



HFS Horizons Report

Metaverse Services Providers, 2023

March 2023

AUTHORS:

Phil Fersht, CEO and Chief Analyst
David Cushman, Executive Research Leader

Excerpt for EY



The metaverse has evolved rapidly over the last year, creating a whole new dimension for immersive customer and employee experiences.

Phil Fersht, CEO and Chief Analyst, HFS Research



2023 must be a big year for proving value. We expect metaverse services to come under firm pressure to deliver real ROI in an increasing majority of enterprise use cases. Enterprises are ready to invest, with 47% committing to 10%–20% growth in metaverse investments over the next two years and a further 40% planning to add 5%–10% to metaverse budgets. To match this, they need service providers to upskill and scale up.

David Cushman, Executive Research Leader, Emerging Technology, HFS Research

Contents

	Page
1 <u>Introduction and key findings</u>	4
2 <u>Research methodology</u>	14
3 <u>Horizons results: Metaverse services providers, 2023</u>	22
4 <u>EY profile: Metaverse services, 2023</u>	25
5 <u>HFS Research authors</u>	27
6 <u>Demographics, guides, and definitions</u>	29

1

Introduction and key findings

Introduction

The term “metaverse” is regularly used as marketing shorthand for any virtual space or augmented reality in which users interact with digitally generated or enhanced environments and other users, often via digital versions of themselves. Enterprises can work with this definition to develop better virtualized customer, employee, and partner experiences and to upskill in preparation for the needs of future customers. We asked providers to also consider the future direction of the metaverse—where it becomes an open and interoperable driver of an emerging business paradigm disrupted by decentralization—and the impact of customer control of their own data.

- The value proposition for metaverse services is moving from a “return on learning” toward what HFS describes as value across three horizons:
 - **Horizon 1:** Driving business outcomes, cost reduction, and productivity improvements
 - **Horizon 2:** Horizon 1 + improving customer experience (CX) and employee experience (EX) at the enterprise level
 - **Horizon 3:** Horizon 2 + unearthing new sources of value to drive growth and manage risks at the ecosystem level
- This inaugural HFS Horizons report for metaverse services examines the capabilities of 18 services providers and management consultancies to paint the supplier landscape across the three HFS Horizons.
- We assessed the service providers across a defined series of criteria:
 - The Why: Value proposition
 - The What: Execution and innovation capabilities
 - The How: Go-to-market strategy
 - The So What: Market and client impact
- This report also includes detailed profiles of each service provider, outlining their placement, provider facts, and detailed strengths and opportunities.

Executive summary

1

An estimated \$1 trillion metaverse economy opportunity awaits – but so far, HFS estimates the 18 service providers in this report are only capturing around \$2.45 billion of it. To start closing the gap, 2023 must be a big year for proving value. We expect metaverse services to come under firm pressure to deliver real ROI in an increasing majority of enterprise use cases. Enterprises are ready to invest, with 47% committing to 10%–20% growth in metaverse investments over the next two years and a further 40% planning to add 5%–10% to metaverse budgets. To match this, they need service providers to upskill and scale up.

2

Commitment to the metaverse is not evenly distributed. We found many examples of service providers relabeling or reorganizing existing functions under a metaverse umbrella rather than adding significant new investment. This is true of personnel and revenue recognition. Additional investment is easier to identify in new offerings, roadmaps, and partner ecosystems.

3

Enterprises should push their providers for the application of robust value frameworks to focus on outcomes. Many of the leading service providers in this report have them readily available. There is no need to experiment outside of these frameworks. We see the shortest routes to value through CX, EX and, in the industrial metaverse, through digital twins—impacting training, product and service development, and the supply chain. Digital twins represent our best-yet data visualization technology.

4

The best near- and mid-term opportunities come from adding metaverse capabilities and approaches rather than wholly replacing old ways of working, living, buying, and making with the new. As with most new technologies, the opportunity is in combining the best available solutions to meet specific needs.

5

Many service providers are compiling technology stacks in reaction to customer need. While they stick to this, it is hard to see how they can envisage and therefore shape a future state to lead their clients toward. Customers are looking for a leader in unfamiliar territory.

6

The metaverse of VR and AR and immersive experience is being widely embraced by both enterprises and service providers; the decentralized, data-challenging reality of Web3, less so. The most mature offerings embrace both. Service providers must be braver in outlining both the threats and the opportunities associated with the Web3-powered, decentralized, and interoperable version of the metaverse as it looms ever larger.

7

The most mature metaverse services we identified in this report - in EX, CX and digital twins - are coming out of the innovation lab to be integrated into implementable enterprise-scale elements of core offerings.

The metaverse has moved from thought experiment to value

More hype than value

Invest if you want a high-risk and high-reward, but they don't do much

- Cryptocurrencies
- Stablecoins
- NFTs

Interesting thought experiments

Potentially game changing, but more philosophical as of now

- CBDC
- Web 3.0

The open and interoperable true metaverse will drive new business models—but not yet

Pilot and prove

Technology exists, but it needs a robust business strategy

Metaverse tech offers lessons in the virtualization of experience—and market access—now

- Metaverse
- DeFi
- DAOs

Ready for primetime

Already proven to drive business outcomes and new sources of value

- Ecosystem play
- Asset tokenization
- Multiparty financial transactions
- Supply chain track and trace

Least

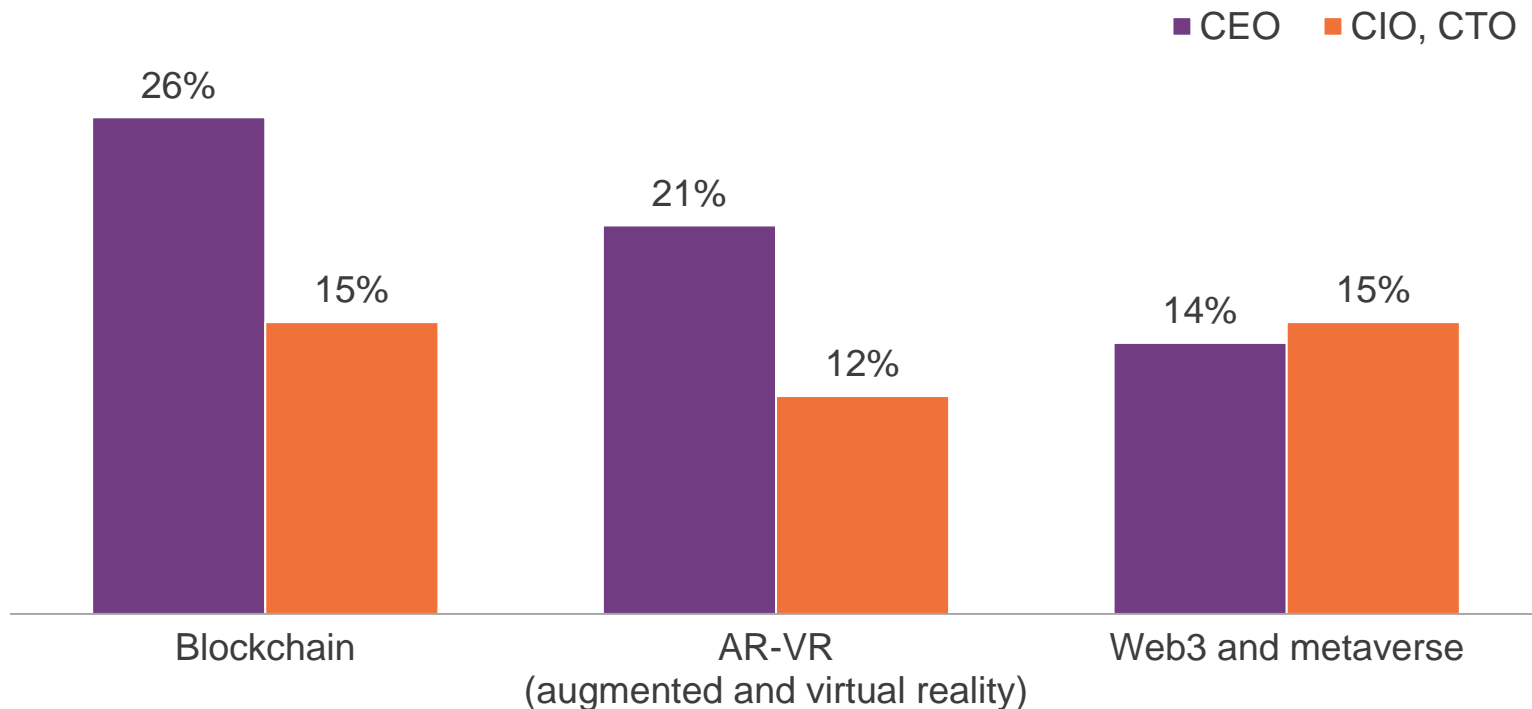
Current value creation potential for enterprises

