



The Metaverse and Media Finance

Presented by Cal Mostella & Joshua Schopf

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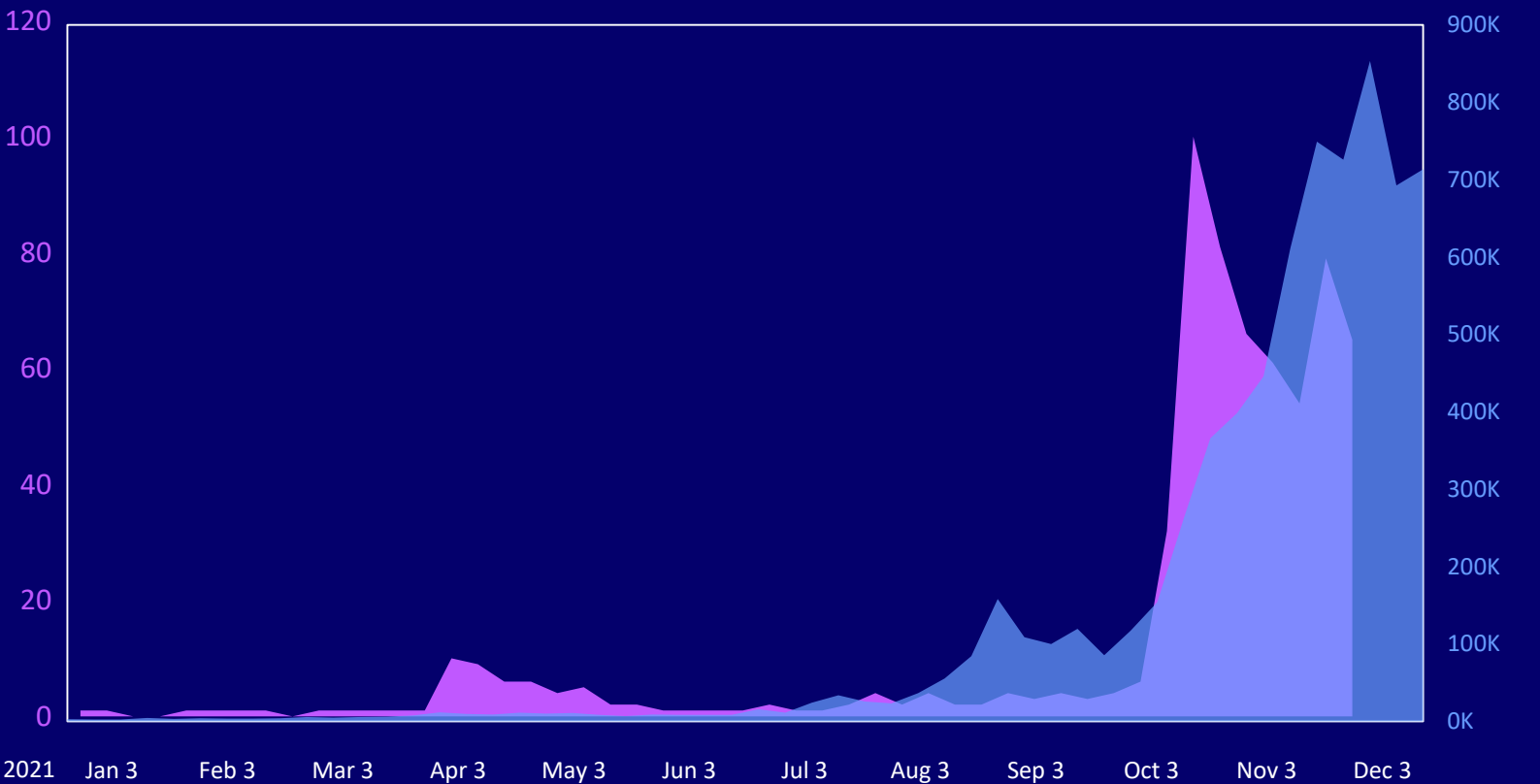
Metaverse Topics

1	The Basics
2	Metaverse Business Dynamics
3	Competitive Landscape
4	Staking A Claim in the Metaverse
5	Metaverse and Media Finance
6	Next Steps

