

A person in a red and white plaid shirt stands on the crest of a sand dune, looking out over a vast desert landscape under a starry night sky. The scene is bathed in a cool blue light, with the stars creating a sense of depth and wonder. The person's shadow is cast on the sand in front of them.

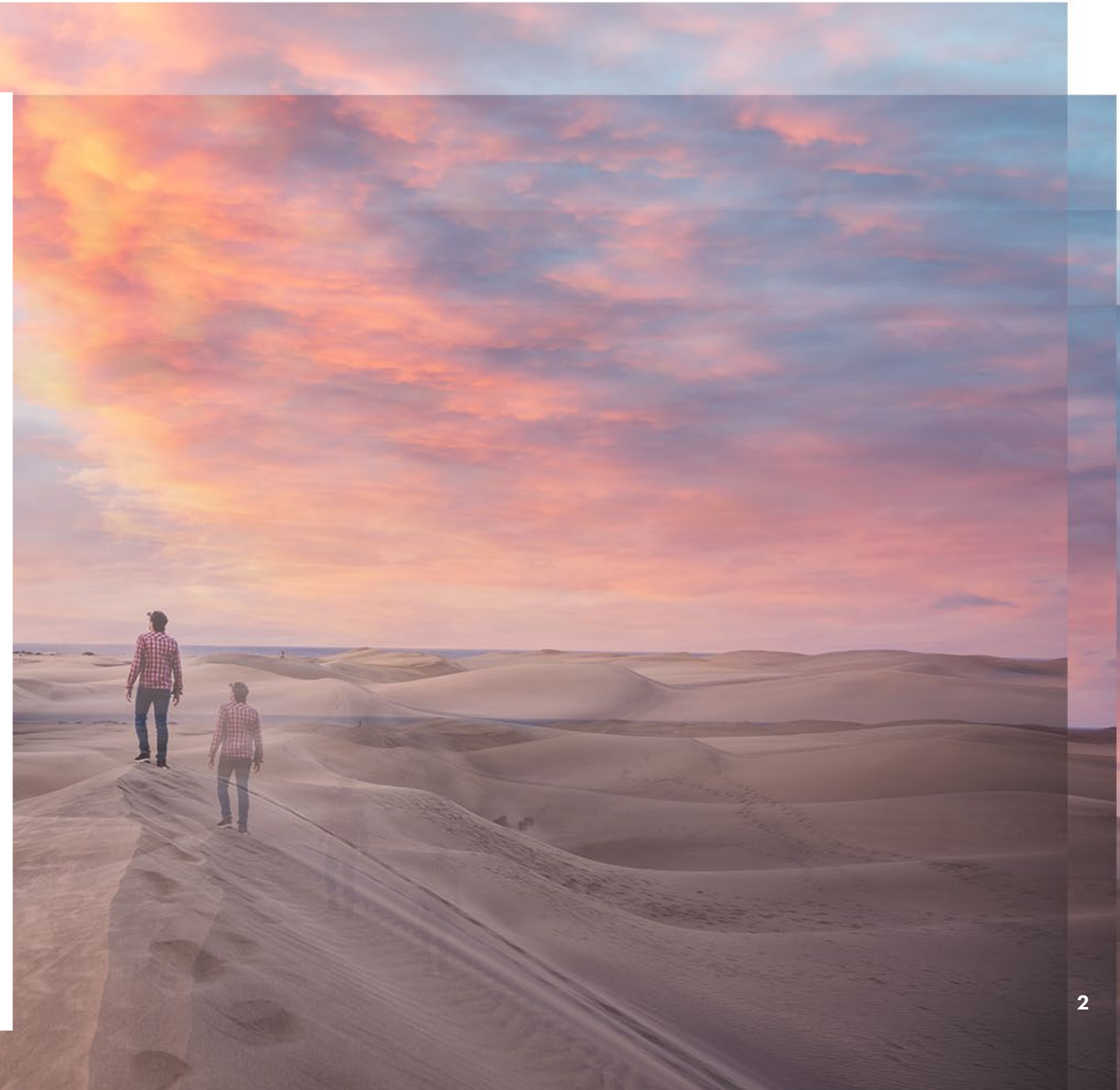
# HARDWARE'S NEW REALITY

How High Tech can find  
greater value in the metaverse



# Introduction

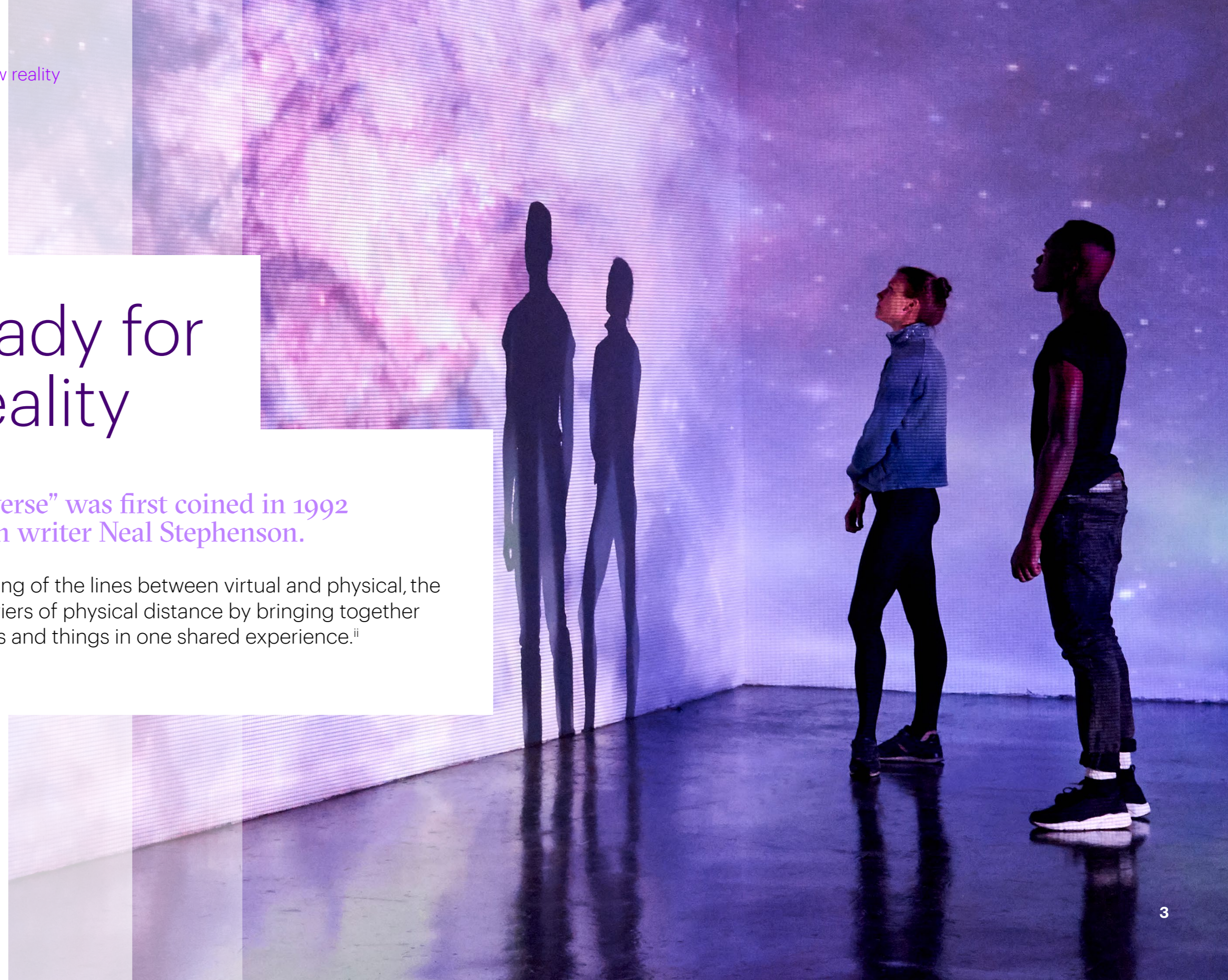
According to Accenture's Technology Vision 2022, 86% of High Tech executives state that the metaverse will have a positive impact on their organizations.<sup>i</sup> Indeed, for most enterprises, the metaverse has become too big to ignore. However, many CXOs are still struggling to formulate a comprehensive metaverse strategy that will convince their stakeholders of its long-term value. For High Tech companies, their place in the metaverse—which is still in its infancy—is initially obvious: They build the chips and devices that are foundational to the technologies that make the metaverse possible. However, some High Tech companies are using the metaverse to change their station in the value chain. These companies are looking to invest in new capabilities. And they're developing the expertise needed to use existing capabilities in different ways. The goal? To expand beyond their core hardware business and tap into potentially more-lucrative segments of this exciting new space.



# Getting ready for the new reality

The term “metaverse” was first coined in 1992 by science fiction writer Neal Stephenson.

It describes the blurring of the lines between virtual and physical, the shattering of the barriers of physical distance by bringing together people, virtual spaces and things in one shared experience.”