Most

CEOs have yet to wake up to the bigger picture on metaverse

Q. Rank the top three technologies your organization expects to invest the most in over the next 12 to 18 months

Total percentage of rank 1, 2, or 3 responses



CEOs are more convinced by the nearer-term and often simpler use cases and benefits of blockchain and AR-VR than they are by the need to place their bets on Web3 and metaverse.

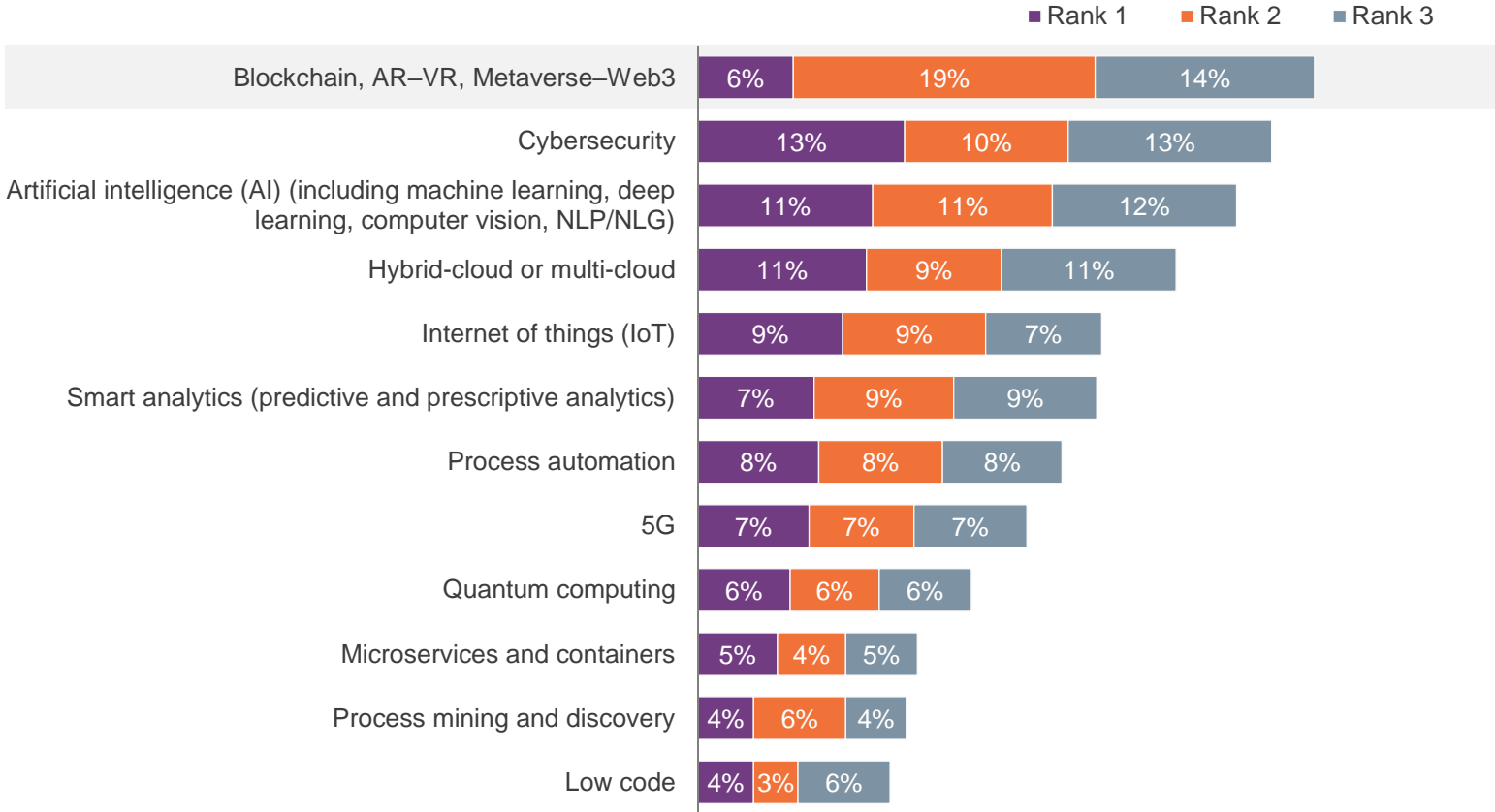
Blockchain and AR-VR are technology choices while Web3-metaverse requires buying into the process, enterprise, and cross-ecosystem benefits on offer.

Our data shows CIOs and CTOs are marginally more likely to see the bigger picture than their bosses. But just 14% and 15% are ranking Web3 and metaverse in their top three investments in 2023.

Enterprise appetite is huge—but it lacks strategic direction

Q. Rank the top three technologies your organization expects to invest the most in over the next 12 to 18 months

Total percentage of rank 1, 2, or 3 responses



Investment in the range of metaverse enablers (identified on page 18) is huge.

In combination, there is greater total prioritization (39% ranking 1, 2, or 3) placed on the metaverse enablers than on any other technology needs identified by our audience of Global 2000 executives (HFS Pulse, 2022).

The fact that enterprise buyers identify only a small proportion of this (14%) as related to their metaverse ambitions suggests a strategy gap that service providers must work harder to fill.

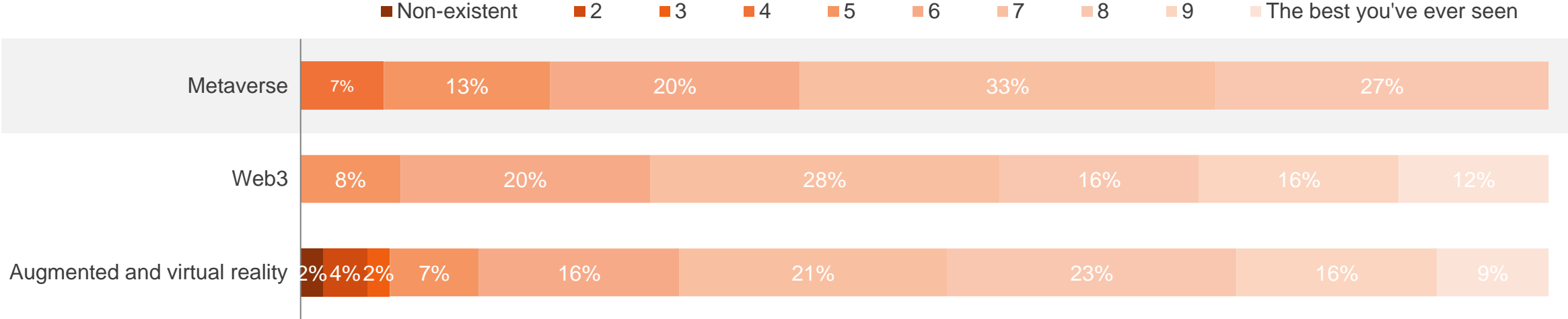
Projects involving AR and VR—and blockchain, too—should be delivered as part of a program with a clearer view on the more holistic business outcomes that the shift to metaverse can deliver.

