PitchBook

EMERGING TECH RESEARCH

Vertical Snapshot: The Metaverse

2022

REPORT PREVIEW

The full report is available through the PitchBook Platform.

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Contents

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Executive summary

What is the Metaverse?

This ostensibly simple question has sparked fierce debate, the terms of which neatly illustrate the chasm between technology evangelists and cynics. It's also the question that underlies this report, for the Metaverse must be defined, contained, and contextualized before its merits and flaws can be properly understood. Though this snapshot offers a perspective on the development of the Metaverse, it does not claim to be the end of the story. Because the Metaverse is an evolving technical and cultural concept, it is guaranteed to change.

In outlining the core components of the Metaverse and highlighting the conceptual underpinnings, this report aims to demonstrate how both advocates and skeptics conceive of a more immersive digital future, how the Metaverse may differ from the contemporary internet, and how aspiring entrepreneurs and venture capitalists hope to capitalize on its emergence.

First, a definition:

> **The Metaverse is the internet, iteratively evolved to incorporate Web3 principles regarding the devolution of user data, novel technologies aimed to improve usability and immersion such as augmented reality/virtual reality (AR/VR) headsets, and greater interoperability built atop more open standards and blockchain technology.**

Because said evolutions have yet to pass, the Metaverse doesn't fully exist today. This explains exactly why the term is the subject of such intense excitement and derision; advocates and detractors don't yet agree on its key components, how it should differ from the modern internet, or even whether it should come to pass at all.

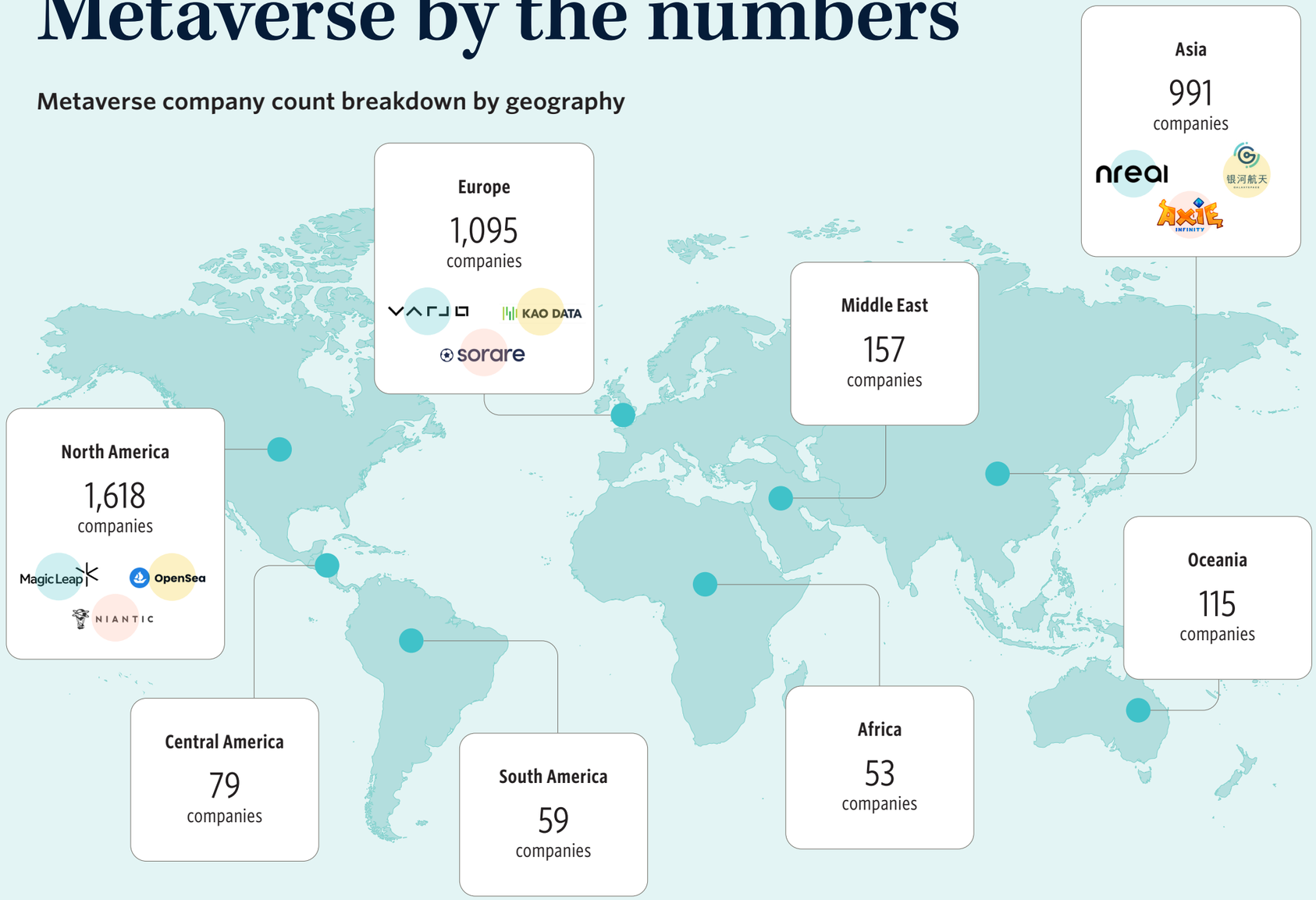
We view the Metaverse as inevitable. The evolution of computers and networking has consistently focused on creating efficacious digital representations of physical reality. Email, one of the internet's early success stories, simply computerized a centuries-old capability, significantly enhancing its value proposition in the process. Today, the Metaverse aims to take this premise to new heights, leveraging a bevy of new technologies, including Internet of Things (IoT), blockchain, and VR, to more thoroughly bridge the physical and digital worlds. Music, industrial asset monitoring, office collaboration, social media—these experiences and the data they generate will be increasingly connected and accessible in myriad environments. Supercharging information's ubiquity is one step toward improving productivity and generating more compelling digital capabilities.

