CODELESS AR & VR

scapic

Ajay PV

Dec 3 2019

Content on the internet

Time. Attention. Engagement.

1.0 INFORMATIVE
≡ Words

2.0 INTERACTIVE
▷ Videos
🖼 Photos

3.0 IMMERSIVE
🌐 360°
🧊 3D
🥽 VR
◈ AR

60s Mainframes

70s Macintosh

80s Desktops

90s Laptops

now Smartphones

VR & AR the future

Always Evolves

Engagement Times

🖼 PHOTOS
0.8 sec

▷ VIDEOS
57 sec

🥽 VR/AR
190 sec

XR

Extended Reality

Extended Reality (XR) is an umbrella term that encompasses Virtual Reality (VR), Augmented Reality (AR), Mixed Reality (MR), 360° & 3D content.

VR

AR

360°

XR

3D

Markets for AR

Advertising

Display

Year	Spend
2019	$800M
2022	$1800M

The Domain of GDN, FB etc.

Search

Year	Spend
2019	$10M
2022	$900M

Marketing

Year	Spend
2019	$1Bn
2020	$4Bn
2021	$10Bn
2022	$18Bn

Ecommerce

Year	Spend
2019	-
2022	$1Bn
2027	$10Bn

AR Ads will dominate

- The trend for AR-equipped banner ads has started. Power Rangers was one among many

- High user engagement due to immersive nature of the media

- High levels of customization & product personalization (Sephora case study)

- Vertebrae, which started as a developer of virtual reality (VR) ads, has seen more interest in AR, due to the lower level of resources and time required for AR apps. Expect more ad networks to adopt AR too.
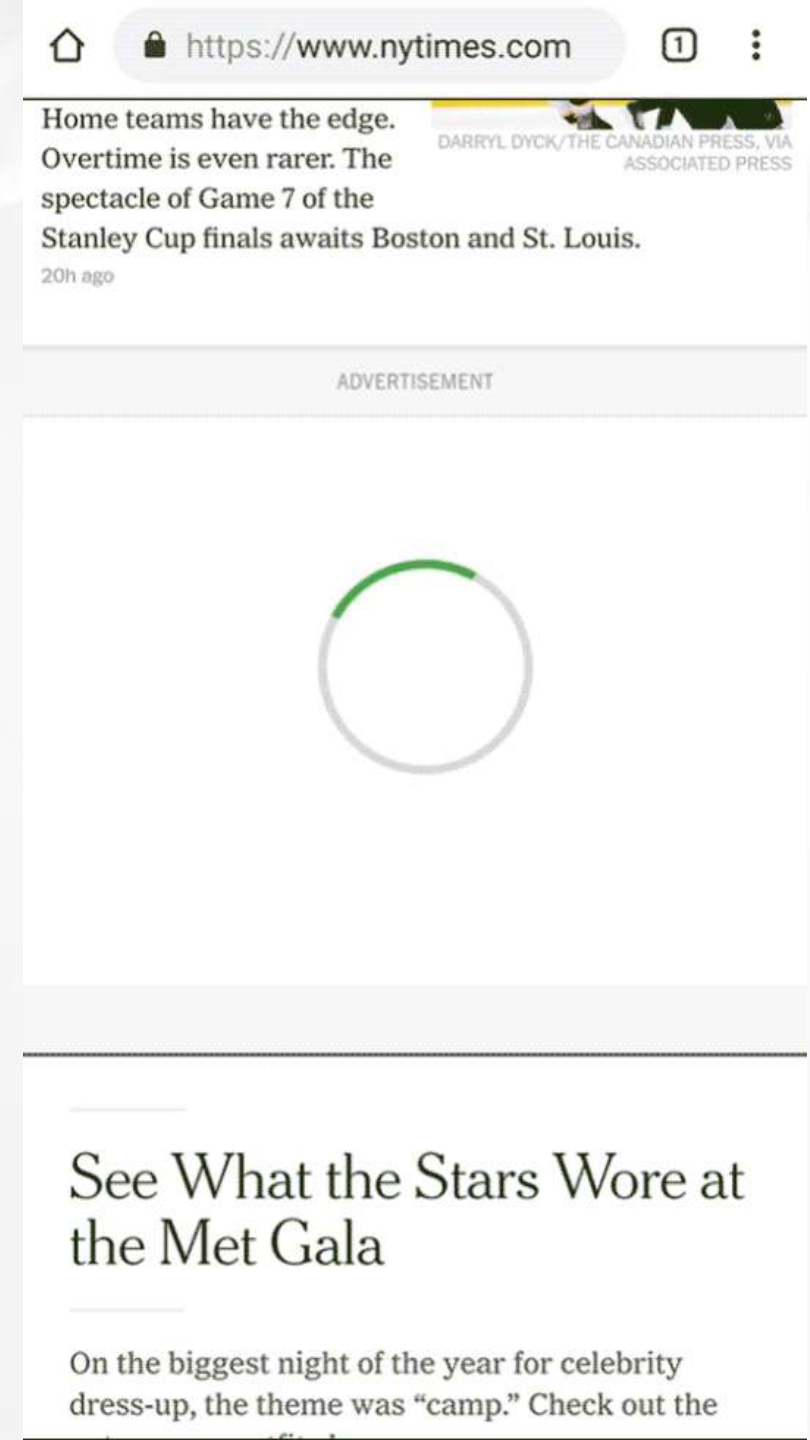
How Apple and Google are enabling AR on Smartphones

