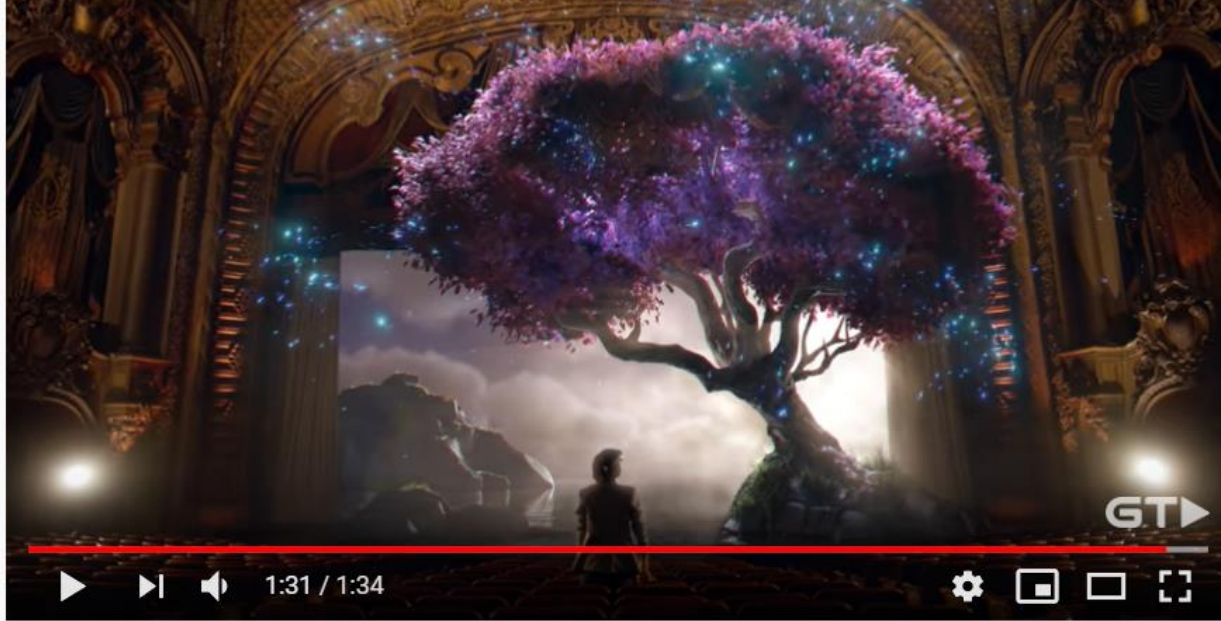
THE HOLOLENS

Microsoft's HoloLens is a device that gives you views of a 3-dimensional Alternate Reality, when you look at the area around you.