Whatever the Metaverse amounts to, it will always be an extension of the real world, not a replacement. Far from dystopian source material such as "Snow Crash" by Neal Stephenson or "Ready Player One" by Ernest Cline, the actual Metaverse will be inextricably connected to and in conversation with real-world developments, not a place to become untethered from reality. While digital-centric content will certainly exist and indeed proliferate, key principles of the Metaverse such as interoperability and inclusivity suggest that digital silos will be hard to maintain and unlikely to be desired by consumers.

The nascent Metaverse opportunity comprises almost 3,400 companies that have raised $47.0 billion in venture capital (VC) since 2018. The Metaverse umbrella is expansive, given how many potential segments of activity it purports to touch and the infrastructure and hardware it will take to achieve such ambitions. This report explores those dimensions across the pillars of access, infrastructure, and experience—dimensions that capture the challenges that entrepreneurs and business executives will have to face as they ponder the future of the internet.

Metaverse by the numbers

Metaverse company count breakdown by geography



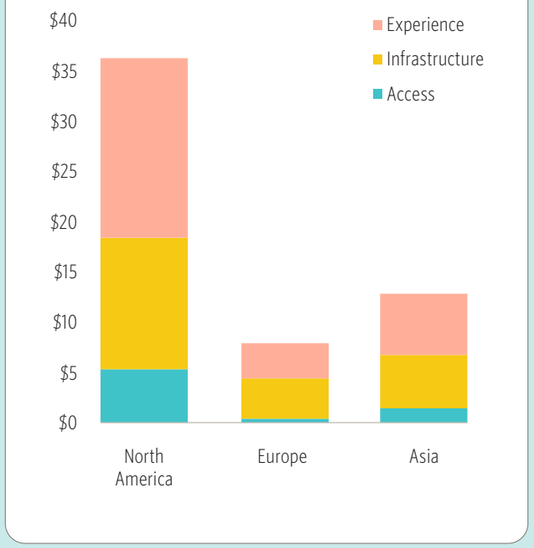
3,327
companies

12,247
investors

9,661
deals

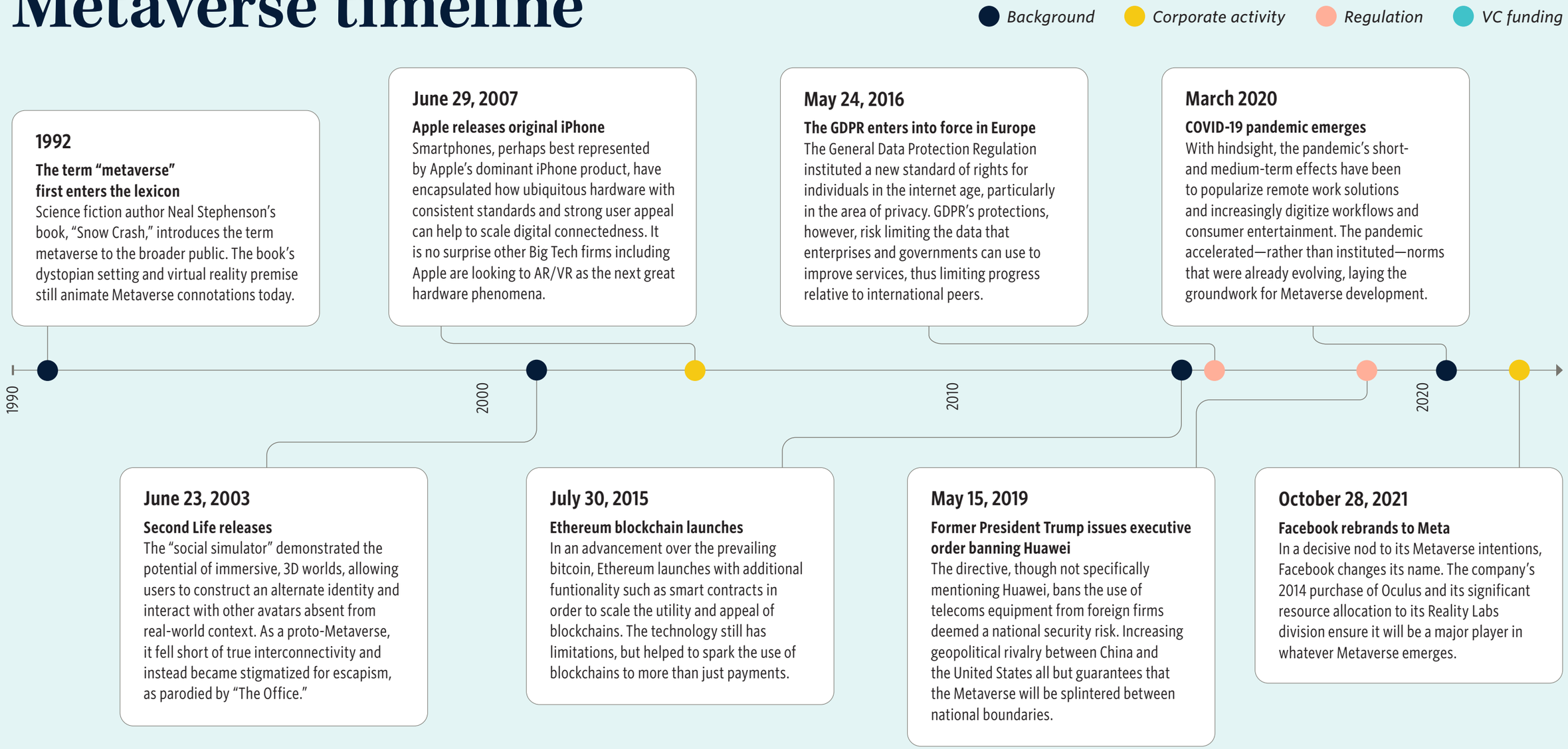
$115.5B
raised by VC-backed companies since 2010