May 2017
ARKit – Apple
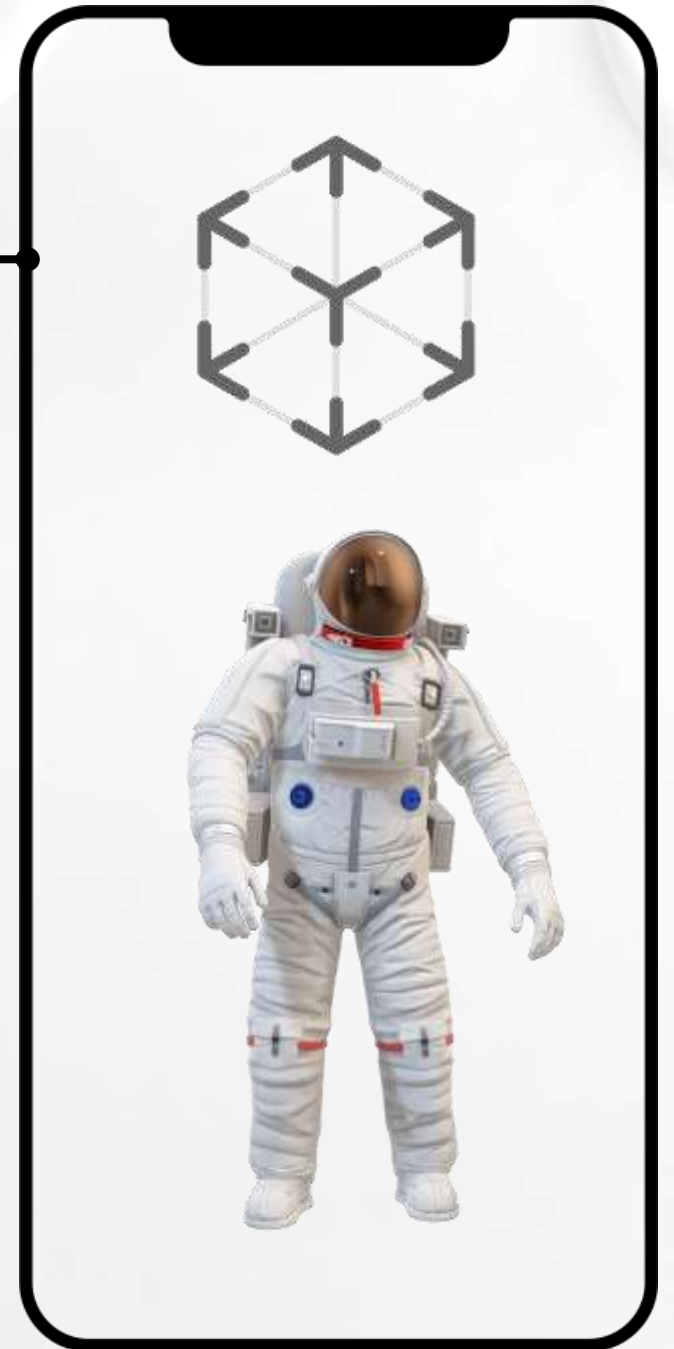Any developer can create
high fidelity AR apps

Feb 2018
ARCore – Google
OEM ecosystem begins to
ship phones with AR built-in

Why this was important

- Native OS level optimizations

- App Developer = AR Developer

- No additional hardware

Market Response

- Non-gaming & utility use cases

- Content development = Software development

- Platforms of choice = Unity, Vuforia, Unreal etc.