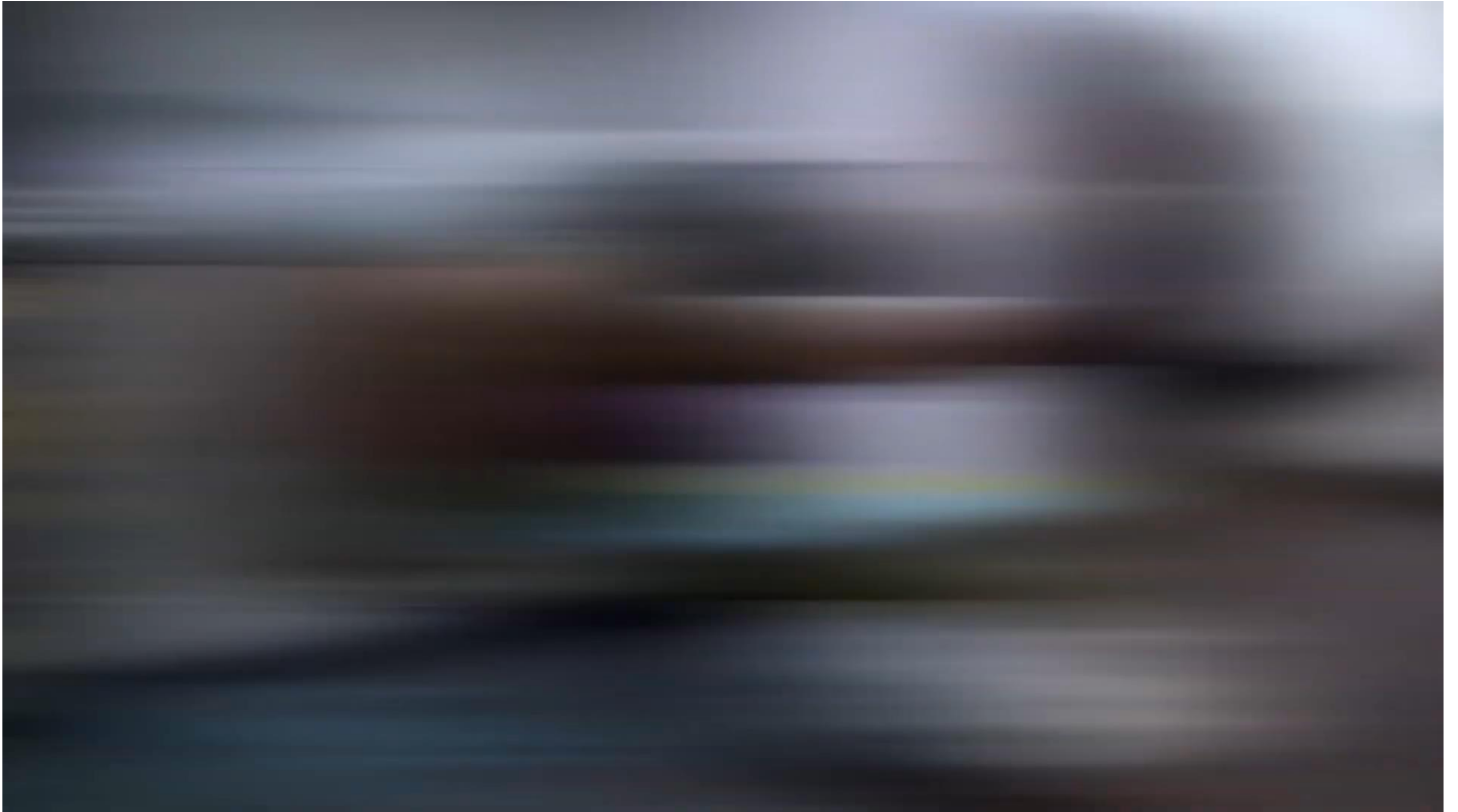They say you are seeing Holograms but you aren't.

The headset is able to project virtual images on top of the real world.

https://www.youtube.com/watch?v=cCL3bFuC4IA   1.34 min

COOL USES FOR MEDICAL EDUCATION !!

https://www.youtube.com/watch?v=h4M6BTYRlKQ   go to 2.54

DISPLAYS THAT RE-CREATE HISTORIC STRUCTURES AND PLACES

HAGI CASTLE
HAGI, JAPAN

HATRA

ALAMUT CASTLE
ALAMUT VALLEY, IRAN

Onward

VISUAL EFFECTS (VFX)

It lets filmmakers enhance a story by bringing to life believable characters, worlds, and stunts.

They can also create environments, objects, creatures, and even people that would otherwise be impractical or impossible to film in the context of a live-action shot.