Metaverse VC deal value ($B) by segment for top 3 geographies*

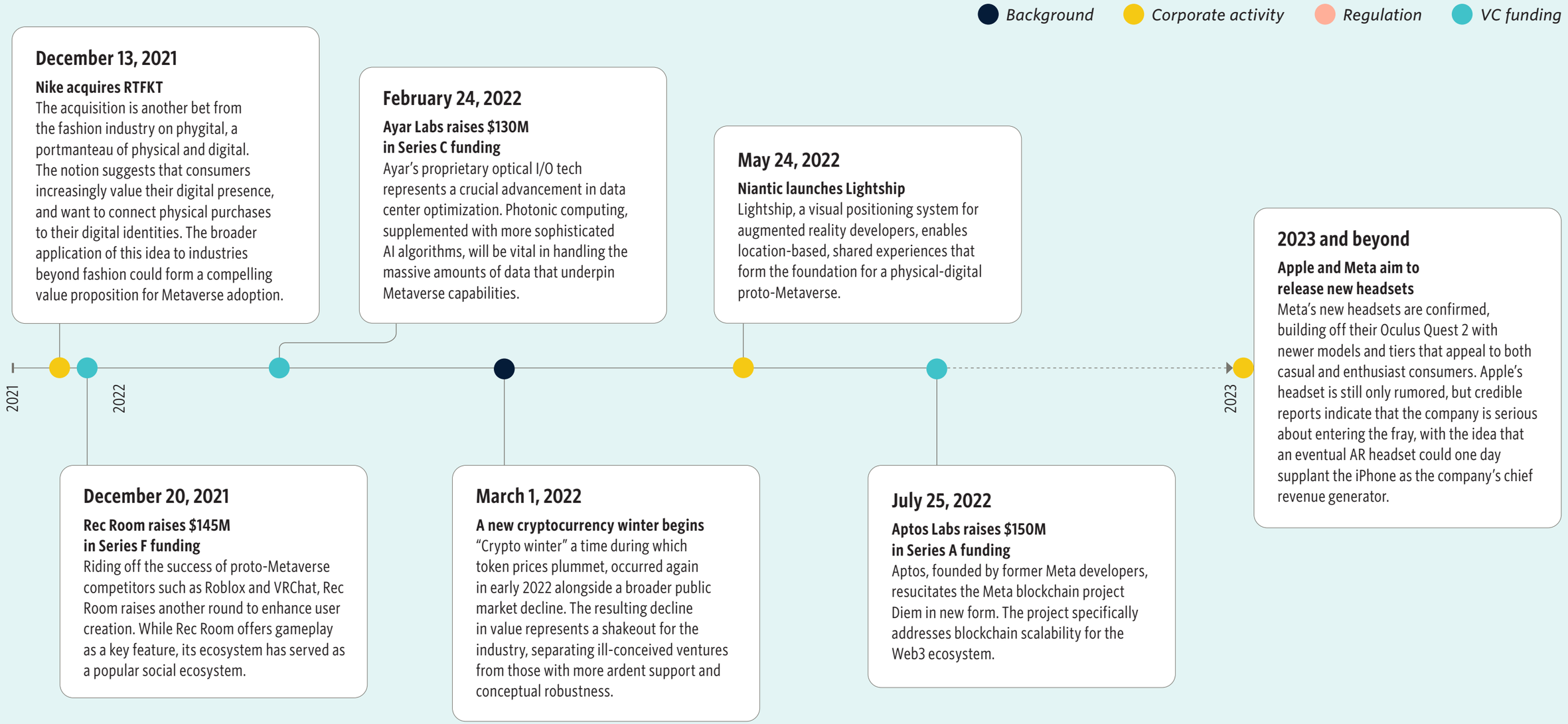


Source: PitchBook | *As of June 30, 2022

Metaverse timeline



METAVERSE TIMELINE



Metaverse VC ecosystem market map

Access
Infrastructure
Experience

Click to view the interactive market map on the PitchBook Platform.

Market map is a representative overview of venture-backed or growth-stage providers in each segment. Companies listed have received venture capital or other notable private investments.

Immersive hardware — Total raised: $6.2B

- Augmented reality glasses
- Virtual reality headsets
- Immersive reality accessories
- Holographic displays

Web3 — Total raised: $3.4B

- Blockchains
- DAOs
- NFTs
- Digital identity
- Smart contracts
- Decentralized finance

Entertainment — Total raised: $11.5B

- Art & collectibles
  - sorare, Parallel, particle, Artory, DIBBS
- Blockchain gaming
  - Forte, Dapper Labs, Axie Infinity, Mythical, The Sandbox
- Decentralized social media
  - BitClout, Artie, VID, Minds, HyperSpace
- Immersive gaming
  - Epic Games, Niantic, Rec Room, The Sandbox, playful studios
- Music & events
  - Theta, FanCraze, ONEOF, royal, rally