Made with Unity and Vuforia

Discover the amazing games and projects made with Unity.

Skylanders Battlecast — Apple Store | Google Play

Crayola Color Alive — Apple Store | Google Play

Coeur D'Orly — Apple Store | Google Play

Industry wide adoption

The Adoption Problem

- Pros: Highly slick apps
- Cons: extremely expensive ($$$) and time consuming to develop/update content
- Market adoption slow
- AR was still limited to a heavy *app driven* experience. Ex: [Vuforia SDK](#)
- IKEA has two apps – one for general catalog and IKEA Place for AR
  - Why? The AR version is heavy, large in size
- Distribution using Apps Only inhibits wider adoption and scale. Pretty much rules out Retail, media/advertising markets

Unity	Unreal Engine 4
Supports 21+ Platforms Including Mobile, Web, PC and Console	Supports mainly PC and Console Games
C#, UnityScript, Boo	C++
Great for 2D and 3D	Better powered for 3D games
No Profiler for free version	Profiler
Limited graphics	Next generation graphics.
$1500 Pro Version or $75/month	Free with 5% revenue share
Better option for novices	Only for pro's
Programmer AND Designer friendly	Designer friendly only
Detailed documentation	Lacklustre documentation
Multitude of community and official tutorials for developer support	Tutorials largely catering to designers rather than programmers
Free after a revenue turnover of <$100k	Free after a revenue turnover of <$50k
Perfect tool for building any sort of game	FPS built, so better suited for FPS based games only

I see AR as being profound. AR has the ability to amplify human performance instead of isolating humans. So I am a huge, huge believer in AR.

We put a lot of energy on AR. We're moving very fast. I don't want to say what we may do, but I could not be happier with how things are going right now.

- Tim Cook, Apple's Q1 Earnings Call 2018

Google bets big on AR

AR across on:

Search Results

SEO indexing

Default Pixel cam

GDN

Swirl – AR Ads

AR Google Maps

AR on Google Lens

Google Glass 2.0

Fuschia.dev

Apple bets big on AR

Benefits of Augmented Reality in Retail

1 Increase store visitors
2 Better customer engagement
3 Enhance print media
4 Reduce product return rate
5 Better UX, customizable content
6 Break language barriers

Market leaders in AR:

ARKit – version 3

RealityKit

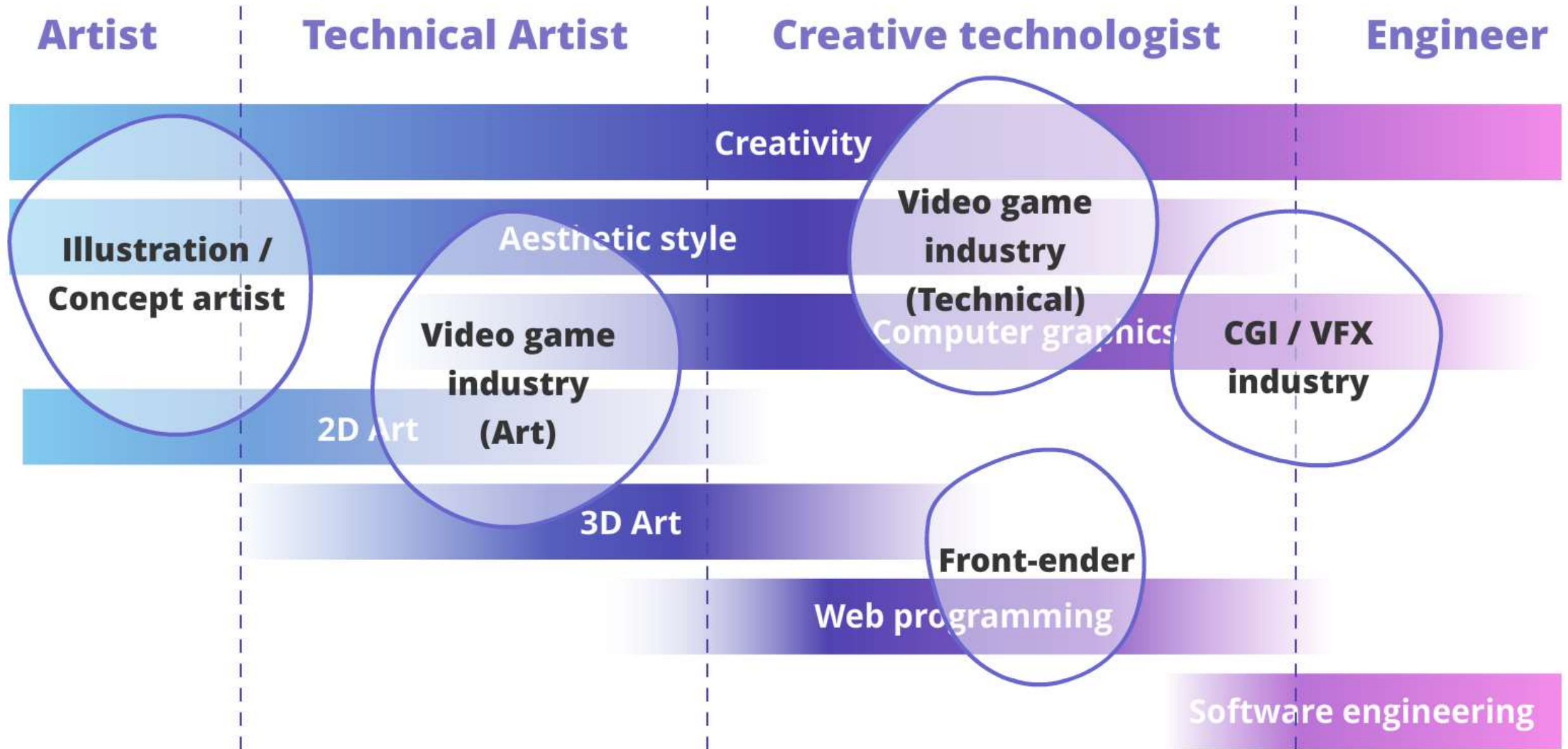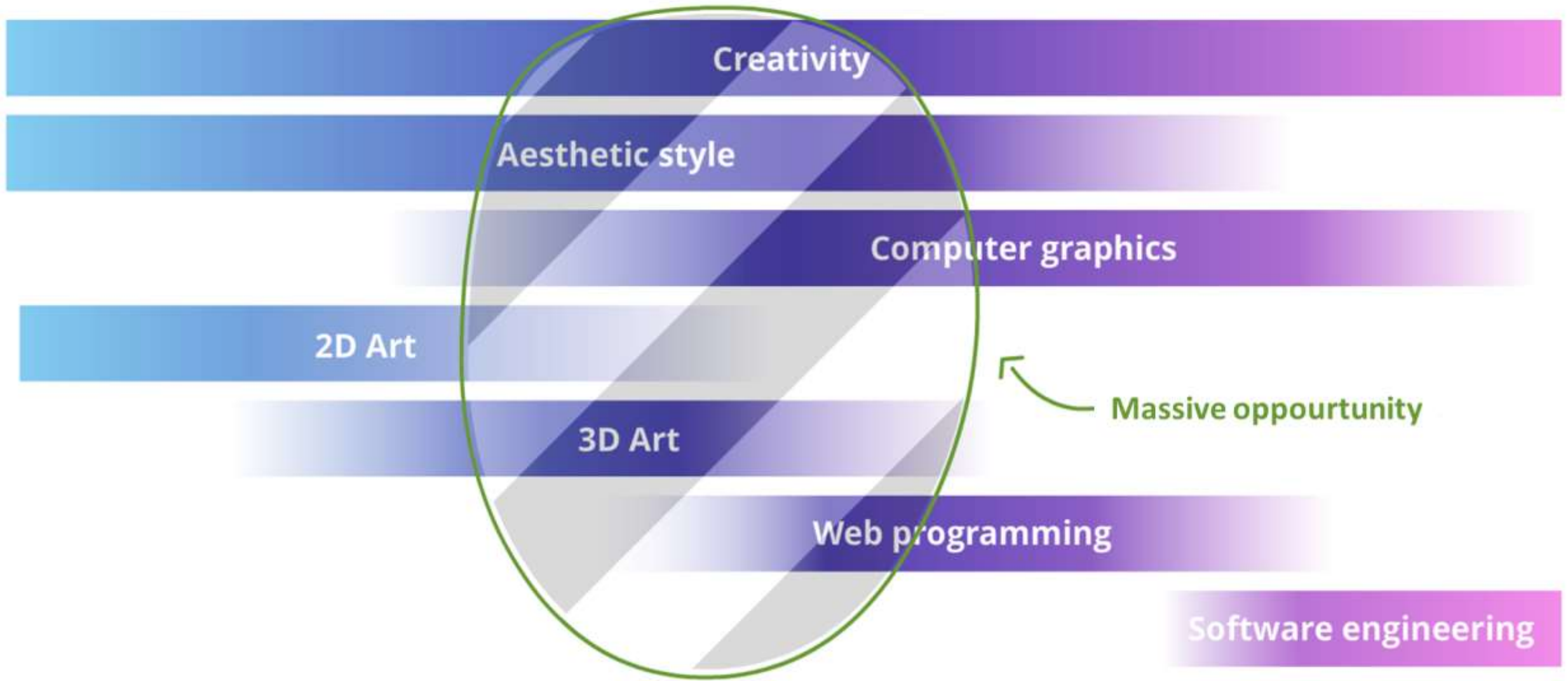RealityComposer