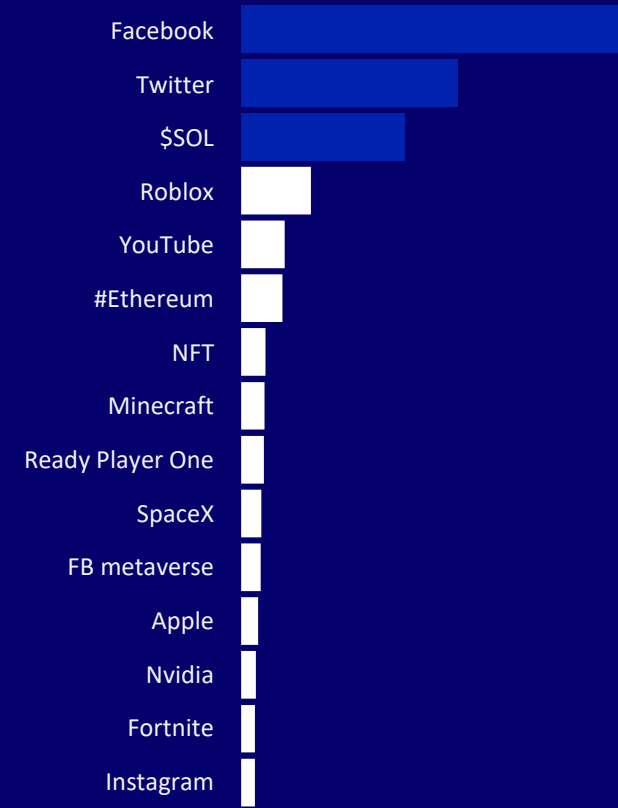
How Has The Metaverse Been Trending?

- Metaverse was a nascent term in 2020, led by platforms like Fortnite, YT, FB, Roblox, and Second Life. In 2021, the idea exploded, with organic brand mentions powered by FB, \$SOL, Play Together, Roblox, Airdrop, Ethereum

Google Trends Search Interest For “Metaverse”



Top Keywords Associated With “Metaverse” (2021)



Source: Google Trends; GRI&A Global Social Intelligence Metaverse Social Media Conversation Analysis 2020 To Now (Oct 2021)

The Basics of the Metaverse

What is the Metaverse?

The Internet disrupted life as we knew it and The Metaverse will do the same.

- Just as company webpages are required for consumer awareness & interaction (Web 2.0), so too will a presence in the Metaverse.
- So, what is the Metaverse? In its most basic form, the Metaverse is a Virtual & Augmented reality version of the internet. Many are referring to this as “Web 3,” the 3rd generation of the internet.
 - The Metaverse isn’t just one place, but many.
 - Think of the Metaverse as a “platform” on which experiences will exist and where digital goods can be created, sold, and transferred from one platform to another.
- What the Metaverse is not:
 - Crypto, NFTs, DAOs are components of the overall Metaverse. They operate on various metaverse platforms and are currently operational on the Web 2.0 version of the internet.

The Basics of the Metaverse

Where is the Metaverse? How do you access it?

Platforms

- In general, there are two platforms in which the metaverse can exist:
 - Decentralized, metaverse exists across the blockchain with no central authority governing its content.
 - Private, Walled Garden where companies establish their own metaverse platform in which they have full control of the terms of operation (e.g. Apple or Android app stores).

Immersive Technology

- For the most optimum, immersive experience, you access a Metaverse through a VR or AR headset. But, you can also access it directly through mobile or gaming devices or a computer.
 - Technology will continue to get smaller, faster, and more integrated which will ultimately expand the metaverse demand and use cases.
 - Wearable technology is extending the sensory experience to include touch (OWO Game), smell (OVR technology), and capture user movements (Shiftall Inc. and Haritorax).



PERSISTENT

A place of perpetual and continuous existence; life will continue whether people are online or offline.

REACTIVE

The virtual environment and the people inhabiting it will respond and reaction to users' actions in real-time.

INTEROPERABLE

Not tied to any one platform
– experiences, possessions and identities will travel unchanged across platforms.

SOCIAL

A place to socialize, meet new people, strengthen existing relationships, and create new communities.

WHAT DEFINES THE METAVERSE?

CREATIVE

A catalyst for creativity and inspiration, where people actively engage with content, rather than passively consuming it.

LIMITLESS

There is no cap to the number of users, experiences, or worlds

EVERYDAY

Seamlessly woven into our everyday activities and engagements

DECENTRALIZED

Ownership will be distributed

USER-DEFINED

Owned and shaped by the people living, connecting, creating, and participating in it.