VFX in film frequently involves using of live-action footage, with computer-generated imagery (CGI).
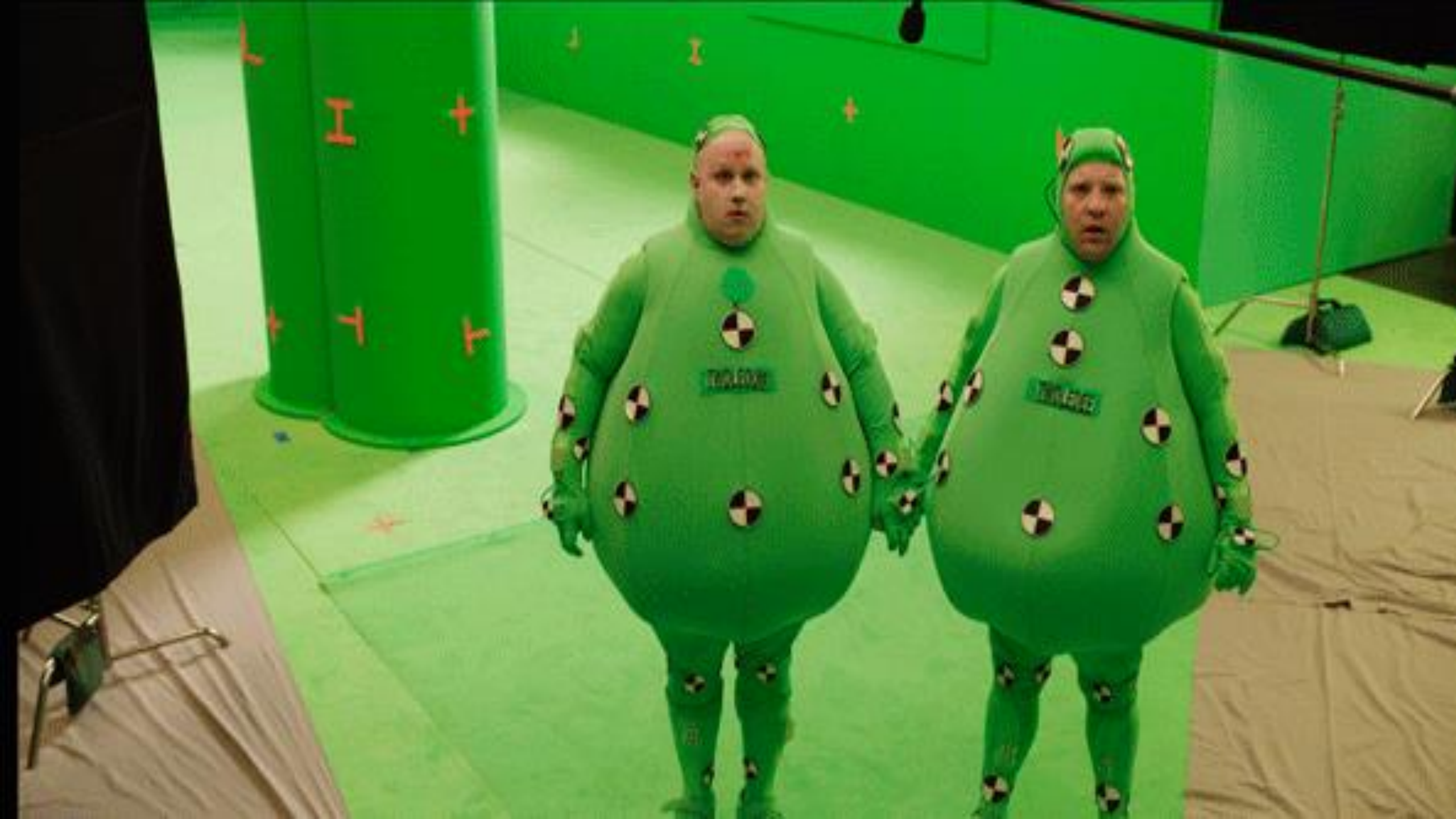

EXAMPLE OF USING A GREEN BACKGROUND
TO OVERLAY A SCENE

The Queen wore a green dress and hat as she didn't realize what visual artists would do with it ! ☺

THAT DAY YOUR GRANDMA WEARS A GREEN SCREEN...

ELECTRONIC DISPLAY SURFACES

ARCHITECTURAL DISPLAY GLASS
Pristine Surface, Electronics Enabling, Touch Sensitive

An **electronic visual display,** informally a **screen,** is a display device for presentation of still or moving images, text, or video transmitted electronically, without producing a permanent record.