The wisest long-term view is to add 5G, IoT, and quantum to that strategic plan.

Sample: HFS Pulse 2022; 602 G2000 executives
Source: HFS Research, 2023

Enterprises need service providers to step up

Using a 1 to 10 scale, where 1 is non-existent and 10 is the best you've seen, please rate vendors' expertise in the following enabling technologies



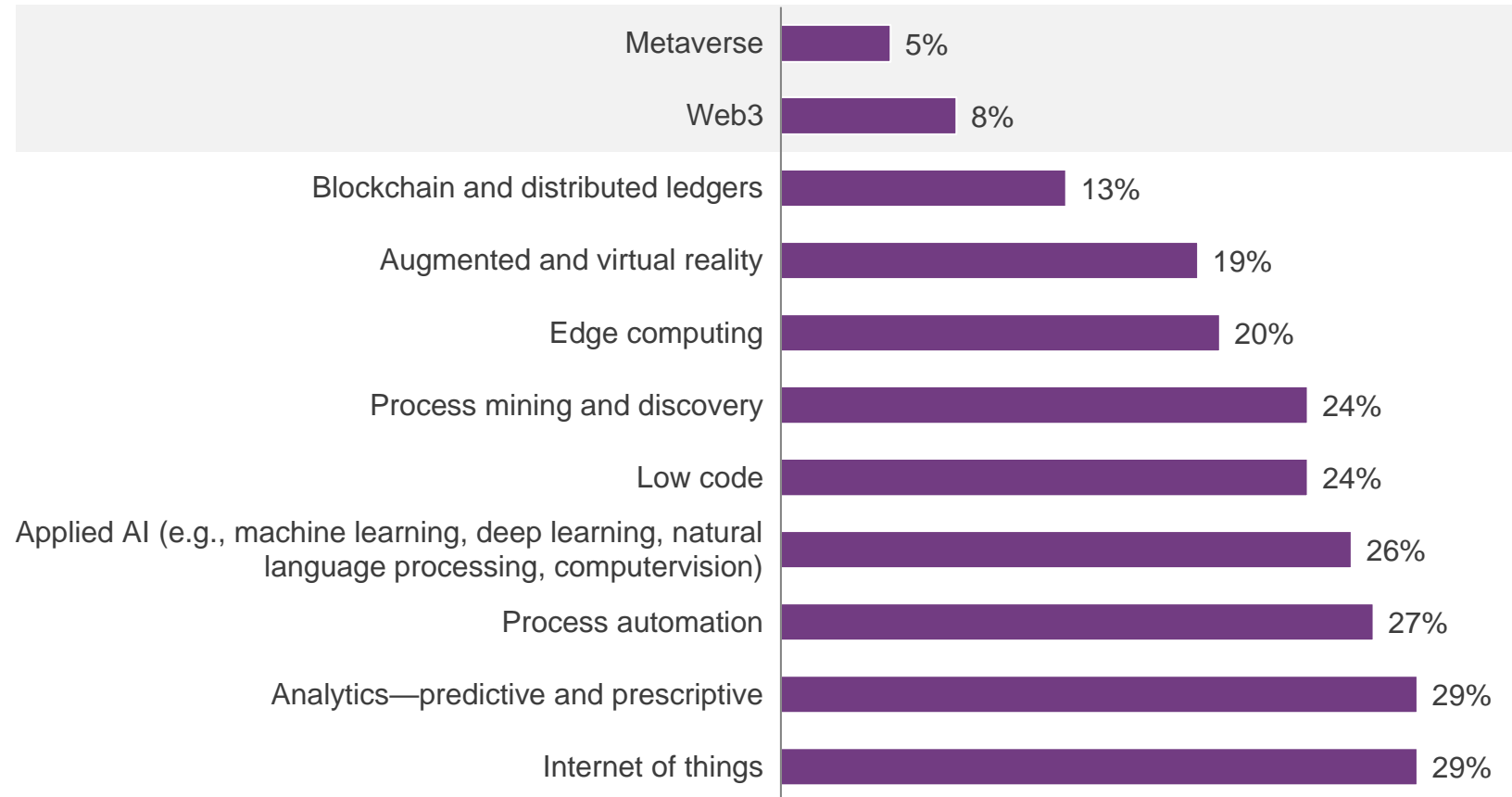
On average, enterprises are only willing to score their service provider partners 6.6/10 for metaverse expertise. One-fifth of those surveyed score their provider less than 5/10. The average rises to 7.2/10 for augmented and virtual reality. The related world of Web3 does better, with 44% of enterprises scoring their service provider 8/10 and above for their expertise.

For comparison, enterprises score service providers an average of 7.7 for process automation and 8.2 for analytics. It's clear enterprises are less convinced by the capabilities available from service providers in the nascent area of metaverse services compared to those in which service providers have a longer track record. Enterprises leaders need convincing with success beyond the ideation session.

Sample: HFS Pulse H1 2023; n=300 Global 2000 leaders
Source: HFS Research, 2023

Service providers lag enterprise investment intent

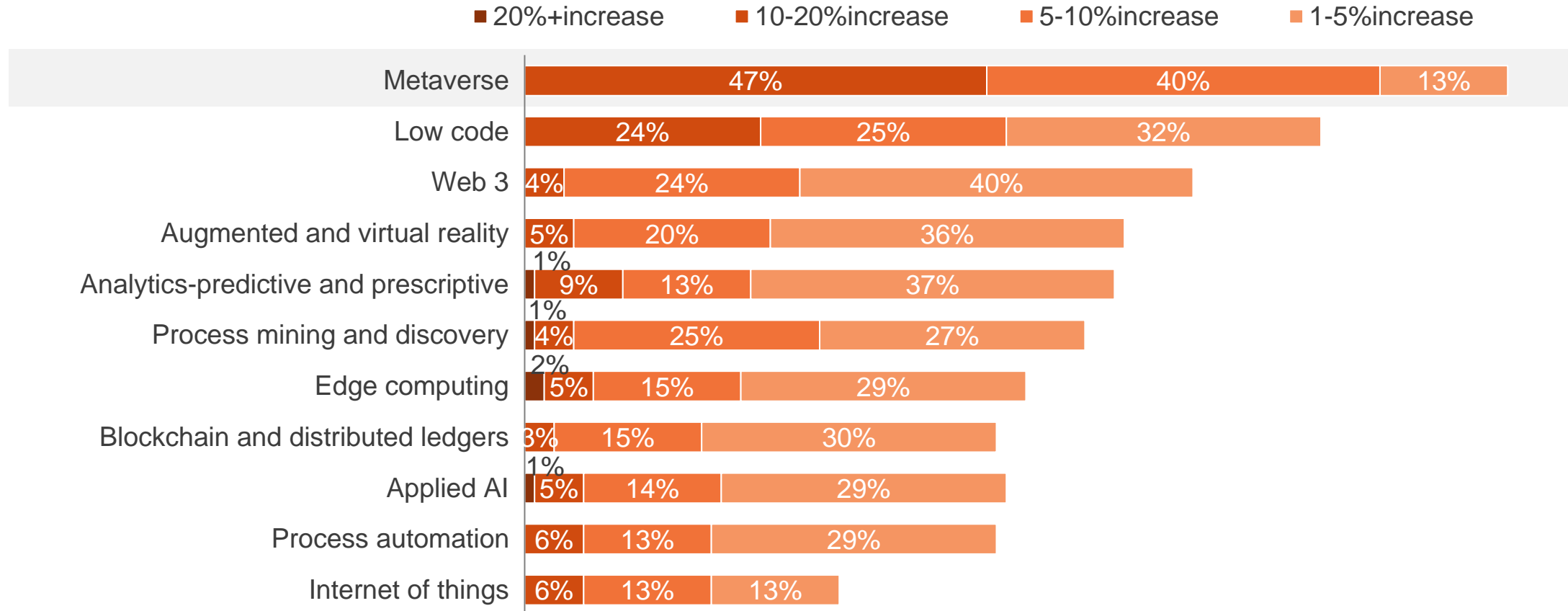
Please specify which enabling technologies your service provider is leveraging as part of your relationship