The Basics of the Metaverse

“Ready Player One” vision of the Metaverse

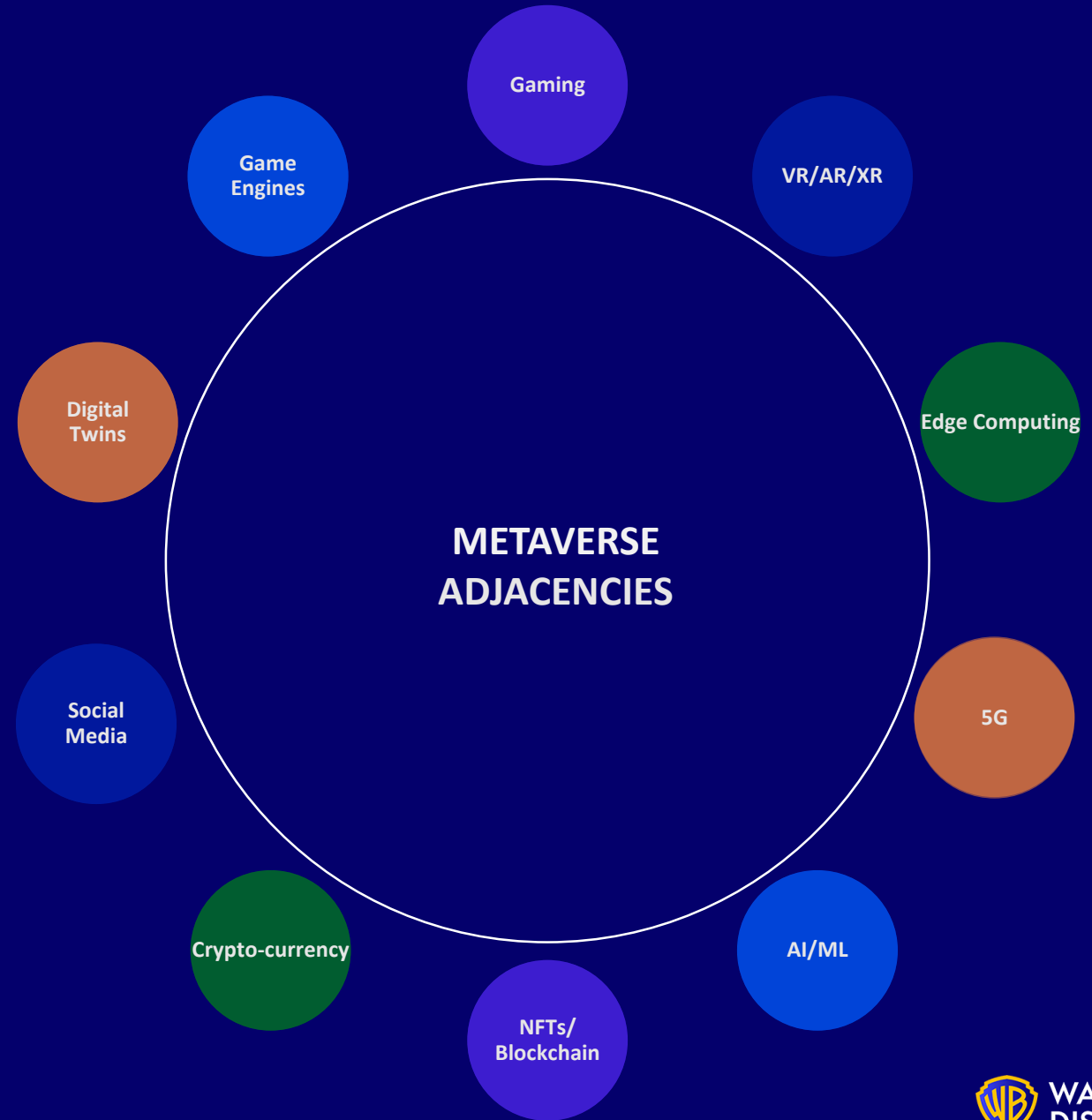


YouTube [Intro](#) Clip

The best depiction of a Metaverse vision is in the movie, “Ready Player One”

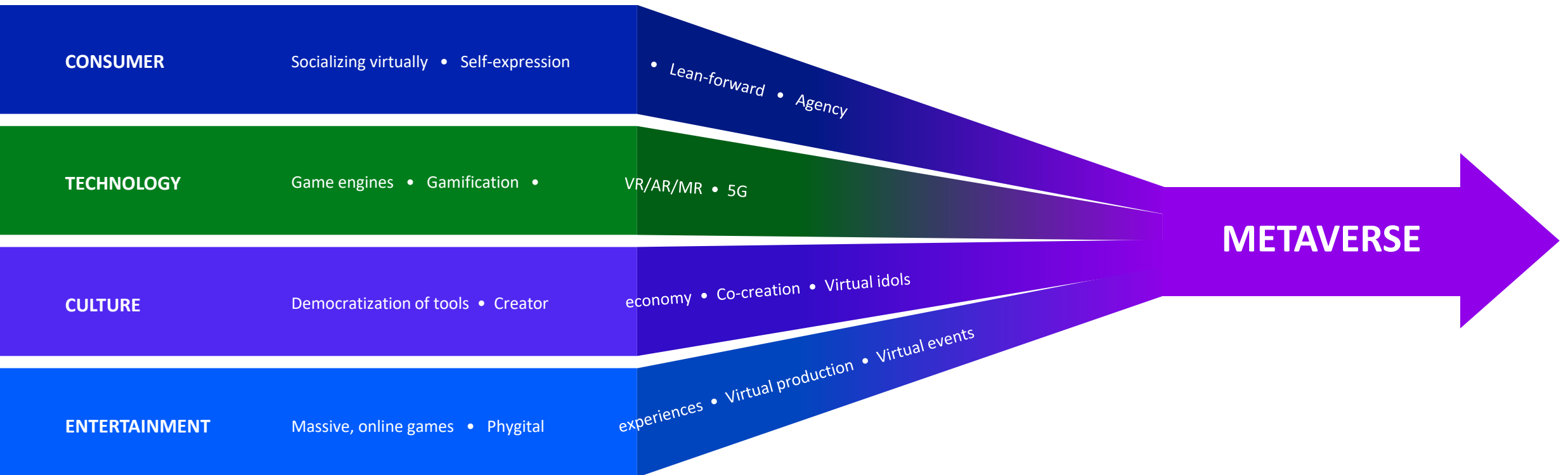
What Are The Related Technologies?