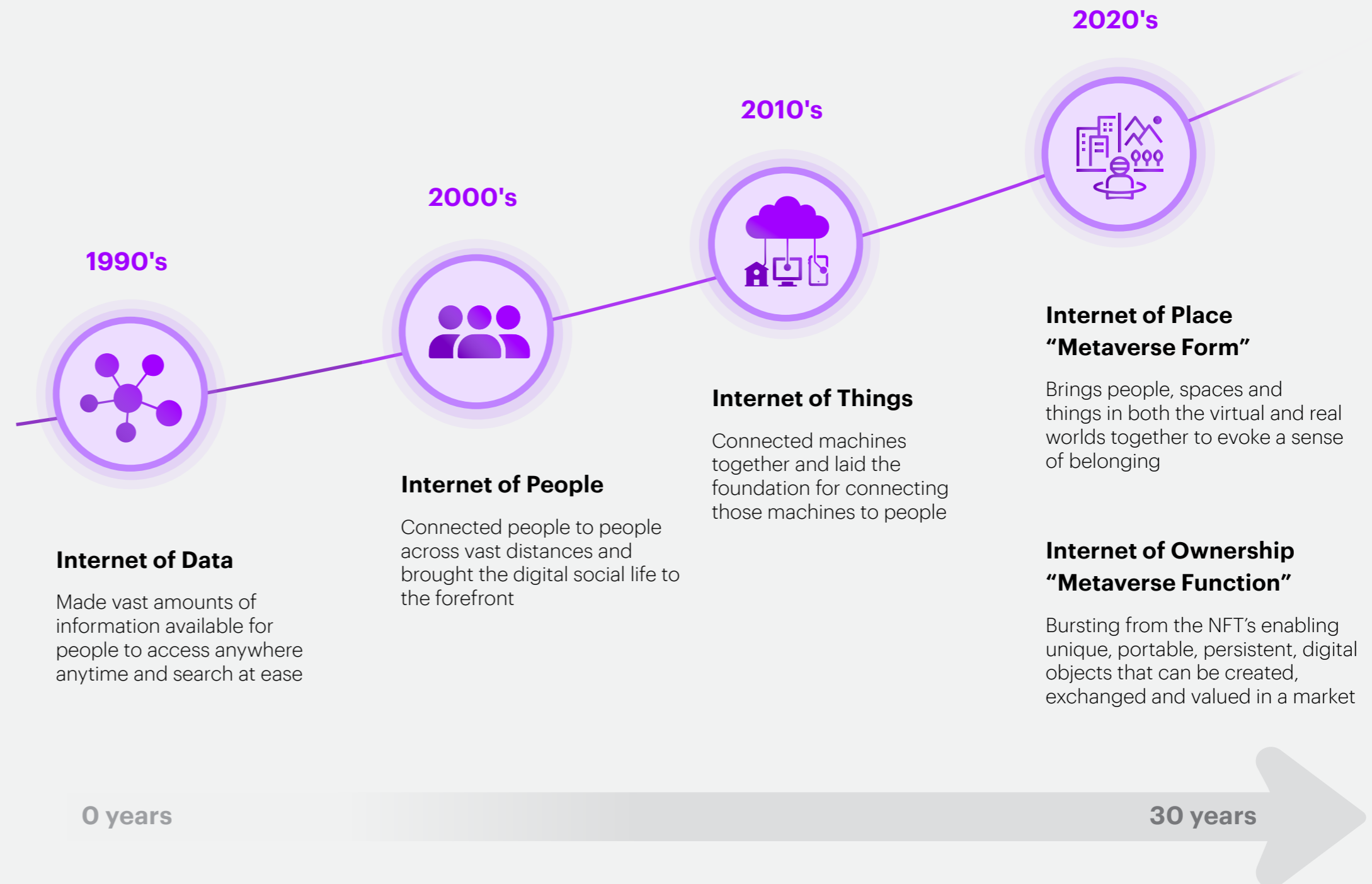
However, the technology of the time limited the idea's potential. While the internet of the 1990's broke down physical barriers, it did so only for data. The publishing, sharing and searching of information was bound to the context of the two dimensions of a URL. In the 30 years since the inception of the metaverse, gradual advancements in technology have chipped away at these limitations (Figure 1).

Thanks to today's technologies, people can connect with each other regardless of where they physically are, and can also connect to many devices through the internet of things (IoT). Additionally, technologies like blockchain have even made it possible to possess and trade digital assets in a manner we have traditionally only seen when dealing with physical assets.

**86%**

of **High Tech** executives state that the metaverse will have a positive impact on their organizations.<sup>1</sup>