Enterprise customers say their service provider is leveraging metaverse-enabling technologies in only 5% of cases—yet... (see next slide)

...Metaverse will see biggest growth in enterprise investment

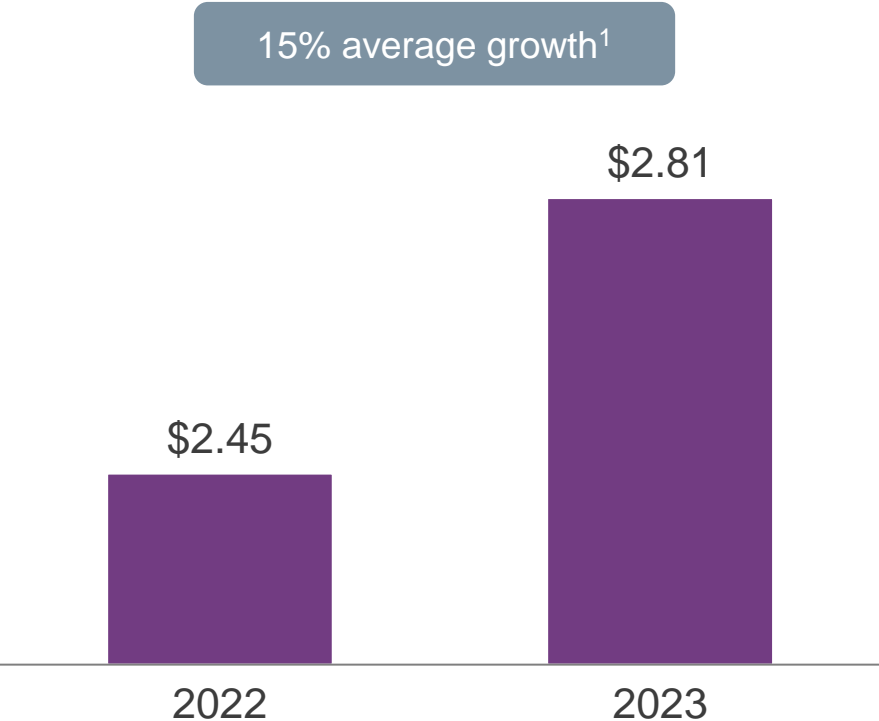
Question: By how much does your enterprise plan to increase investment in emerging technologies in the next 12-18 months?



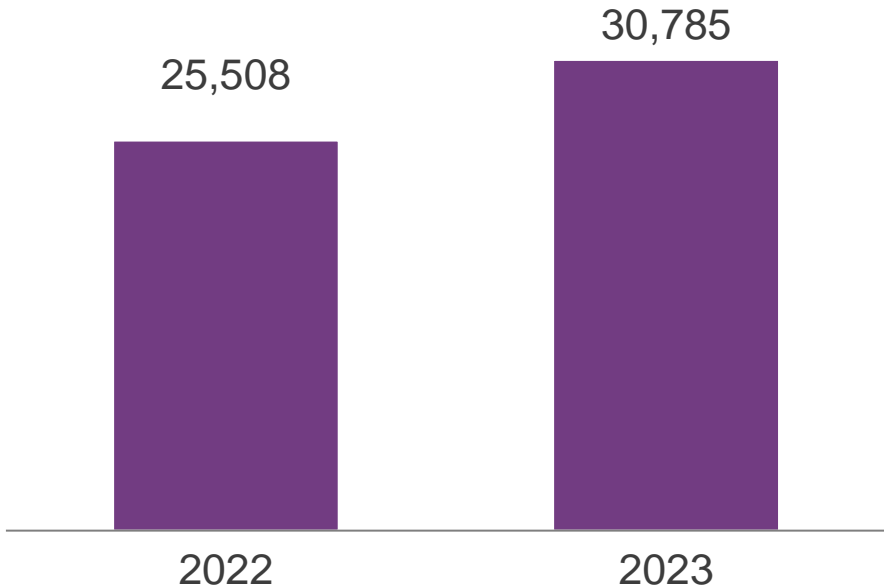
Sample: HFS Pulse H1 2023; n=592 Global 2000 leaders
Source: HFS Research, 2023

Services—already worth \$2.45 billion—will grow at an average of 15%

Metaverse services revenues
\$ billion



Metaverse services total headcount



1 Individual expectations vary from 11% to 200% growth, depending on start point and growth to date
Sample: Based on revenue and headcount growth estimates across 18 global service providers
Source: HFS Research, 2023

2

Research methodology

Hypothesis, inclusion criteria, and assessment

- The potential for metaverse in the enterprise is accelerating apace. How effectively are enterprises uncovering its potential across their customers and employees by partnering with service providers and consultants?
- In answering this, we selected 18 leading service providers and consultants offering metaverse services, based on revenue, investment, declared strategy, and market momentum.
- As further detailed on page 16, we assessed each provider's value proposition (the Why?), execution and innovation criteria (the What?), go-to-market strategy (the How?), and market impact (the So What?).
- We assessed the combination of technology and services each provider is developing, applying, or partnering to deliver, many of which are captured on pages 17 and 18.
- Page 19 lists our definitions of Horizon 1, 2, and 3 in the context of metaverse services and what we are looking for from qualifying vendors.