WebXR on Safari

Human occlusion

Spatial anchors

Strongly rumored to be working on AR Glasses as next device category

Fragmented knowledge and market segments

Artist | Technical Artist | Creative technologist | Engineer

Creativity

Illustration / Concept artist

Aesthetic style

Video game industry (Technical)

Computer graphics

CGI / VFX industry

Video game industry (Art)

2D Art

3D Art

Front-ender

Web programming

Software engineering

Big oppourtunity to create value for the unmet need

2019 – Web meets AR and VR

- [Mozilla, Google launches XR browsers](#)

- [W3C publishes WebXR standard, 30 + companies committed](#)

- [Nreal, Qualcomm launch reference designs](#) for AR glasses

- [Facebook pushes for UGC across VR and AR with platforms](#)

- [Shopify introduces AR compatibility](#)

WebXR

Access to highly privileged resources

Camera
Sensor Data
GPU throttling

WebXR works everywhere

The Unmet Need

- Cloud Delivery
  - Rendering complex 3D models/holograms via open web with high quality user experience; no jitters
  - Compatibility across wide variety of devices (smartphone)
  - Adapt to ambient lighting
  - Securely hosted assets
  - Analytics – AR Heatmaps

- Development Tools
  - Current dev tools are too complex for advertising/ecommerce sectors
  - These industries, Create Not Code
  - Need Create Once Render Anywhere
  - File format compatibility – iOS vs. Android