- Adjacent technologies and industries will intersect to contribute to the metaverse, but will also thrive independently of it



How did we get here?

- The metaverse concept represents the convergence of long-term trends and shifts across consumer needs, cultural trends, technology, and entertainment



The Basics of the Metaverse

The Decentralized Metaverse



The longest-running metaverse on the blockchain



A better, more user-friendly version of Decentraland

Large companies are already taking a stake in leading Metaverses

The Basics of the Metaverse

The Walled-Garden Metaverse



Two thirds of US kids between 9-12 y/o are on Roblox



Meta's 'walled garden' Metaverse is available on Oculus

Consumer engagement in existing Metaverses continues to grow

Top Metaverse-Like Platforms

- Metaverse-like platforms with the greatest scale currently are game-based, with virtual events on those platforms drawing large audiences

Engagement on Key Platforms



Monthly Active Users (MAU)

Engagement w/In-Game Concerts on Key Platforms

RANK	EVENT	GAME	DATE	ARTISTS	LIVE HOURS WATCHED	VoD YOUTUBE* VIEWS
					 	
#1	Astronomical	FORTNITE	4/23/20 - 4/25/20	TRAVIS SCOTT	16.2M	181M
#2	Party Royale Premiere	FORTNITE	5/8/20 - 5/9/20	DILLON FRANCIS	11.9M	3M
#3	Llama-Rama Kaskade	FORTNITE	3/26/21 - 3/27/21	KASKADE	6.3M	376K
#4	Lavapalooza	MINECRAFT	8/14/20 - 8/15/20	Several	6.6M	147K
#5	Marshmello	FORTNITE	2/2/19	MARSHMELLO	5.6M	73M



Up 10x to 300K users
Since December 2021

Source: Roblox, Eurogamer, Minecraft, Statista, IGN
* Data up to May 26, 2021, from the top five most-viewed YouTube videos of the event combined.

Business Dynamics in the Metaverse

Metaverse economy & investment

- Society is beginning to care as much about how they represent themselves and spend their time digitally as they do physically. This phenomenon is driving the Metaverse economy.
- Citibank recently estimated the metaverse economy could be worth \$10T by 2030.
 - If a broader definition of the metaverse is used, where access isn't limited to VR and AR devices, then the total market could be around \$13T with up to five billion users.
 - Citibank sees opportunities in various sectors, such as gaming, healthcare, art, advertising, and social collaboration.
- The Citibank also expects that money in the Metaverse will have numerous forms, such as in-game tokens, central bank digital currencies, and cryptocurrencies.
- Metaverse real estate generates a lot of buzz and conversation. Companies or individuals can use digital real estate to construct buildings, open storefronts, lease space for events, or place advertisements.
 - Like physical land, the value of digital property is dependent on scarcity, functionality built on land, and demand for the platform.

Business Dynamics in the Metaverse

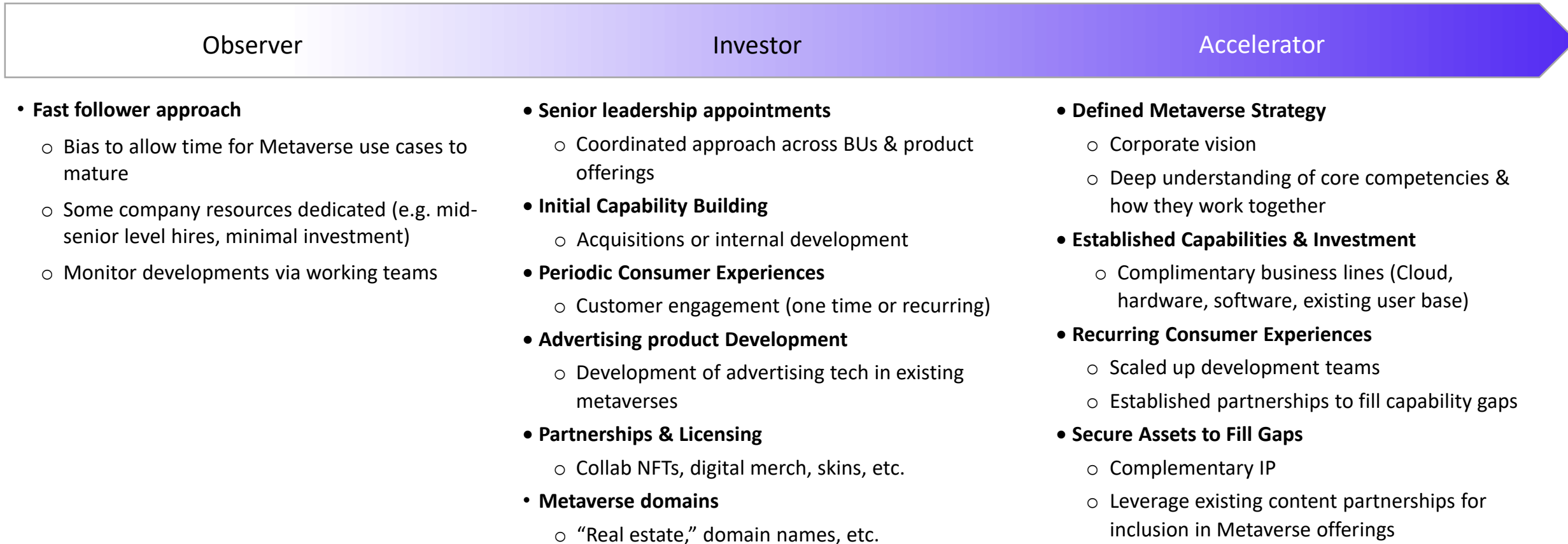
Exploring the Metaverse business paradigm shift