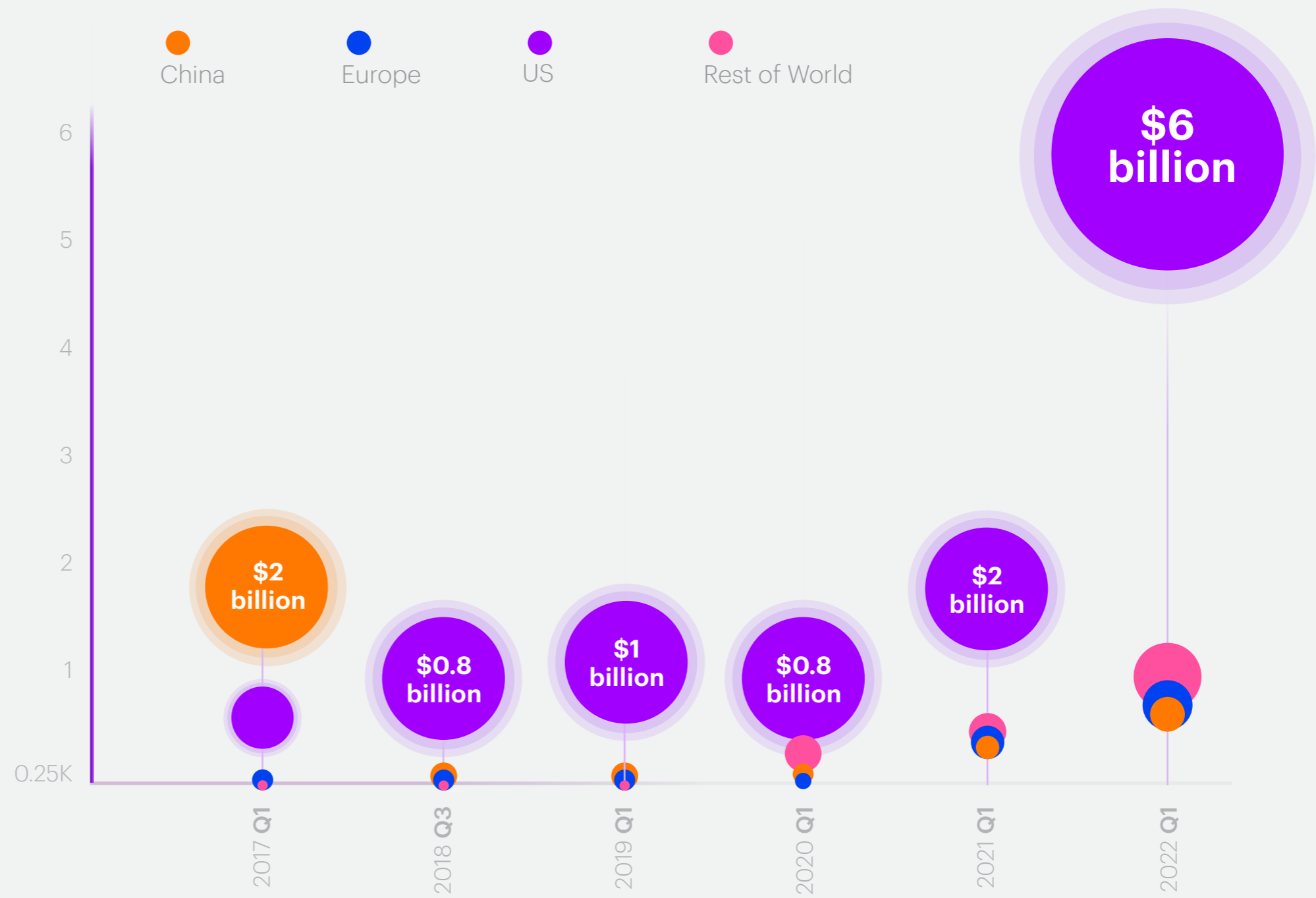
**Figure 1:** The internet is being reshaped along the metaverse continuum



Source: Accenture analysis based on publicly available content

This rapid development in technology has created fertile ground from which we see Stephenson's idea of the metaverse spring to life. Companies are taking note and investments in the metaverse have picked up momentum during the last five years (Figure 2). The companies investing in the metaverse are searching for and establishing their niche within this new space. We're now approaching an inflection point where High Tech companies risk being left behind if they don't invest in and find their place in the metaverse.

**Figure 2:** North American metaverse startups attract the most investments  
Investment by quarters and regions (billions of US\$)



Source: Accenture analyses on [Crunchbase data](#), timeline: until April 2022

A key enabler behind this momentum is the maturity of end-user devices that make the metaverse commercially viable (Figure 3).

In the Oculus Connect 2018 keynote, Meta's CEO Mark Zuckerberg approximated 10 million users as a key threshold before the "ecosystem will just explode."<sup>iii</sup> That figure is widely believed to have been achieved in 2022 according to third-party market size estimates.<sup>iv</sup>

**85%**

of **High Tech** executives believe programming the physical environment will emerge as a competitive differentiation in their industry and 78% agree that augmented reality will disrupt their industry in the next three years.<sup>i</sup>