Electronic visual displays include television sets, computer monitors, personal computers, smartphones, and digital signage as well as many types of medical, transportation and industrial equipment.
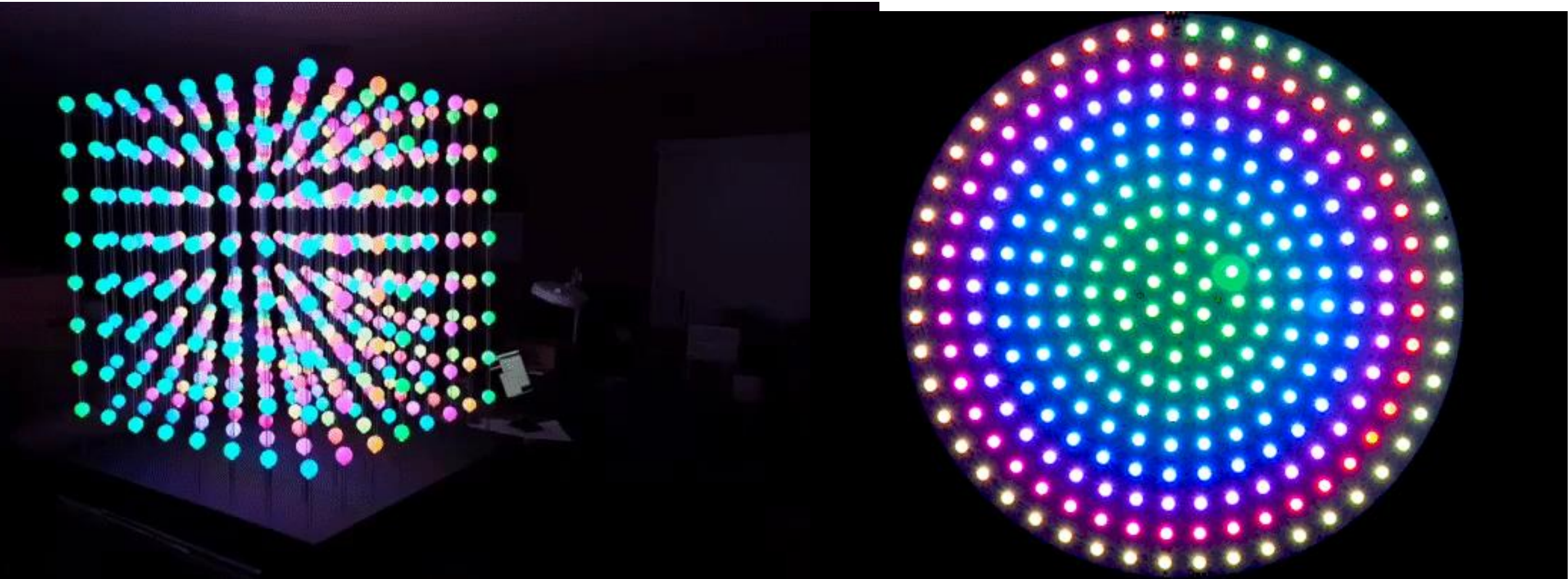
A DAY MADE OF GLASS - https://www.youtube.com/watch?v=TTxBVFiD07w GO TO 4.38

HOLOGRAPHY AND OTHER 3D METHODS OF ENTERTAINMENT

HOLOGRAPHY IS A TWO-STAGE PROCESS OF PHOTOGRAPHY USING COHERENT LIGHT FROM A LASER TO ILLUMINATE A SCENE

1) In the first stage a hologram is formed by combining the light scattered from the object and the direct laser beam on a photographic plate.