- Combining brand franchises and demographics can present unique challenges and risks
 - Once a brand is available in the Metaverse it can become homogenized against everything else in the Metaverse. This could be a concern for certain protected brands.
 - IP owners can lose control of the brand story, IP is no longer a standalone story, everything becomes a co-star to the broader show – the Metaverse
 - Fortnite had a game story and its own characters, but abandoned them to plug in more recognizable characters from other existing franchises, essentially losing its own story but becoming a vehicle for cross-overs, unified demographics and thus massive profits
 - Although a brand's value in the physical world will translate to the digital world, consumers will be less likely to rely on a brand's reputation for manufacturing quality and more so on the self-expression and status aspects. This type of consumer behavior is influencing which brands and strategies are succeeding in the Metaverse.
 - Companies will need to strategize which IP and brands they put into a Metaverse platform and in what form -- license it, control it within a private walled-garden, release it to the decentralized environment, or a combination of all three




















Business Dynamics – the Metaverse Spectrum

Involvement in the Metaverse can take various forms, from casual observer to total shift in corporate vision



Media & Tech Landscape

Technology & Media companies are at various stages of Metaverse engagement

	Observer	Investor	Accelerator
	<ul style="list-style-type: none"> Instagram testing NFT integrations 	<ul style="list-style-type: none"> Platform Dev - Horizon Worlds Hardware – AR Technology Dev 	<ul style="list-style-type: none"> Pivot on corporate vision / mission Hardware - VR Oculus
	<ul style="list-style-type: none"> Early experimentation with Google Glass (2014), re-engaging in AR 	<ul style="list-style-type: none"> Executive leadership placements AR acquisition & headset dev (est '24) 	<ul style="list-style-type: none"> Developing proprietary OS and AR processors
		<ul style="list-style-type: none"> Acquisitions (AltspaceVR, Activision) Cloud tech & privacy capabilities 	<ul style="list-style-type: none"> Practical application focus (Mesh) Commercial AR dev (HoloLens)
	<ul style="list-style-type: none"> “Shmetaverse” 	<ul style="list-style-type: none"> ARKit AR software framework dev Assumed AR & XR Technology dev 	
	<ul style="list-style-type: none"> Product Mgr. hire to support cloud based Metaverse (VR training game) 	<ul style="list-style-type: none"> AR shopping tech (room decorator) 	
		<ul style="list-style-type: none"> Executive leadership placements NFT drops (Star Wars, Marvel) 	<ul style="list-style-type: none"> Patented Metaverse tech Theme park experimentation
	<ul style="list-style-type: none"> Basic VR content viewing (living room or theater ‘experience’) 	<ul style="list-style-type: none"> Executive leadership placements Gaming company acquisitions 	<ul style="list-style-type: none"> Shared-viewing experience rumored to be in development
	<ul style="list-style-type: none"> Basic VR show viewing 	<ul style="list-style-type: none"> Ad Tech innovation (eye-track, etc.) Bravo Bazaar shopping experience 	<ul style="list-style-type: none"> Comcast investments in 10G
<i>Others</i>		    	   

Media Success Factors in the Metaverse

Common best practices across the Metaverse spectrum

- Senior leadership appointments
 - Strategic vision for current execution & future offerings
 - Coordination across business units
- Understand core competencies and how they fit together
 - Identify capability gaps
 - Gap closure via acquisitions, internal development, or partnerships
- Consumer engagement
 - Test to understand what works for your brands/fans
 - Develop a plan for sustained consumer engagement
- Onboard new capabilities & partners

Staking Your Company's Claim in the Metaverse

Choosing where and how to invest

- The term 'The Metaverse' isn't a single entity, but a concept. The Metaverse exists on multiple platforms (decentralized and walled garden) and forms – gaming, online communities, professional collaboration, digital commerce, and an endless combinations of the above.
- Companies will want to choose the right IP and brands for representation in each platform.
- Each platform offers different foundational characteristics and attracts different user communities. Choosing the right platform(s) and format is a crucial business decision to ensure it delivers what is promised.