**Figure 3:** Hardware is a key enabler of immersive metaverse experiences

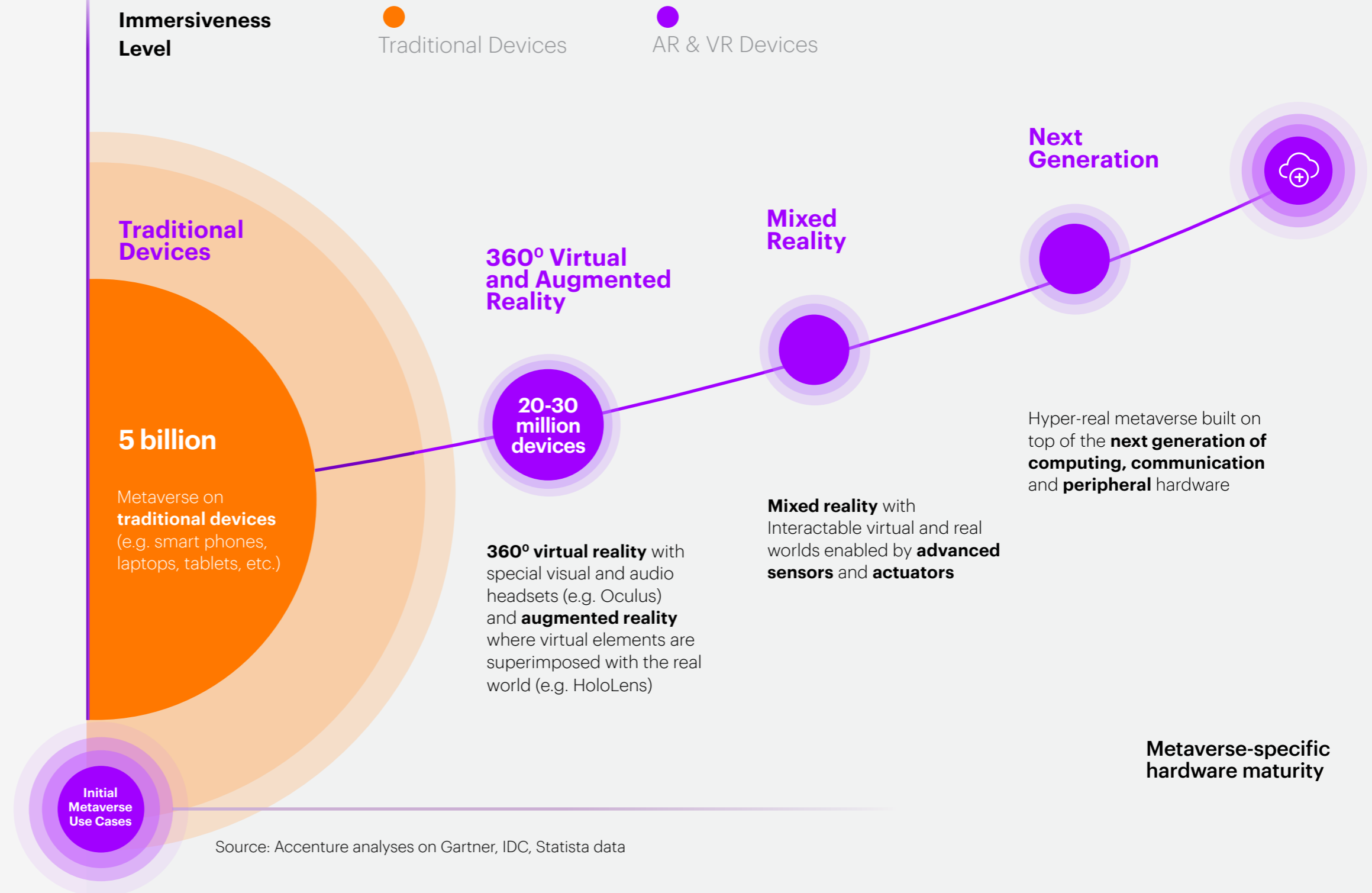
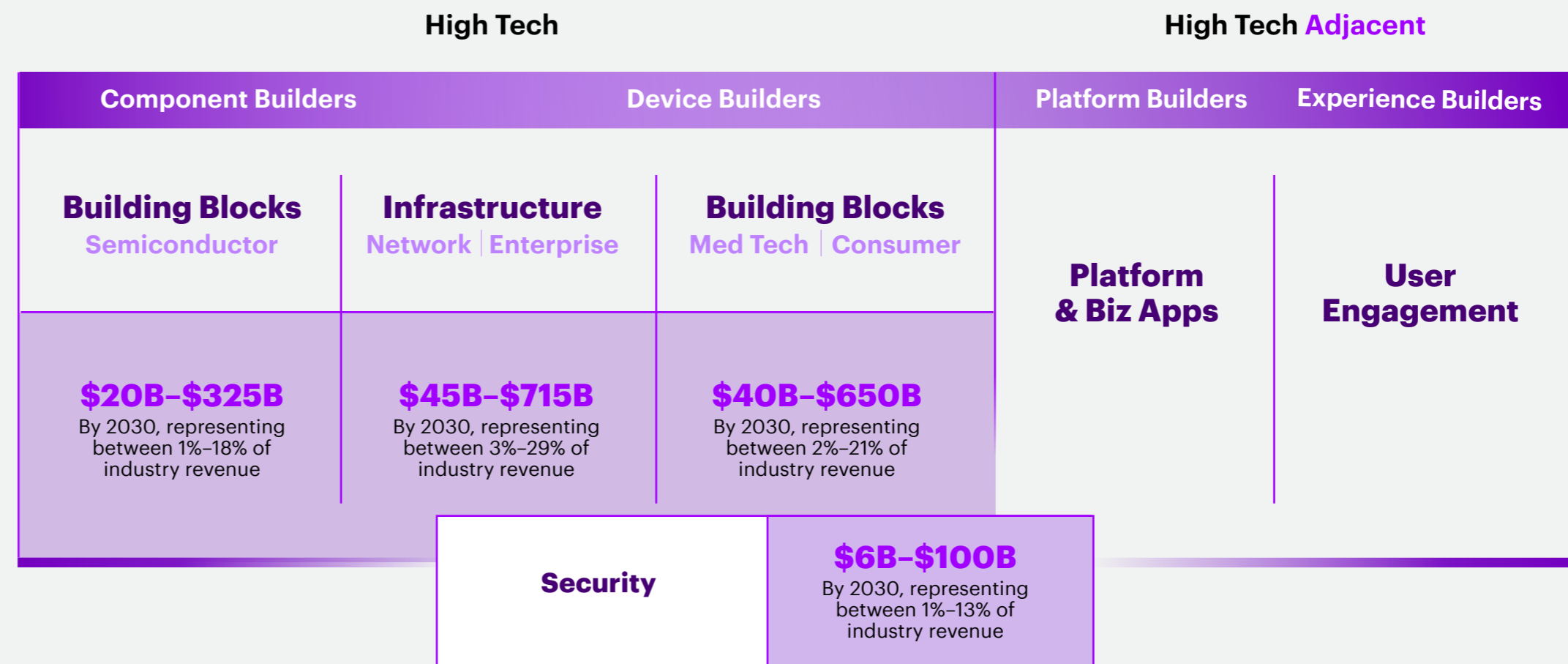