2) In the second stage a three-dimensional image is reconstructed without the use of lenses, by directing the laser beam through the hologram.
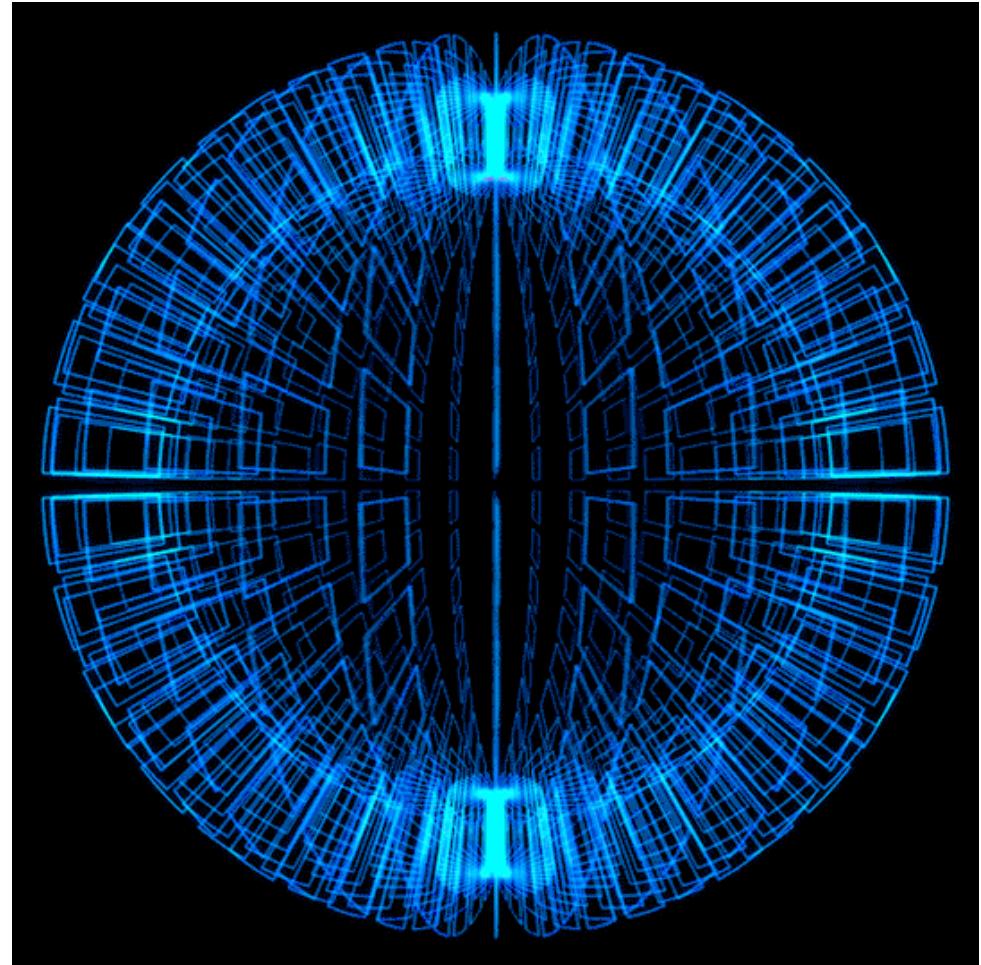
PROJECTED IMAGES ARE USED FOR HEADS-UP DISPLAY, IN PLANES AND NOW CARS

PEPPER'S GHOST

In 1860, more than 150 years ago, Pepper's Ghost, an illusionary trick created by John Henry Pepper, was developed to make it appear that a ghost was part of a play.

By means of a sheet of glass, special lighting, and using the reflective properties of the glass, the impression or optical illusion is created that objects or persons appear and disappear.

74

PEPPER'S GHOST: HOW DEAD CELEBRITIES ARE BEING RECREATED AS REALISTIC "HOLOGRAMS"

BRINGING BACK OPERA SINGER, MARIA CALLAS AND ROCK N ROLL SINGER, ROY ORBISON.

https://www.youtube.com/watch?v=uQrfR4Ito44 2.5 min

PREDICTIONS ABOUT THE FUTURE OF ENTERTAINMENT FROM ONE SOURCE OF ITEMS SHOWN IN THE NEXT SLIDE

A. Consumers will (finally!) get to choose what is top and what is not (Predictions 1-3)

B. Artists and other content creators will (finally!) be fairly compensated and everybody is a content creator (Predictions 1 + 4)

C. Entertainment will (almost!) be consumed in a seamless and personalized experience across many devices and media (Predictions 5-10)

10 Bold Projections on the Future of Entertainment

1. Clicks are the New Casting Call

2. Algorithms Will Enable a New World of Storytelling

3. Fans Will be Part of their Media's Org. Chart

4. A digital rights revolution will empower creators

5. A new media gateway will emerge as your TV Guide

6. Virtual assistants will win your living room (and your Connected Life)

7. Screens will be fluid, not fixed

8. Live experiences will transcend boundaries of time and space

9. Media will be emotionally intelligent

10. Immersive experiences will be full-sensory and social

THE FUTURE OF ENTERTAINMENT

Entertainment in the future is likely to be digital and increasingly virtual as multiple screens mediate nearly all aspects of our lives.

Today we have multiple screens – and screenless voice assistants who, for some people, assist with our work, our entertainment, our social lives, classrooms, doctor's visits, and contain and remind us of items on our calendar.

We're not going back, we're pushing forward, into the Metaverse **!**

To where ?