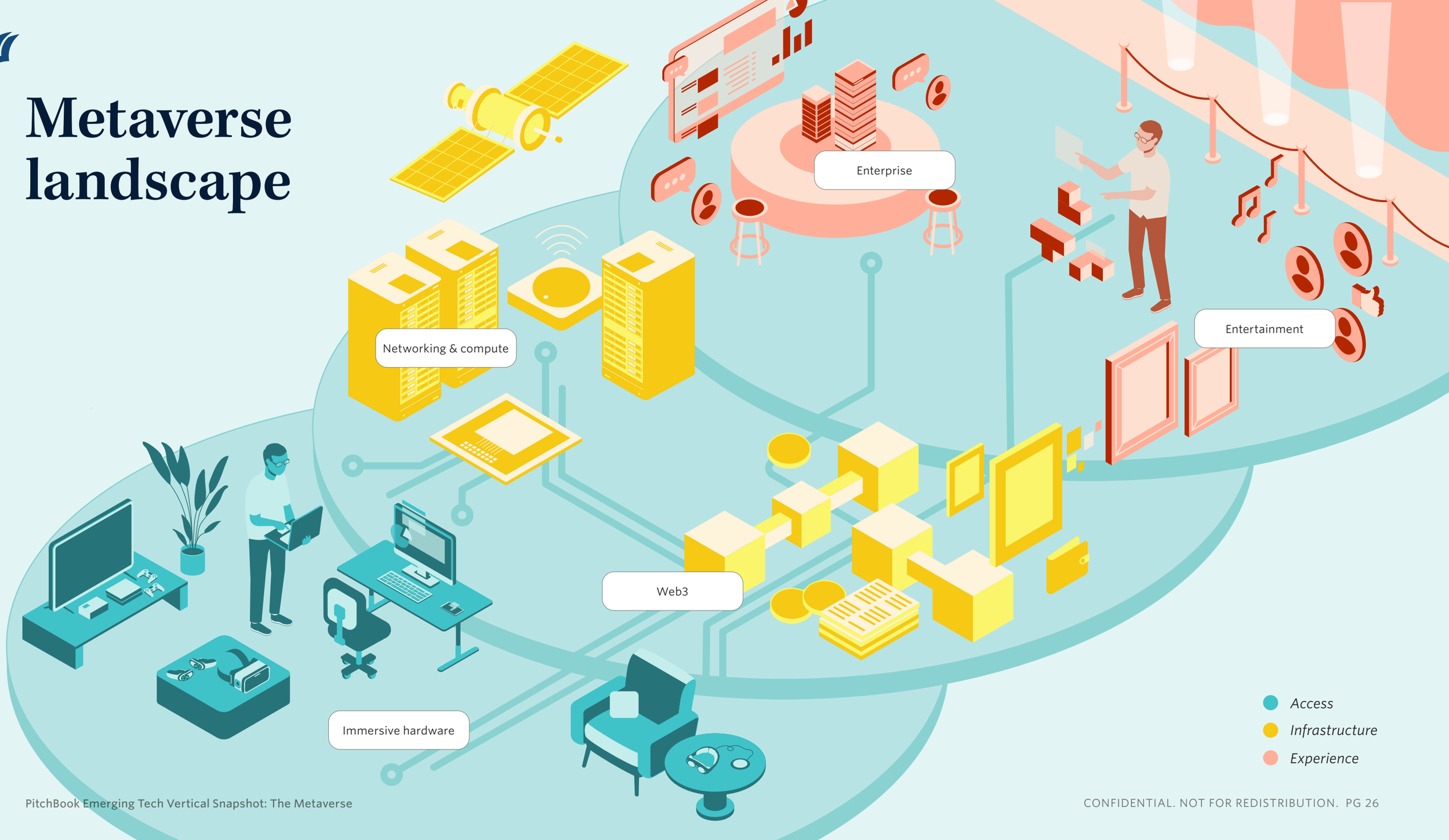
Enterprise — Total raised: $2.6B

- Collaboration & productivity
- Industrial - immersive
- Industrial - digital twins
- Industrial - IoT

Networking & compute — Total raised: $6.0B

- Photonic computing
- Satellite internet
- Data center optimization
- IoT networking

Metaverse landscape



About PitchBook Emerging Tech Research

Independent, objective and timely market intel

As the private markets continue to grow in complexity and competition, it's essential for investors to understand the industries, sectors and companies driving the asset class.

Our Emerging Tech Research provides detailed analysis of nascent tech sectors so you can better navigate the changing markets you operate in—and pursue new opportunities with confidence.

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