Figure 4: High Tech industry market\* for metaverse

Beyond end-user devices, High Tech companies play other critical roles in the metaverse. They provide the networking infrastructure, embed the security, and design and manufacture the chips that power everything. However, while the projected market for metaverse-related hardware is substantial (Figure 4), High Tech companies should look beyond their core business. There are significant untapped opportunities in building the platforms and designing the experiences that support the metaverse. Several market-leading High Tech companies are doing just that—they're moving along the value chain to find the right entry point into the metaverse for their business.



\*Note: Metaverse market sizing based on current industry segment market share extrapolated against expected metaverse market size by 2030 (\$800 billion to \$13 trillion) v. vi

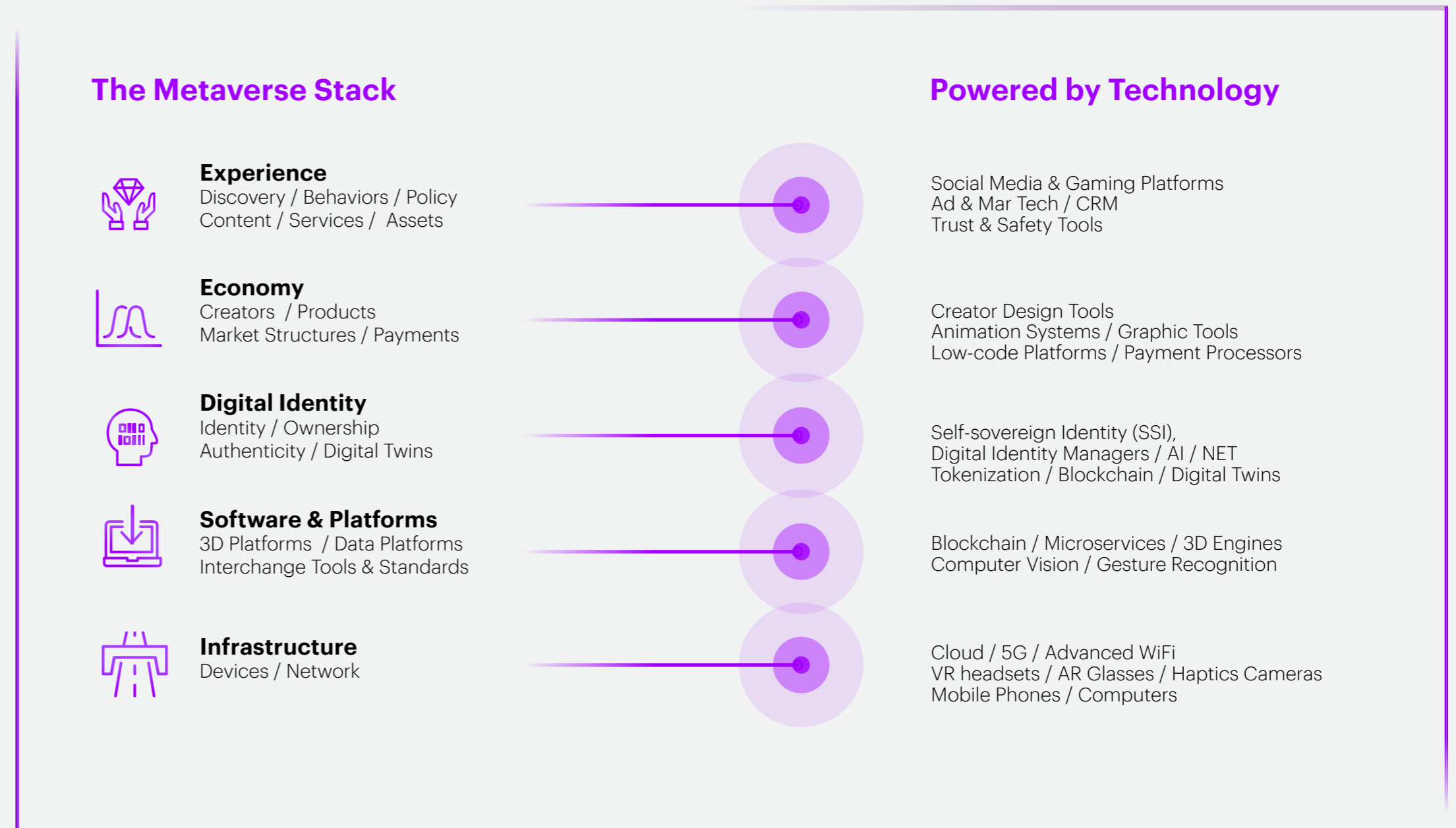
Source: Accenture analysis based on company and industry filings