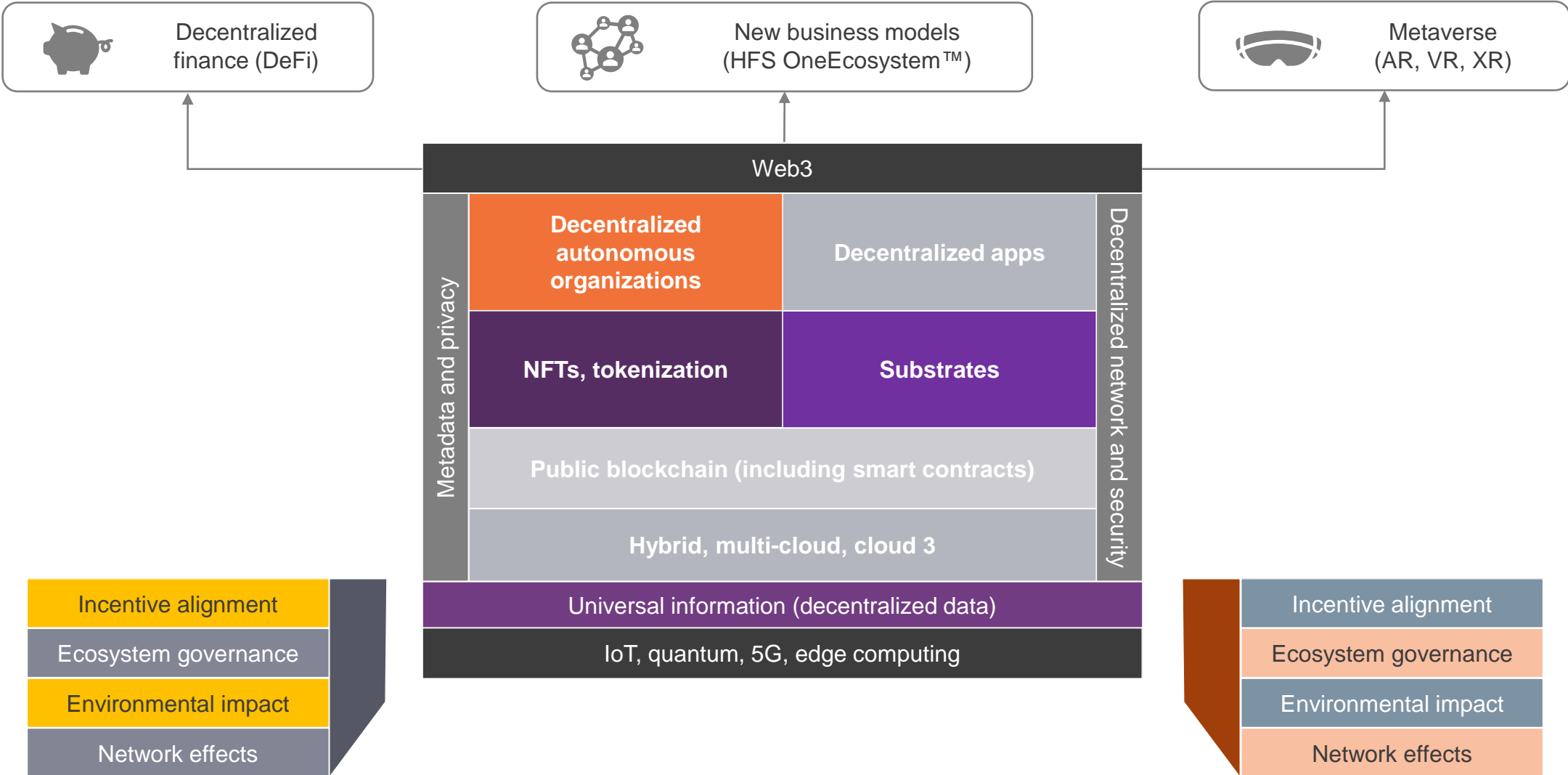
Assessment methodology

The HFS Horizons **Metaverse Services Providers, 2023** report evaluates the capabilities of providers across a range of dimensions to understand the **Why, What, How, and So What** of their metaverse services offerings. Our assessment is based on inputs from clients, partners, and employees and augmented with analyst perspectives. The following illustrates how we have assessed their vision, execution and capabilities.

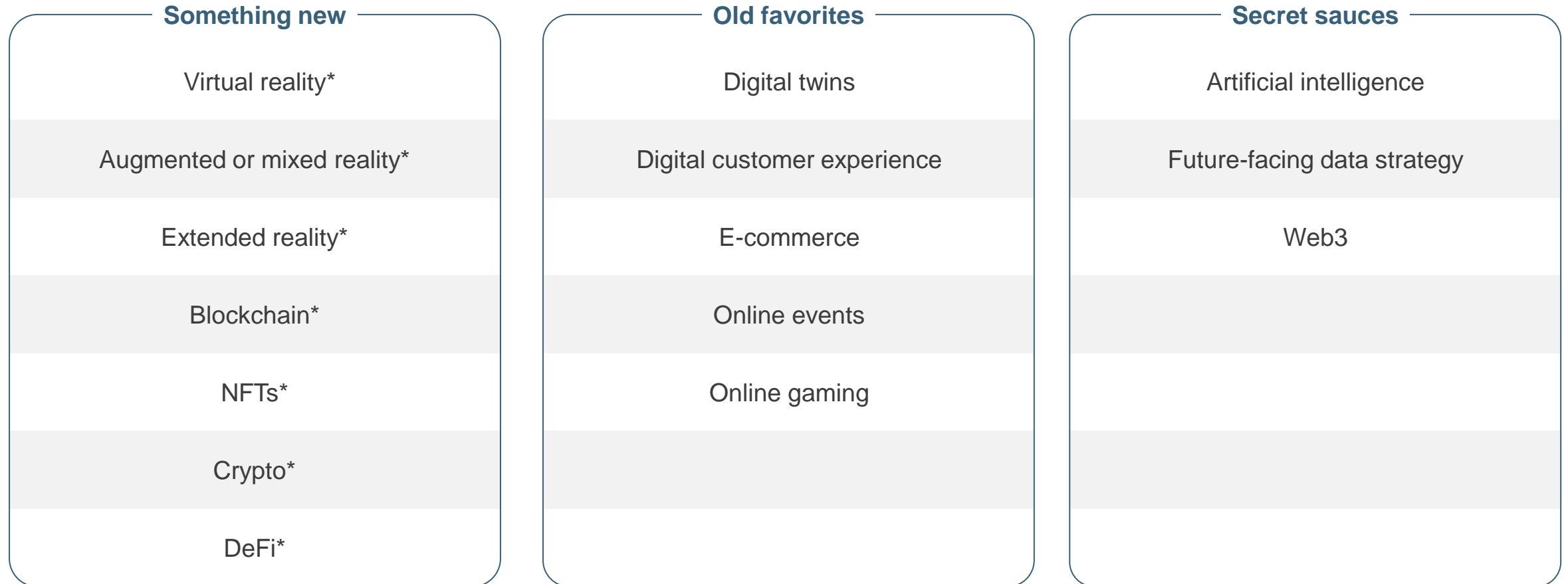
← Distinguishing supplier characteristics →

Assessment dimension	Assessment sub-dimension	Horizon 1 service providers	Horizon 2 service providers	Horizon 3 service providers
Value proposition: The Why? (25%)	• How do you define “metaverse”?	• Ability to drive functional digital transformation by driving cost reduction, speed, and efficiency	• Horizon 1 + Ability to drive OneOffice mindset enterprise-level with real enterprise-level business outcomes	• Horizon 2 + Ability to drive OneEcosystem approach by finding completely new sources of value
	• Strategy and vision for metaverse and nature of outcomes			
	• Why did enterprises choose to work with you on metaverse?			
Execution and innovation capabilities: The What? (25%)	• Technology roadmap for the metaverse	• Primarily focused on implementation • Offshore-focused with strong technical skills and partnerships with 1-2 hyperscalers • Demonstrate robust fundamentals of cloud-transformation with clients • Partnerships with foundational technologies supporting the metaverse (e.g., IoT, blockchain, NFTs, 5G, AR, VR, digital twins)	• Ability to support clients’ metaverse roadmaps, aligning customer and employee experience • Ability to create metaverse experiences with own employees • Horizon 1 + global capabilities with strong consulting skills and partnerships with metaverse tech specialists covering DeFi, tokenization, geospatial tech	• Strategy and execution capabilities at scale • Horizon 2 + well-rounded capabilities across all value creation levers: talent, domain, technology, data, and change • Partnerships on emerging technologies that support the metaverse, e.g., Web3, dApps and DAOs, quantum
	• How are you developing ecosystem partners for your roadmap?			
	• Where are you investing to deliver on your metaverse experience (your own employees’ experiences, your customers’ and your customers’ employees’ experiences, infrastructure, and labs?)			
	• How are you developing or training your staff to exploit the metaverse opportunity? Strategies for junior and senior talent? Specific hiring programs for metaverse capabilities?			
• How are you developing the infrastructure to help clients define business outcomes and their future roadmap?				
Go-to-market strategy: The How? (25%)	• What are you actually selling with the metaverse?	• Robust delivery of metaverse technologies	• Horizon 1+ • Proven and leading-edge proprietary tools, assets, and frameworks	• Horizon 2+ • Driving co-creation with clients and ecosystem partner
	• What industries are you targeting? Investing in for 2023?			
	• New value sources from metaverse partner ecosystem			
Market impact: The So What? (25%)	• How are you organized to develop your metaverse offerings and capabilities? Centralized, regional, or by vertical?	• Referenceable and satisfied clients for ability to execute	• Horizon 1+ • Referenceable and satisfied clients for ability to innovate	• Horizon 2 + • Referenceable and satisfied clients driving new business models on the basis of the partnership
	• Early- and mid-stage client experiences with metaverse			
	• Voice of the customer			