Into the Metaverse !
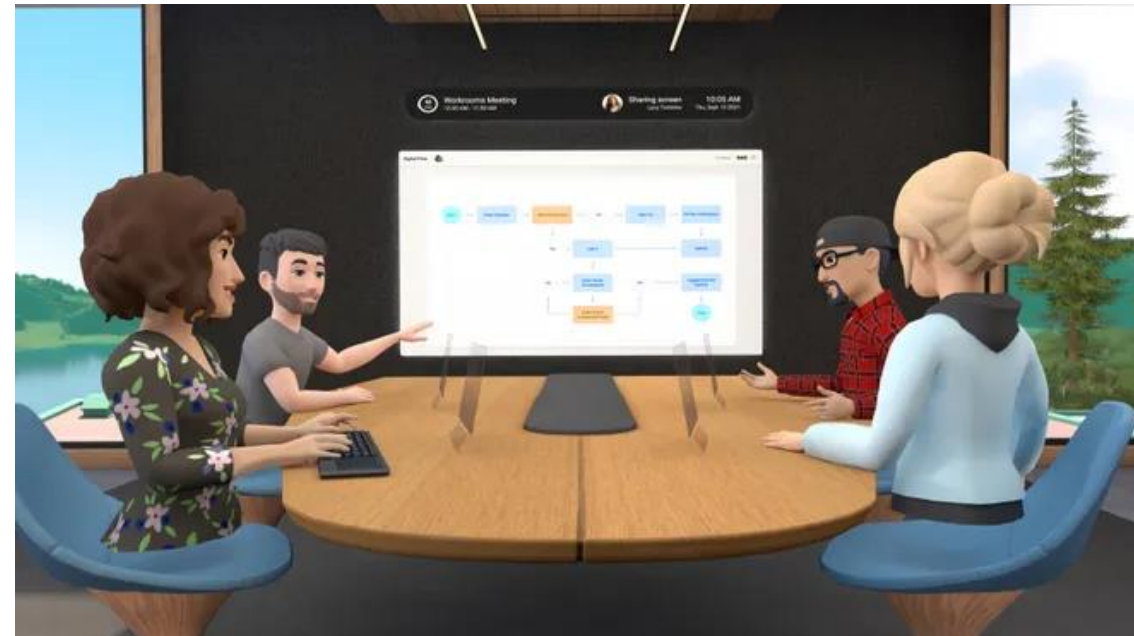
The metaverse, a virtual universe that promises to be "the new chapter of the Internet,"

Many have difficulty understanding – or even imagining – how the metaverse works, since it does not exist yet.

It is ambitious: to mirror the real world in the virtual environment, where people can interact through 3D avatars and technologies such as virtual and augmented reality.

However, its arrival promises to promote new types of human connections and inaugurate different forms of work, leisure, and even travel.

What is the Metaverse?

