

HFS Horizons Report

Generative Enterprise™ Services, 2023

October 2023

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Excerpt for NTT DATA

“

People are excited by the potential impact of GenAI on their lives—both their work and their personal experiences. They want to know how they can be better than they are and how to make others around them better. They want to know how to keep enriching their experiences because of the promise of GenAI.



Phil Fersht
CEO and Chief Analyst, HFS Research

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Introduction, the HFS value chain, and market dynamics

Introduction

- This **HFS Horizons: Generative Enterprise™ Services, 2023** report is the industry's first competitive analysis of professional services firms and the value they create with enterprise clients adopting and experimenting with generative AI (GenAI) technologies.
- HFS' Generative Enterprise™ articulates the pursuit of AI technologies based on large language models (LLMs) like ChatGPT and GPT-4 to reap huge business benefits for organizations in terms of continuously generating new ideas, redefining how work gets done, and disrupting business models steeped in decades of antiquated process and technology.
- The report examines and assesses 35 service providers. Our research evaluates the providers' capabilities to understand the **Why, What, How, and So What** of their Generative Enterprise services offerings.
- This report also includes detailed profiles of each service provider, outlining their provider facts, strengths, and development opportunities.
- We based this Horizons research on briefings from each of the participants along with publicly available announcements, datapoints, and case studies. We began with an open call for participation, resulting in unprecedented participation levels. We requested each participant to provide customer and partner references, and we have used their responses and supplementary customer reference data to ensure the voice of the customer impacts the outcomes. Where a service provider chose not to brief us, we created profiles and scores from publicly available announcements, case studies, data, and our regular conversations with leaders across functions and industries.

Executive summary

- 1 The generative AI gold rush is on in pursuit of a \$7 trillion prize**

We've never seen a technology adopted so quickly. Generative AI's (GenAI) poster child, ChatGPT, reached 100 million users in two months. RPA took more than a decade to reach 15 million. Every boardroom is asking every CEO, "What are you doing with GenAI?" This bottom-up and top-down demand and the promise of a [\\$7 trillion prize](#) has prompted a gold rush among service providers as they hurry to organize and claim a piece of the action. In a matter of months, leading systems integrators and consultancies have conjured up new practices, divisions, platforms, and partnerships. They are scaling up, investing billions, training thousands of people, and recruiting thousands more—and this journey is only just beginning.
- 2 Point solutions dominate, but this is not where we will end up**

Already, we are witnessing a rapid diversion of AI budgets to GenAI projects. On average, this stands at 41% across the enterprises surveyed for this report, but we expect that to grow as enterprises move beyond their initial point solutions in POCs and pilots. Most are solving specific tasks. And as the next cycle of budget-making begins, we expect budgets to scale up to take GenAI deeper into end-to-end processes, shaping new ways of working. The next step will be harder but more rewarding, and if it doesn't happen, there are going to be a lot of red faces among service provider leaders, many of whom have gone all-in on GenAI.
- 3 The disruption is coming first and fastest to CX, EX, and sales and marketing**

As part of our research for this report, we asked enterprise leaders the functions they are prioritizing for the application of GenAI. Customer experience (CX), employee experience (EX), and sales and marketing lead the way. This chimes with the case studies shared by service providers. Transforming code has been touted as a leading use case by many service providers, and it features prominently in their own internal use and in services they offer. But, in our own research, it has only appeared in around 10% of the cases studies we've seen. A key thing to note regarding case studies to date is that many are proofs of concept and pilots, and few are coming with an ROI. At this stage in development, most enterprises are happy to see softer measures such as time-to-serve, CSAT, or time-to-market.
- 4 Knowing the tech is one thing; helping to transform with it is quite another**

Customers see a gap between how well their service providers deliver on tech implementation compared with their ability to transform business. It's an important gap as enterprises seek help on their journey to the Generative Enterprise beyond the initial point solutions. Knowing the tech is one thing; helping transform ways of working because of the tech is another altogether. We think this gap will close as many service providers are going all-in on GenAI, focusing on proving the effectiveness of applying GenAI to their own ways of working first. The lessons they learn through self-transformation will give them the credentials to help enterprises shape their journeys.
- 5 This revolution is personal, and you need to get down and dirty with it**

Using GenAI tools is where your personal experience and understanding begin. This is your due diligence. The journey to the [HFS Research Generative Enterprise](#) is not easy, but it starts with your understanding. Leaders need to develop their GenAI muscle memory to begin seeing the future through today's technology rather than persisting with a view constructed on their experience and knowledge of the technology of the past.