- Snoop Dog owns 122 plots on the Sandbox platform. Nike, PWC, and Reese Witherspoon also own parcels there.
- Paris Hilton has a virtual island in Roblox. Tommy Hilfiger owns land in the fashion district.
- Barbados developed an embassy and JPMorgan opened a bank branch called the Onyx Lounge in Decentraland

Media Finance & the Metaverse

What role will finance play in a Metaverse investment?

- Sales and marketing will turn to Finance for guidance on the economics and financial operations within the Metaverse. It will be essential to understand various business models in the Metaverse.
 - Negotiation with NFT Auction providers, establishing storefronts
 - Understanding of new ad tech innovations and products
- NFTs will likely be an important component of the Metaverse revenue model. It is important to understand the accounting impacts of digital assets – NFTs and Cryptocurrency.
 - The secondary market provides revenue in perpetuity. Finance will need to accommodate this ongoing revenue stream and forecast.
- Investing in the Metaverse – purchasing digital land or other digital assets – may require transacting in cryptocurrency, navigating crypto account onboarding and designing controls and procedures
- Acquiring digital domains (e.g. real estate, domain names).
- Partnering with legal and tax on IP and e-commerce issues.
- Real-time monitoring and tracking of Metaverse investments – what is working, what is not?
 - Closer integration with business

First Steps into the Metaverse

Professional suggestions for getting started

- Richard Eisenberg, former editor of Money and Yahoo! Finance suggests the following:
 - Start by learning all you can. Sign up for training videos, read articles, follow metaverse topics on social media.
 - Tap the talent of your partners or hire a metaverse professional.
 - Discover how your competitors and customers are using the Metaverse. This will be a good indicator to help you decide on the best timing for your brands.
 - Figure out which elements of your customers' journey and partner vendors' journey lend themselves to the Metaverse. What will save them time or hassle, or enrich their experience?
 - Try small, limited inexpensive Metaverse tests.
- Start having discussions with leadership, and ask questions!

“The time
is now to
think big,
start
small, and
scale
fast.”

Accenture

Appendix

Glossary

Terms that are frequently used in describing the Metaverse

DAO - decentralized autonomous organization is an organization constructed by rules encoded as a computer program that is often transparent, controlled by the organization's members and not influenced by a central government, in other words they are member-owned communities without centralized leadership. [\[Examples: ConstitutionDAO, ApeDAO, PleasrDAO\]](#)

Virtual Reality (VR) - is a simulated experience that can be similar to or completely different from the real world. Applications of virtual reality include entertainment (particularly video games), education (such as medical or military training) and business (such as virtual meetings)

Augmented Reality (AR) - is an interactive experience of a real-world environment where the objects that reside in the real world are enhanced by computer-generated perceptual information, sometimes across multiple sensory modalities, including visual, auditory, haptic, somatosensory and olfactory

Mixed Reality (MR) - is the merging of real and virtual worlds to produce new environments and visualizations, where physical and digital objects co-exist and interact in real time. Mixed reality does not exclusively take place in either the physical world or virtual world, but is a hybrid of augmented reality and virtual reality. [\[Mixed Reality encompasses the 'middle ground' between the real world and virtual world and includes augmented reality\]](#)

Snow Crash - is a science fiction novel by the American writer Neal Stephenson, published in 1992. [\[The term 'Metaverse' was coined in this book\]](#)

Spatial Audio – A.K.A. Surround sound is a technique for enriching the fidelity and depth of sound reproduction by using multiple audio channels from speakers that surround the listener (surround channels) [\[VR headsets include spatial audio that adjusts as the user moves\]](#)