As with any innovative technology, defining the metaverse value chain for a set of customers is often difficult and rarely holistic. While there's no concrete definition, themes have emerged to form a metaverse stack (Figure 5). By weaving these themes together, companies are finding early successes through compelling user experiences. Looking across the landscape of these early successes, a clear momentum is building toward establishing the metaverse as a transformative technology.

**57%**

of consumers state "I expect companies to help me unify my digital experiences."<sup>1</sup>

**Figure 5:** The building blocks of the metaverse



Source: Accenture analysis based on publicly available content



# Where to find the most value

Platform, Experience and High Tech players are picking and choosing where and when to play in the metaverse value chain. In many cases, this means extending beyond their legacy business to enable the value potential their customers demand.

Consider Meta's investment in acquiring Oculus (now renamed to Meta Quest). Meta is a platform company making a significant investment in a hardware player. Meta saw an opportunity to take a leading role as a metaverse platform for its users but lacked the hardware to make it happen. Through Meta Quest, it's now in a leading position in two key segments of the metaverse value chain. The consumer response to this approach has been overwhelmingly positive: Meta Quest has slingshot past the competition by maintaining a greater than 70% shipment share since the end of 2020.<sup>vii</sup> This change in market position makes sense because Meta Quest offers a new, shared experience in a virtual world featuring a community of users.

However, new experiences don't stay that way for long. Content creators need to work hard and consistently deliver new experiences that keep the user base engaged. To overcome this challenge, Meta needs to be a metaverse market maker. By investing to achieve the appropriate scale, Meta Quest is creating the market incentive content creators need to keep the "new experiences" pipeline full. And by investing in new capabilities in its devices (e.g. Meta Quest Pro), Meta is adding more tools content creators can use to develop new experiences.

While some companies are better positioned to make these kinds of investments than others, all companies can find ways to benefit from the right partnerships. At Meta Connect 2022, Meta announced it was opening its Horizon Worlds platform to mobile and desktop. Not only does this increase the user base that can engage on the continuum of metaverse, but it also opens the door to broader enterprise adoption. It starts with new experiences that accelerate the future of work, which is exactly

the intent of the metaverse partnership between Meta, Microsoft and Accenture.<sup>viii</sup> Individually, these three companies can provide valuable metaverse offerings for enterprise. Together, they combine to provide the capability for end-to-end metaverse transformation at a scale that was not previously possible.

In the future, integration of new metaverse layers with existing enterprise systems will be the norm. Metaverse platforms will bring 3D capabilities to database management (e.g. enterprise resource planning), data visualization tools (analytics) and even day-to-day communications channels like email, instant messaging and video calls. The creation of a 3D version of Microsoft Office 365 that is compatible with the Meta Quest headset, announced at Meta Connect 2022, represents a first step toward these new ways of working.

Content creators need to work hard to deliver new experiences to keep the user base engaged.