Metaverse enabling technologies and service capabilities



Metaverse services may comprise a menu of old and new



*Definitions in our [A-Z of Web3](#)
Source: HFS Research, 2022

HFS Horizons: What makes a Horizon 1, 2 or 3 provider?



Horizon 3—New sources of value

Horizon 2 +

Ability to drive **OneEcosystem** approach by finding completely new sources of value

- Strategy and execution capabilities at scale
- Well-rounded capabilities across all value creation levers: talent, domain, technology, data, and change
- Partnerships on emerging technologies that support the metaverse e.g., Web3, dApps and DAOs, quantum
- Driving co-creation with clients and ecosystem partners
- Referenceable and satisfied clients driving new business models on the basis of the partnership

Horizon 2—Improving stakeholder experience

Horizon 1 +

Ability to drive OneOffice mindset enterprise-level with real enterprise-level business outcomes

- Global capabilities with strong consulting skills and partnerships with metaverse technology specialists covering DeFi, tokenization, geospatial tech
- Proven and leading-edge proprietary tools, assets, and frameworks
- Ability to support clients' metaverse roadmaps, aligning customer and employee experience
- Ability to create metaverse experiences with own employees
- Referenceable and satisfied clients for ability to innovate

Horizon 1—Driving business outcomes

Ability to drive functional optimization outcomes through cost reduction, speed, and efficiency

- Primarily focused on implementation
- Offshore-focused with strong technical skills and partnerships with 1-2 hyperscalers
- Demonstrate robust fundamentals of cloud-transformation with clients
- Partnerships with foundational technologies supporting the metaverse (e.g., IoT, blockchain, NFTs, 5G, AR and VR, digital twins)
- Robust delivery of metaverse technologies
- Referenceable and satisfied clients for ability to execute

Services providers covered in this report



We identified the leading service providers offering metaverse services, based on revenue, investment, declared strategy, and market momentum

Note: Service providers are listed alphabetically
HFS has leveraged a wide range of data sources (public and private) and conducted independent interviews with enterprise executives.

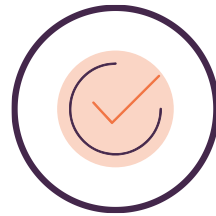
Sources of data

This report relied on myriad data sources to support our methodology and help HFS obtain a well-rounded perspective on the metaverse services capabilities of the providers covered in our study. Sources are as follows:



RFIs and briefings

Each participating vendor prepared and presented a detailed briefing responding to specific questions provided by HFS. They also responded to brief but specific data-point requests for information.



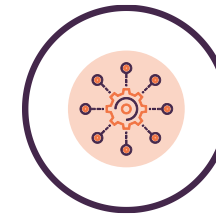
Reference checks

We conducted reference checks with **active clients** of the study participants via phone-based interviews and/or detailed surveys. We also sought references from partners and, where available, employees.



HFS vendor ratings

Each year, HFS fields multiple demand-side surveys in which we include detailed vendor rating questions. For this study, we leveraged our fresh from the field HFS Pulse Study data featuring **900+ inputs** across Global 2000 enterprise



Other data sources

Public information, such as press releases and web sites.
Ongoing interactions, briefings, virtual events, etc., with in-scope vendors and their clients and partners.

3

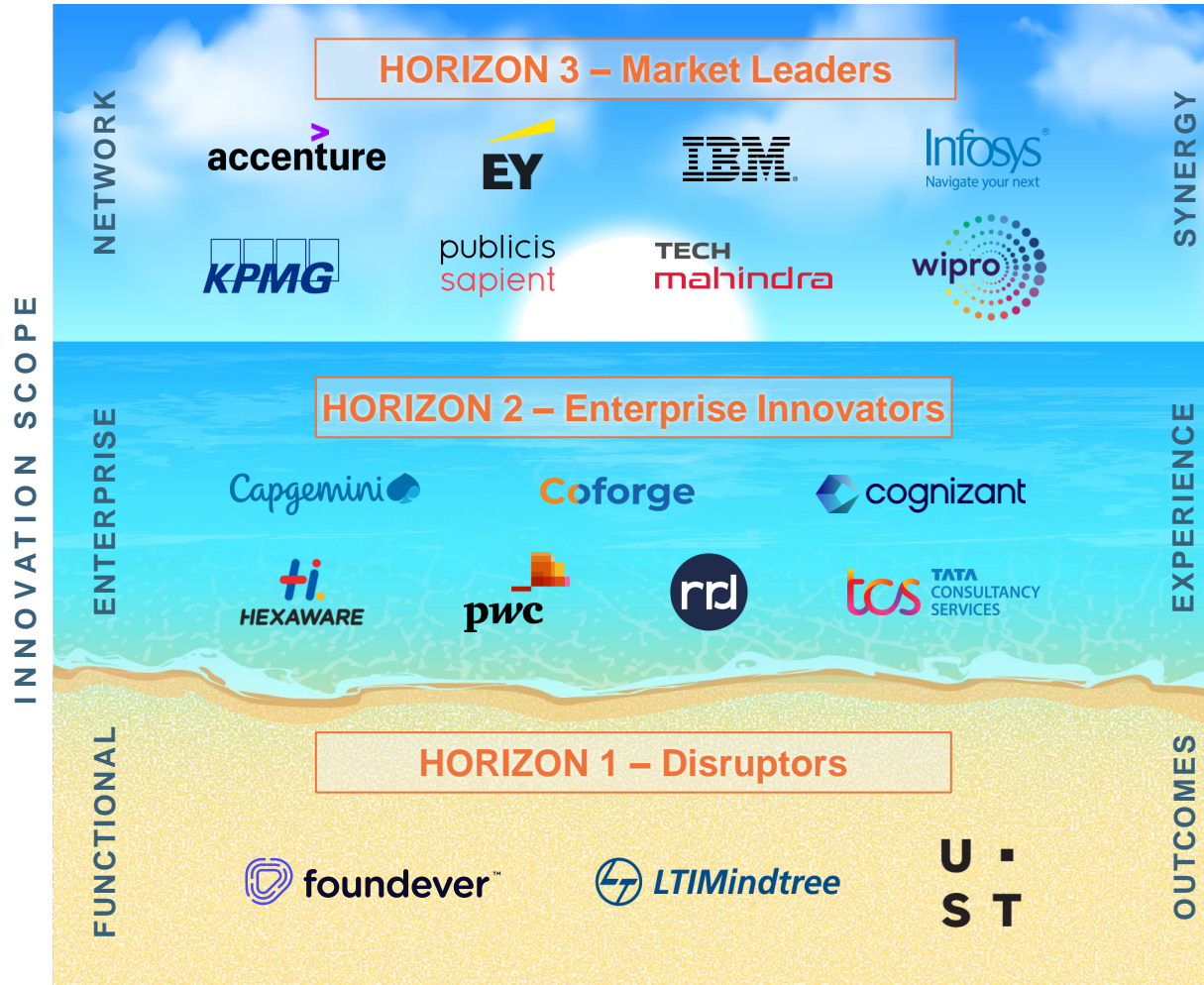
Horizons results: Metaverse services providers, 2023