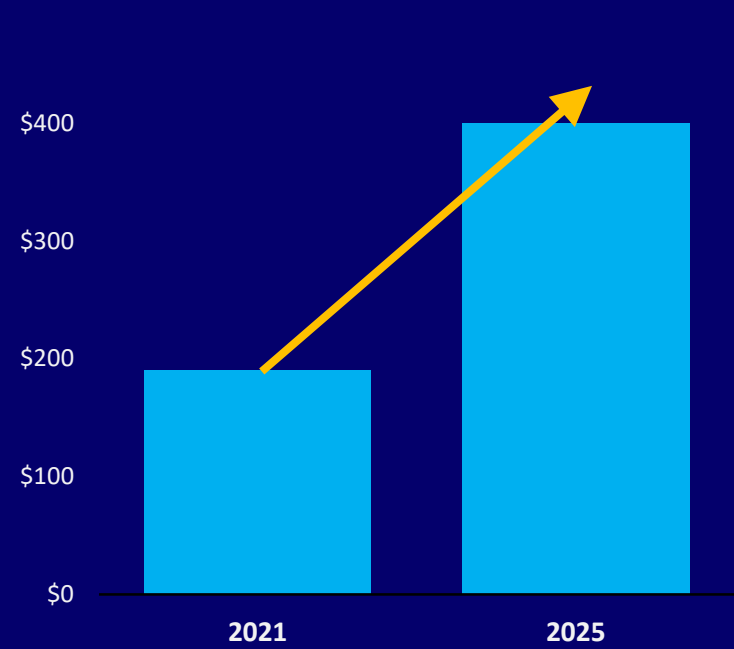
Voxels - In 3D computer graphics, a voxel represents a value on a regular grid in three-dimensional space. As with pixels in a 2D bitmap, voxels themselves do not typically have their position (i.e. coordinates) explicitly encoded with their values. [\[A Voxel is essentially a 3D Pixel\]](#)

Market Size

- Given the amorphous nature and early stage of the metaverse, the exact amount of resources, capital, and revenue generated in the future is challenging to forecast; estimates range from \$82B¹ to \$800B by 2024-2025

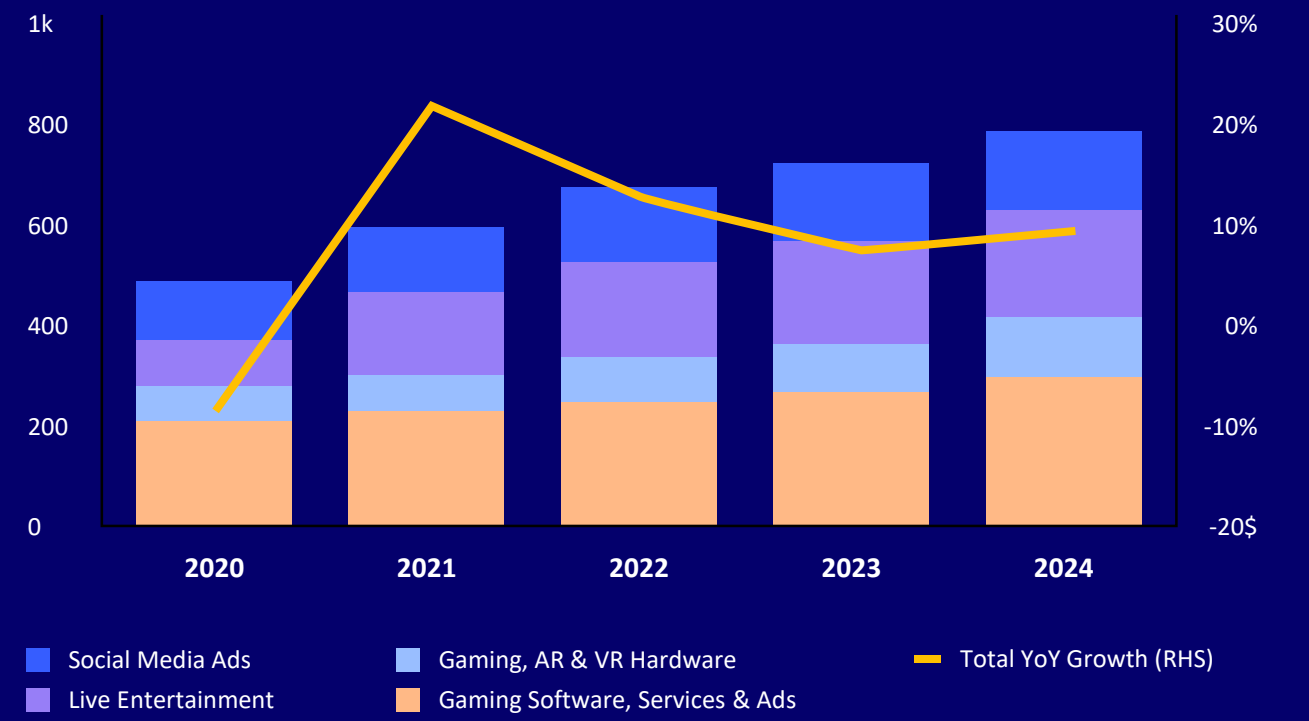
Virtual Worlds Revenue

Ark Invest estimates revenue from virtual worlds could approach \$400B² by 2025



Bloomberg’s assumptions for Metaverse growth by 2024

Bloomberg Intelligence believes market opportunity for metaverse could be \$800B³ by 2024



Source: 1) The Information What Will Metaverse Be Worth in 2025 (Oct 2021) – includes only share of gaming UGC revenue and social/enterprise market; 2) Ark Invest (Jan 2021) – includes only virtual platforms and their content; 3) Bloomberg Intelligence (Apr 2021) – excludes hardware, networking, compute, and payment categories

The Basics of the Metaverse

What is the Metaverse?