**72%**

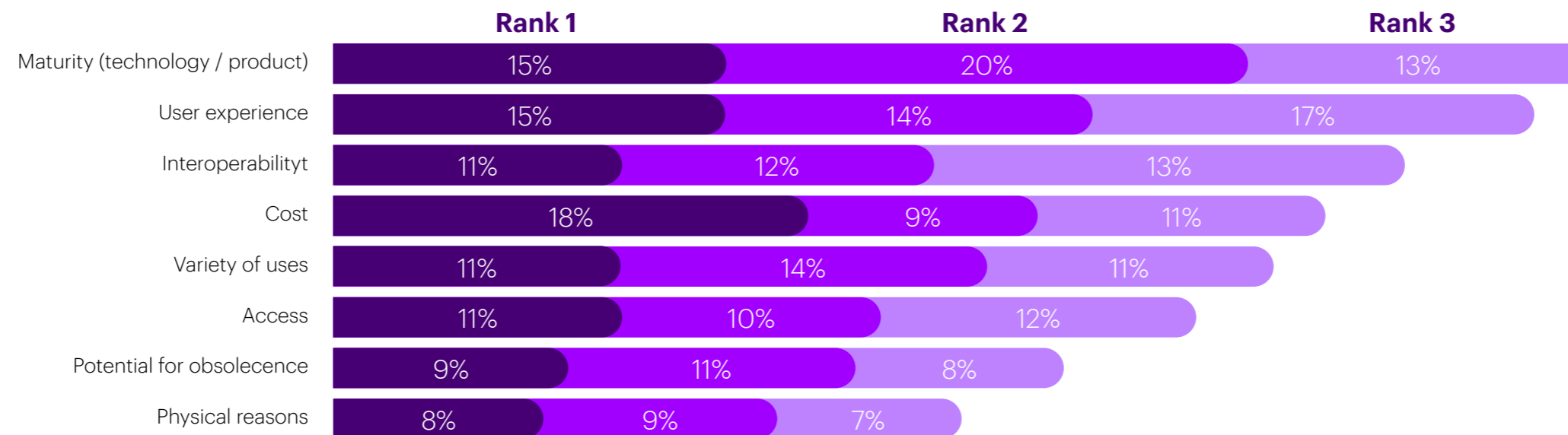
of consumers state "The next technology revolution needs to be led by people-centric experiences, giving me more control over my data."<sup>i</sup>

Nvidia is another example of a company playing in multiple points in the metaverse value chain. In October 2020, Nvidia announced the launch of its Omniverse platform, a scalable development platform for real-time 3D simulation.<sup>ix</sup> With Omniverse, Nvidia hopes to make virtual worlds more visually compelling and easier to create. This focus on user experience

and interoperability hits on two of the top three roadblocks identified by industry executives (Figure 6). Nvidia's move has enabled the company to stake its ground in a new segment of the soon-to-explode metaverse.

On the Q2 2022 earnings call, Nvidia CEO Jensen Huang asserted, "I'm fairly sure at this point that [the metaverse] is going to be a new economy that is larger than our current economy."<sup>x</sup> If this is true, it means that the metaverse is still far from being oversaturated with new entrants.

**Figure 6:** Top roadblocks for consumer access to the metaverse (rated by semiconductor executives)



Source: Accenture research: "Semiconductor Industry: Balancing Resilience with Innovation"(retrieved in Oct 2022 to be released 2023)

# Expanding beyond what's possible

Nvidia's experience isn't unique—other traditional High Tech companies are expanding the boundaries of their business to take advantage of the metaverse. But doing so requires companies to think hard about their opportunities.

# 01

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## Find the greatest opportunities in the metaverse value chain for your business

Beyond the partnership with Meta and Accenture, Microsoft's pending acquisition of gaming company Activision Blizzard is a good example of a High Tech company expanding into new businesses in other parts of the metaverse value chain.<sup>xi</sup> Opportunities remain open for players to enter or even lead across various industry segments. For example, the hardware supporting digital currency, identity and assets infrastructure continues to develop as the internet of place and the internet of ownership continue to converge.

# 02

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## Identify opportunities close to your core business

For example, exploring opportunities to offer "metaverse-ready" technology devices/solutions /services could align closely with HP's Hybrid Work offering in bringing transformative workplace devices and services to its customers.<sup>xii</sup> Companies can align with one or several of the multitude of devices, applications and platforms that support the metaverse.

# 03

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## Understand the impact these investments have on your brand and core business

While Nvidia's move into the metaverse platform space seems to be a non-sequitur on the surface, enabling experience builders with these tools drives up the hardware specifications for one of NVIDIA's core products, GPUs.

# 90%

of **High Tech** executives agree that leading organizations will push the boundaries of the virtual world to make it more real, increasing the need for persistence and seamless navigation between the digital and the physical worlds.<sup>i</sup>

# The next big wave

The metaverse is poised to become the next big wave of technology innovation at the confluence of creativity, community and technology.<sup>xiii</sup> And, like previous waves, High Tech companies are uniquely positioned to both drive it and benefit from it. To do so, they must look for opportunities in the metaverse value chain—even if this means playing a non-traditional role.

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