"A constantly operating virtual space in which people can interact with each other and with digital objects through their avatars, using virtual reality technologies."
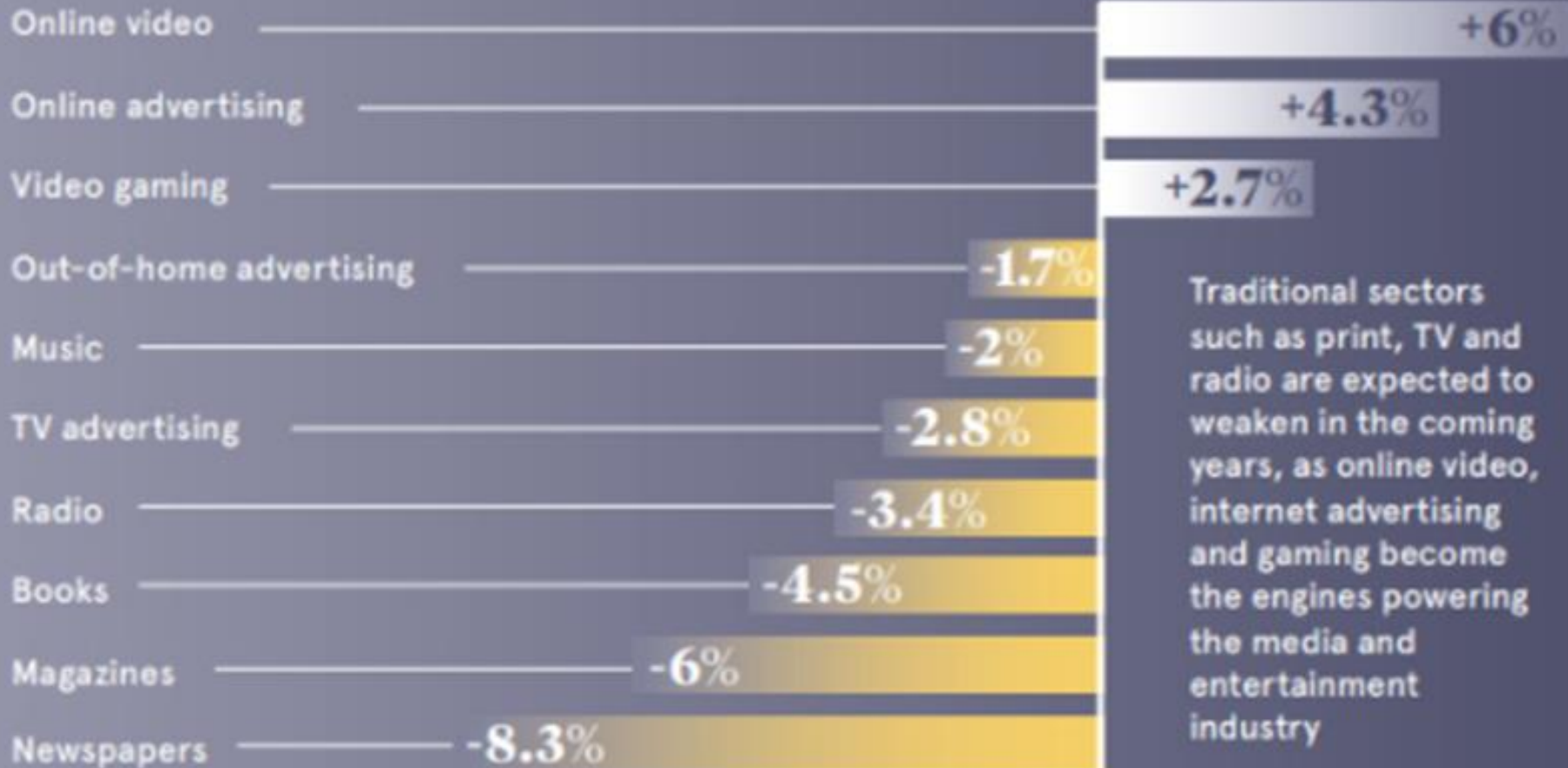

More   Internet

Metaverse: Seven Facts to Understand the New Internet Experience

7 CORE PRINCIPLES OF THE METAVERSE:

1) Be consistent. No pauses or reboots – this is an immanent, endless world.

2) To exist synchronously for everyone and in real time.

3) Have no limit on the number of users.

4) Have a fully functioning domestic economy. People can not only spend money in it, but also earn money, open their own business, invest and sell.

5) Tie together real life and virtual. It is not so much a world separate from the present, as its augmentation, an addition.

6) Provide users with "unparalleled data compatibility". So that if you bought clothes for your Fortnite avatar, you can use them in any other game or app.

7) Be open to any authors and content makers who can create their own "experiences" within the metaverse.

Growth rates of major media and entertainment sectors

Compound annual growth rate minus GDP growth, 2016 to 2021

Sector	Rate
Online video	+6%
Online advertising	+4.3%
Video gaming	+2.7%
Out-of-home advertising	-1.7%
Music	-2%
TV advertising	-2.8%
Radio	-3.4%
Books	-4.5%
Magazines	-6%
Newspapers	-8.3%

Traditional sectors such as print, TV and radio are expected to weaken in the coming years, as online video, internet advertising and gaming become the engines powering the media and entertainment industry

eMarketer 2018

HERE ARE SOME FIGURES ON THE FUTURE OF MEDIA AND ENTERTAINMENT THAT ARE PARTICULARLY INTERESTING

- By 2021, Cisco says that 82% of all internet traffic will stem from digital video

- There will be 26.3 million VR headsets shipped in 2022, up from 100,000 in 2016

- The eSports market will jump 152% in size by 2021

- By 2021, there will be 650 million subscribers to services like Amazon Prime or Netflix

- 5G latency is expected to be 0.001 seconds, which is 15-60x faster than 4G

It's fair to say that in another decade, media and entertainment will be much less recognizable than what it looks like today.

THE END