- Key components of the Metaverse vision include:



Avatar – your digital representation in the Metaverse. Eventually, avatars will be able to move seamlessly through different platforms – shopping, games, concerts, etc.



VR and AR devices – the technology that immerses a user visually into the metaverse. VR puts you into a totally virtual world, where AR layers virtual digital assets on top of what you see in the physical world. As technology improves and matures with faster, lighter, better sound and visuals, the greater Metaverse adoption we will see.



Interoperability – digital assets, content and data needs to carry over into the next virtual world (e.g. your avatar can wear its Nike NFT from one Metaverse platform into another).

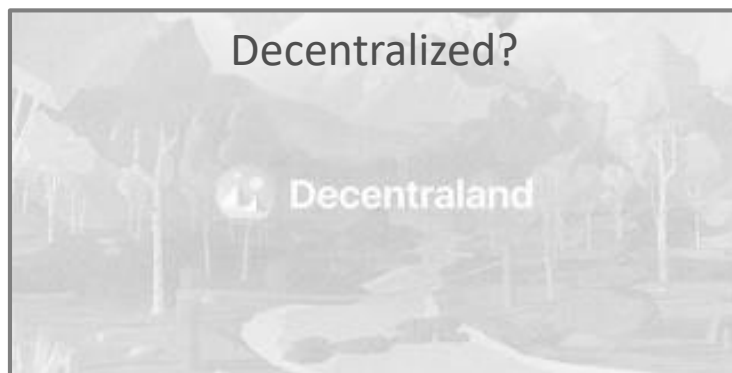


Autonomy – Web3 and blockchain technology enables more individual autonomy and less centralized control from a few mega companies in Web2 (Meta, Google, Amazon, etc.) which levels the competitive landscape – anyone can create content and the next big thing.

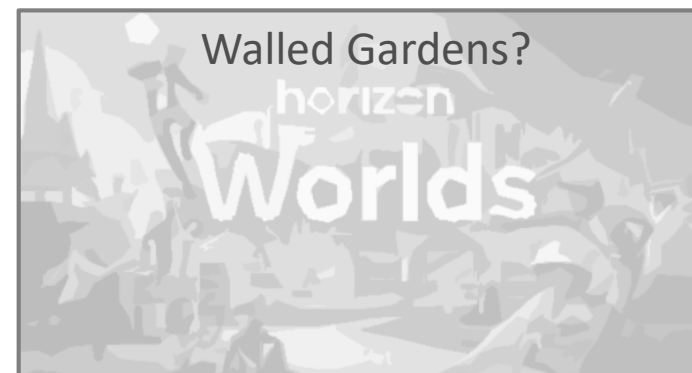
The Media & Tech Landscape

What are Media & Tech companies doing in the Metaverse?

- Media & Tech have become intertwined.
 - Apple, Microsoft, Google, and Meta are all media companies to one degree or another.
 - Tech companies continue to build Metaverse infrastructure.
- Technology companies have advantages in the Metaverse:
 - Ownership of Metaverse hardware, software & content IP
 - Cloud storage & computing capacity
 - Existing user bases (e.g. gaming platforms, social platforms, services)
- Media companies and content creators will choose which platforms to engage with consumers.
 - Pros and cons associated with each scenario.



And / Or



Staking Your Company's Claim in the Metaverse

What factors should be considered in choosing where and how to invest?

Decentralized

- The decentralized Metaverse is a movement and aligns with the pure definition and vision – open shared world where users can move seamlessly across platforms and trade assets without a centralized authority.
- Blockchain, edge computing, and AI are some of the biggest technologies supporting democratization of the Metaverse.
- Users gain complete control and ownership over their assets and experiences.
- Decentralized Authority Organizations (DAO).
- User defined experiences and content.

Centralized – Walled Garden

- Private walled-gardens are controlled by a central authority who control the usage terms, content, user experience, brand and IP usage.
- Tightly protected IP would be safer in a walled-garden where the Company can control how assets are used and the overall experience.
- Meta, Roblox, Fortnite are examples of walled-gardens.
- They haven't figured out interoperability where digital assets transfer across walled gardens. Will this create a barrier for users and usage?

Choosing the right platform(s) is a crucial decision.

LANDSCAPE

- There are players large and small across platforms/gateways, components/services, and infrastructure – the largest players with assets across the landscape include Facebook/Meta, Microsoft, Nvidia, and Tencent

METAVERSE GATEWAYS		
	Centralized	Decentralized
Player-first Content (UGC Rich)		
Dev-first Content		

Source: Newzoo Intro to the Metaverse (June 2021)

METAVERSE SERVICES

Avatar & Identity	User Interface & Immersion	Economy
Social	Play-to-Earn & Play-to-Collect	

METAVERSE INFRASTRUCTURE

Cloud, Scalability, & Hosting	Visualization & Digital Twin	Artificial Intelligence
Decentralized Infra	Adtech & Marketing	Connectivity