Summary of providers assessed in this report

Providers (alphabetical order)	HFS point of view
Accenture	Metaverse as a catalyst for total enterprise reinvention
Capgemini	Leading with immersive multi-sensory experiences
Coforge	Metaverse as a value maximizer for blockchain and AI
Cognizant	Just another toolkit for fixing enterprise problems
EY	Sophisticated, compliance-led, sector-specific, strategy-to-launch
Foundever	CX-focused services for metaverse natives and beginners
Hexaware	Fast tests delivered with established technology ecosystem
IBM	Infrastructure-led continuum of value, enabling rapid scale
Infosys	Deep-tech early mover meeting customers where they are

Providers (alphabetical order)	HFS point of view
KPMG	Managing the real risks of the big problems in virtual worlds
LTI Mindtree	Creative flair meets modular tech focused on collaboration
Publicis Sapient	CX-led approach and enviable self-transformation
PWC	Embedding trust to build safe metaverse solutions
RRD	Content and experience metaverse to help CMOs do business
TCS	End-to-end capabilities focused on experience 4.0
Tech Mahindra	Mature practice with major implementation creds
UST	Pragmatic delivery of fast, value-focused metaverse POCs
Wipro	Comprehensive test-and-learn offers for now and next

HFS Horizons: Metaverse services providers



Horizon 3—New sources of value

Horizon 2 +

Ability to drive **OneEcosystem** approach by finding completely new sources of value

- Strategy and execution capabilities at scale
- Well-rounded capabilities across all value creation levers: talent, domain, technology, data, and change
- Partnerships on emerging technologies that support the metaverse e.g., Web3, dApps and DAOs, quantum
- Driving co-creation with clients and ecosystem partners
- Referenceable and satisfied clients driving new business models on the basis of the partnership

Horizon 2—Improving stakeholder experience

Horizon 1 +

Ability to drive **OneOffice mindset** enterprise-level with real enterprise-level business outcomes

- Global capabilities with strong consulting skills and partnerships with metaverse technology specialists covering DeFi, tokenization, geospatial tech
- Proven and leading-edge proprietary tools, assets, and frameworks
- Ability to support clients' metaverse roadmaps, aligning customer and employee experience
- Ability to create metaverse experiences with own employees
- Referenceable and satisfied clients for ability to innovate

Horizon 1—Driving business outcomes

Ability to drive **functional optimization outcomes** through cost reduction, speed, and efficiency

- Primarily focused on implementation
- Offshore-focused with strong technical skills and partnerships with 1-2 hyperscalers
- Demonstrate robust fundamentals of cloud-transformation with clients
- Partnerships with foundational technologies supporting the metaverse (e.g., IoT, blockchain, NFTs, 5G, AR and VR, digital twins)
- Robust delivery of metaverse technologies
- Referenceable and satisfied clients for ability to execute

Note: All service providers within a "Horizon" are listed alphabetically

4

EY profile: Metaverse services, 2023

EY: Sophisticated, compliance-led, sector-specific strategy-to-launch



Strengths	Development opportunities
<ul style="list-style-type: none"> • Definition and value proposition: EY offers the future state of content and experience for the internet. Offerings cover strategy-to-launch outcomes in the context of the metaverse, ultimately evolving into the experience layer of Web3's decentralized technologies and structures. It targets frictionless flow across ideas, capital, talent, and resources. • Offerings: EY has sector-specific offerings in future strategies, future of human experience, next-gen technologies, new value exchange, ecosystem distribution, risk-savvy operating, decentralized supply chains; and tax, legal, and regulatory. • Growth proof points: EY has seen 48% growth in metaverse and web3 business over the last year and serves more than 1000 customers. Its integrated technology roadmap combines metaverse, Web3, AI, and blockchain. Its foundational and advanced metaverse and Web3 dedicated training programs include Web3 University. • Key differentiators: Tax, legal, and regulatory issues are a thread throughout the entire go-to-market strategy. • Outcomes: EY helped strategize and launch a project for a top 10 global life sciences company, delivering alignment on metaverse, metaverse spaces, and a repeatable launch process for best use cases. It created a metaverse as a platform plan for a Fortune 10 energy company. • Customer kudos: Customers offer praise for Horizon 1 and 2 excellence and the Horizon 3 capabilities it has readied for the next paradigm. It is strong on CX and new business models with supportive, proactive, high-quality delivery, wide geographic coverage, and excellence in co-innovation with clients and partners. • Partner kudos: Partners offer kudos for end-to-end capabilities and high-quality service. 	<ul style="list-style-type: none"> • What we'd like to see more of: Examples of "superfluid" outcomes at the ecosystem level. EY has the creds to deliver. • What we'd like to see less of: Less "not-invented-here" syndrome and more evidence EY engages with metaverse specialist advisory partners. • Customer critiques: There is room for improvement in top-line growth impact. Some suggest EY learn more of clients "as-is." • Partner critiques: The approval process can be arduous; partners would appreciate more thought leadership from EY.

Relevant M&A and partnerships	Key metaverse services clients	Global metaverse operations and resources	Flagship internal or co-developed IP—metaverse services
<p>Acquisitions (2019–2022)</p> <ul style="list-style-type: none"> • EY Fabernovel, digital innovation agency <p>Partnerships</p> <ul style="list-style-type: none"> • Fireblocks, OpenSea, XMPRO, Pryon, Metaco, Vatom; Adobe, Synthesio, Culture, Interwork Alliance, Luma.AI, Polygon, Kaleido, IBM, Deltec, Microsoft, Unity, Unreal, Babylon.js, WebXR, blender, Autodesk3DS Max, Nvidia Omniverse • Member of the Metaverse Standards Forum and IEEE, and the Global Blockchain Business Council 	<p>Number of metaverse services clients: 1,000+, including Web3 enablers such as blockchain and decentralized storage</p> <p>Key clients:</p> <ul style="list-style-type: none"> • Global jeweler, sports car maker, European media company, athletic apparel company, Swiss watchmaker, global brewer, global wine and spirits group, leading insurance provider, Fortune 10 energy company 	<p>Metaverse services headcount: EY has set growth targets of 100% and is growing its headcount exponentially in the thousands.</p> <p>Delivery and metaverse labs: EY Metaverse Labs has a large presence in India, the US, and worldwide. EY Wavespace has 50+ locations across the globe. Metaverse competencies also sit within the broader EY Parthenon, business consulting, technology consulting, GDS, creative services, people advisory, and tax teams. It is planning sector-specific hubs.</p> <p>Target industries: TMT, consumer, life sciences, real estate, public sector, financial services</p> <p>Organization: Centralized core, matrixed with 80% shared horizontally, 20% developed and delivered within sectors</p>	<ul style="list-style-type: none"> • Metaverse as a Service, metaverse enterprise risk assessment; metaverse business case generator; Web2/Web3 capability framework; EY wavespace; experience in the Metaverse; future of human experience models • NFT assessment framework; smart contract and token review; Nightfall and Starlight blockchain; EY blockchain analyzer; OpsChain NFT • Platform regulation and consumer rights; EY compliance and reporting frameworks; EY tax calculator

5

HFS Research authors

HFS Research authors



Phil Fersht

CEO and Chief Analyst

phil.fersht@hfsresearch.com

Phil Fersht is widely recognized as the world's leading independent analyst focused on the alignment of business operations and technology, spanning more than two decades. He has a global reputation for calling out the big trends, being unafraid to share his honest views, and driving a narrative on the technology and business services industries that shape many leadership decisions.