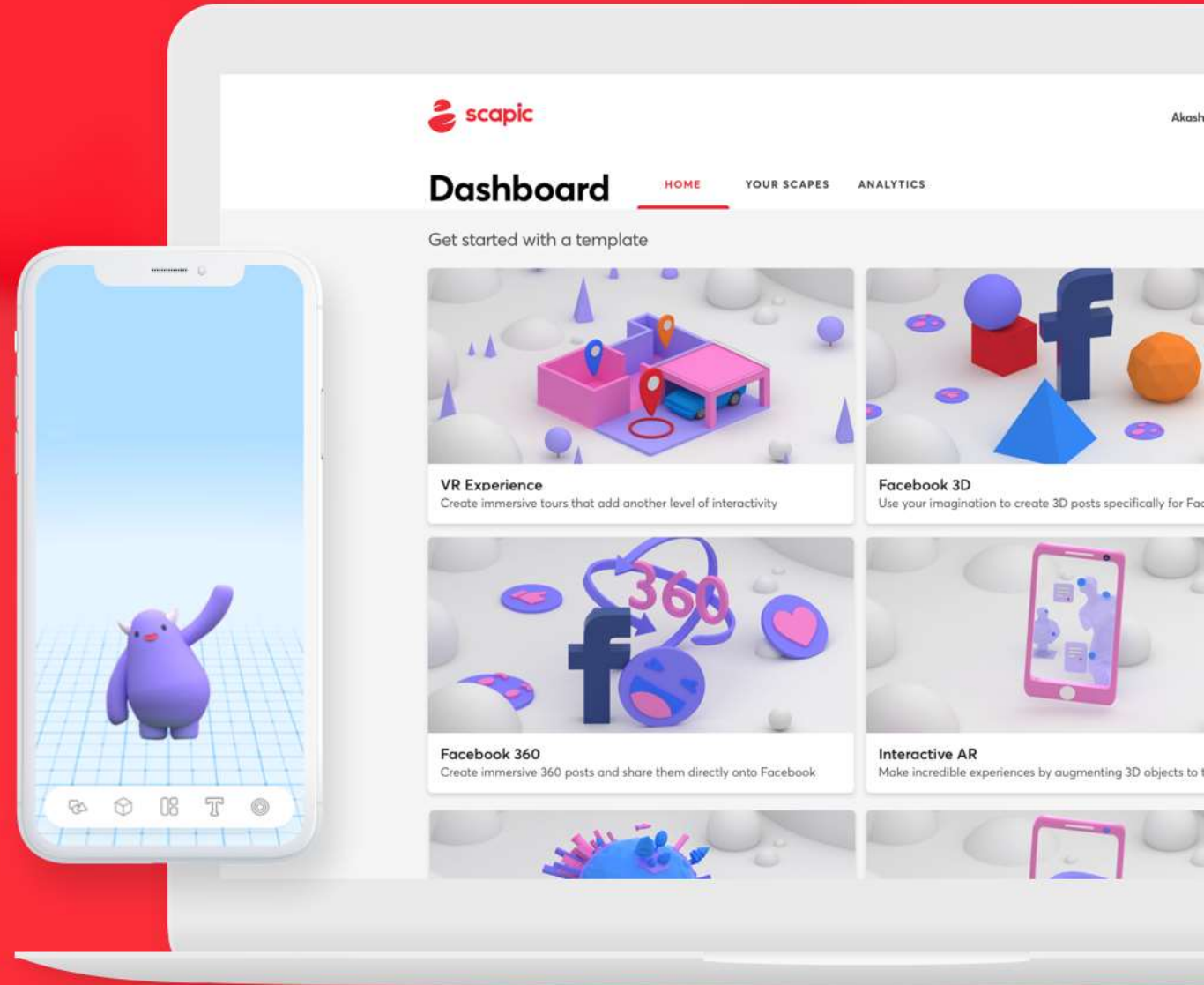The Rise of "No Code"

Ryan Hoover [Follow]

What is Scapic?

Scapic makes XR easy

Scapic offers a suite of templates which help you create and distribute 360°, 3D, VR and AR content easily.

- **Cost & time effective implementation**

- **No technical expertise required**

- **Cross compatibility across native applications, browser and social media**

Works with variety of products

Electronics

Demo   Video

Automobiles

Demo   Video

Demo

Wearables

Demo   Video

Furniture

Demo   Video

Team

20+ strong team with deep experience in development & design of 360°, 3D, VR & AR content

Sai Krishna
Hails from Stanford GSB, and previously cofounded an AI startup and an Ed-Tech startup.

Ajay P V
Previously been a part of Gridraster Inc, a San Francisco based VR Startup and Cisco.

Investors

Speciale Invest | specialeinvest.com

Axilor Ventures | axilor.com

Tech Advisory

Daniel Applequist, Samsung Internet

Damon Hernandez, Samsung Research

Ada Rose Canon, Chairperson, Immersive Web Workgroup

John Pallet, Chrome XR

Lars Fodor, Mozilla Mixed Reality

Gregory Fodor, Mozilla Mixed Reality

Advisors

Barry Sandrews, Pioneer in film colorization, VR

James Lattin, Professor, Stanford GSB

Marco Marinucci, Ex-Googler

Mentors

Ryan Hoover, Product Hunt

Laks Srini, Zenefits

Indus Khaitan, Chargebee

Kevin William David, Angel List

You're in good company

Top brands & businesses across the world trust us to bring their immersive experiences to life

Content for the immersive web, made easy.

scapic

hello@scapic.com