His reputation drove him to establish HFS Research in 2010. Fersht coined the term "OneOffice" in 2016 to describe HFS Research's vision for future business operations amidst the impact of cloud, automation, AI, and disruptive digital business models.



David Cushman

Executive Research Leader

david.cushman@hfsresearch.com

David Cushman is our strategic lead for Metaverse and Web3, aligning closely with his research in Emerging Technology. He is also deeply engaged in research into Employee Experience, and leads our HFS Hot Vendors program.

Experienced in start-up, scale-up and large-scale digital transformation programs, he has led digital development at the UK's fastest-growing media company, founded and grown digital consultancies across Europe and worked with world-class companies as a director in digital strategy advisory at a tier-1 services provider.

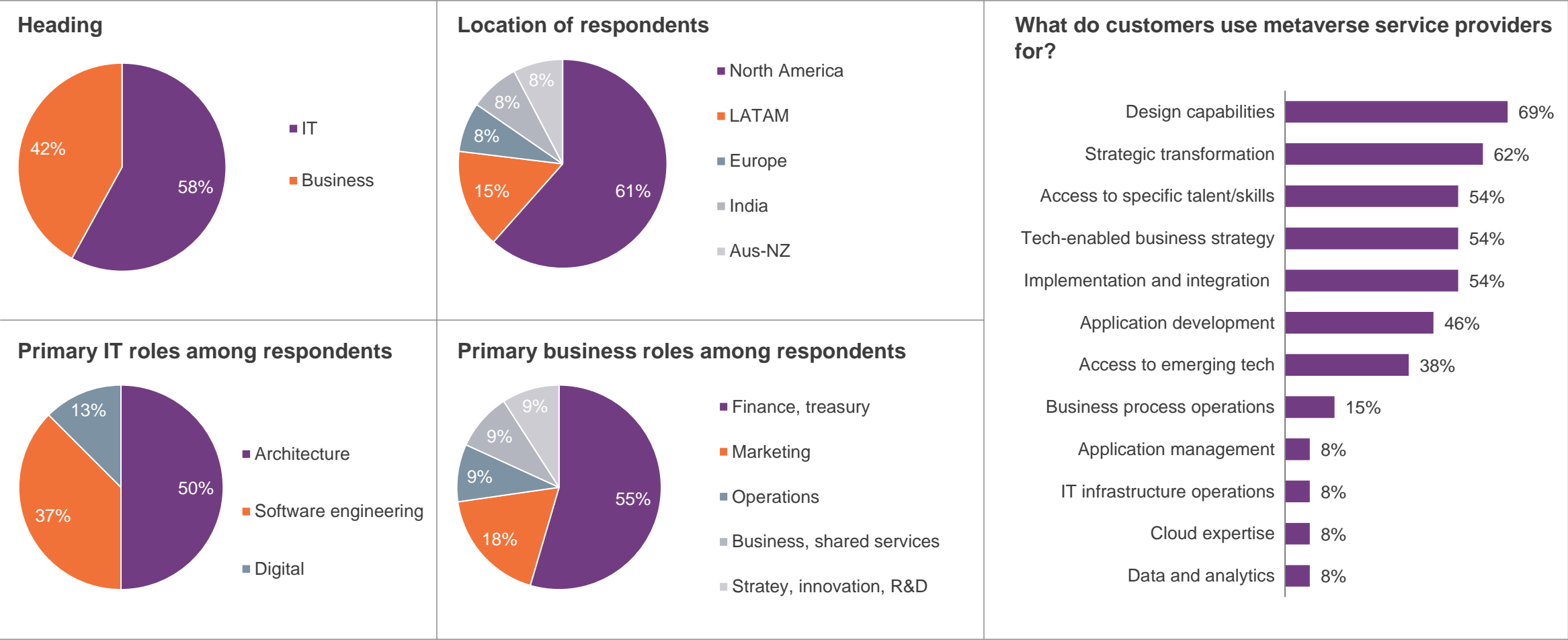
He is the author of *The 10 Principles of Open Business* (Palgrave-Macmillan, 2014).

6

Demographics, guides, and definitions

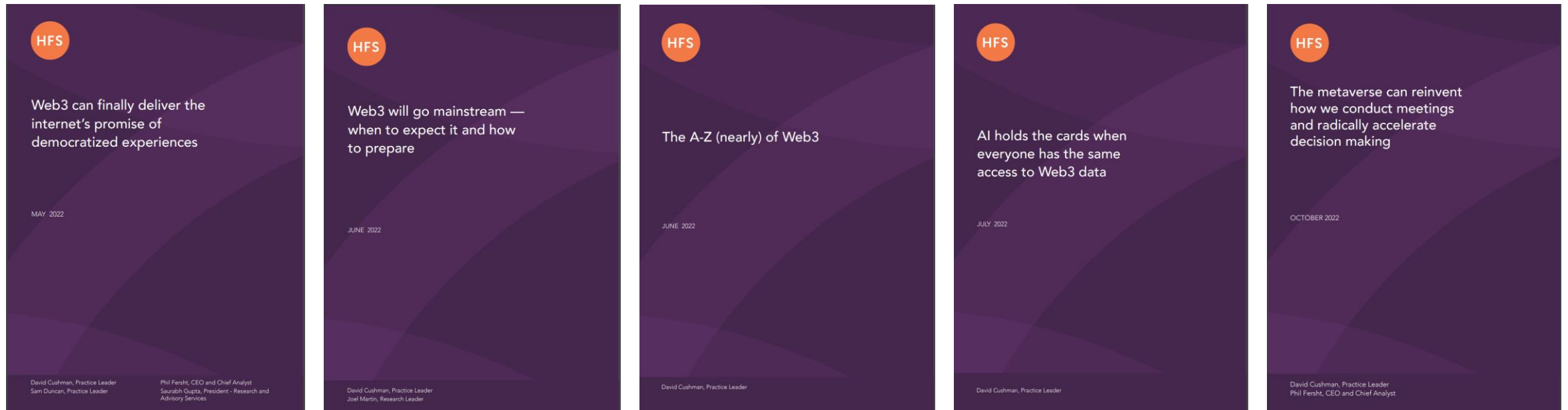
Demographics

Our cohort of metaverse services providers provided customer references. References hold decision-making roles in Global 2000 enterprises



Guides and definitions

This report may contain terms, abbreviations, and concepts you may not be familiar with. HFS has compiled a series of guides to help newcomers understand the implications for a new business paradigm driven by metaverse-related technologies.



Click images of the reports to open links. For more, search “metaverse” at www.hfsresearch.com



About HFS

Insight. Inspiration. Impact.

HFS is a unique analyst organization that combines deep visionary expertise with rapid demand-side analysis of the Global 2000. Its outlook for the future is admired across the global technology and business operations industries. Its analysts are respected for their no-nonsense insights based on demand-side data and engagements with industry practitioners.

HFS Research introduced the world to terms such as “RPA” (Robotic Process Automation) in 2012 and more recently, Digital OneOffice™ and OneEcosystem™. The HFS mission is to provide visionary insight into the major innovations impacting business operations such as Automation and Process Intelligence, Blockchain, the Metaverse and Web3. HFS has deep business practices across all key industries, IT and business services, sustainability and engineering.

www.hfsresearch.com 

[@hfsresearch](https://www.linkedin.com/company/hfsresearch) 

www.horsesforsources.com 