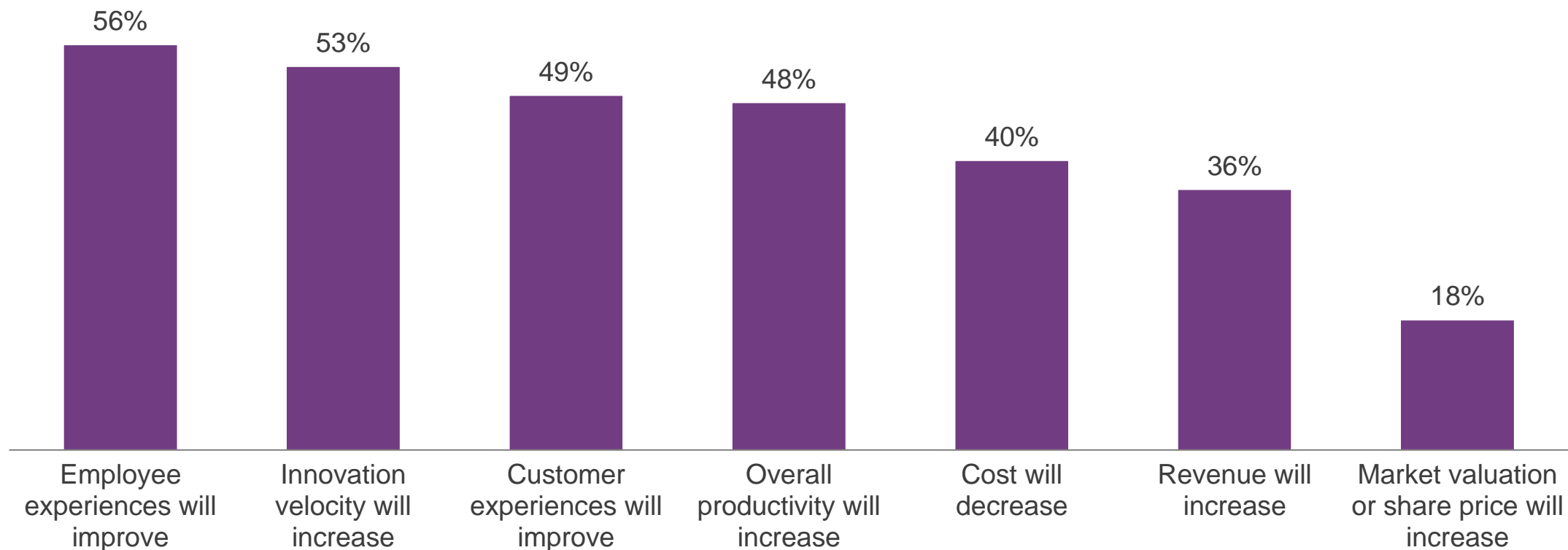
The new S-curve

An inflection point for the IT and business services industry

- The Generative Enterprise inspires a new S-curve of value creation for the IT and business services industry. Traditional outsourced service areas are likely to lose momentum in favor of AI-led, data-driven services focused on driving growth and sustaining trust. Successful relationships cannot be effort-driven; they must be performance- and purpose-driven. Hybrid pricing with baked-in innovation funds will be critical to prove value. (see page 9)
- The GenAI gold rush is on: Leading IT and business services firms made 50+ GenAI-related announcements in just two months early in 2023. The primary focus of these was on expanding hyperscaler partnerships. (see page 10)
- The Generative Enterprise and its widespread application of GenAI and other forms of AI can successfully manage the [Digital Dichotomy](#), balancing the macroeconomic Slowdown with the Big Hurry to innovate. (see page 15)
- Data and AI are like the stars of two galaxies colliding—the impact will destroy and create at an alarming rate. Without quality data, the benefits of AI will not scale, and to scale to the ecosystem, the data accessed will need to be increasingly private in nature. (see page 16)
- Stages of GenAI value creation for enterprises will be based on the nature of their data and the maturity of their technology. The impact of GenAI goes beyond productivity. (see pages 17-18)
- Roles GenAI will impact go beyond rote tasks, disrupting creativity and ideation.
- The road ahead is not easy. Page 20 lists 10 challenges every enterprise must consider.

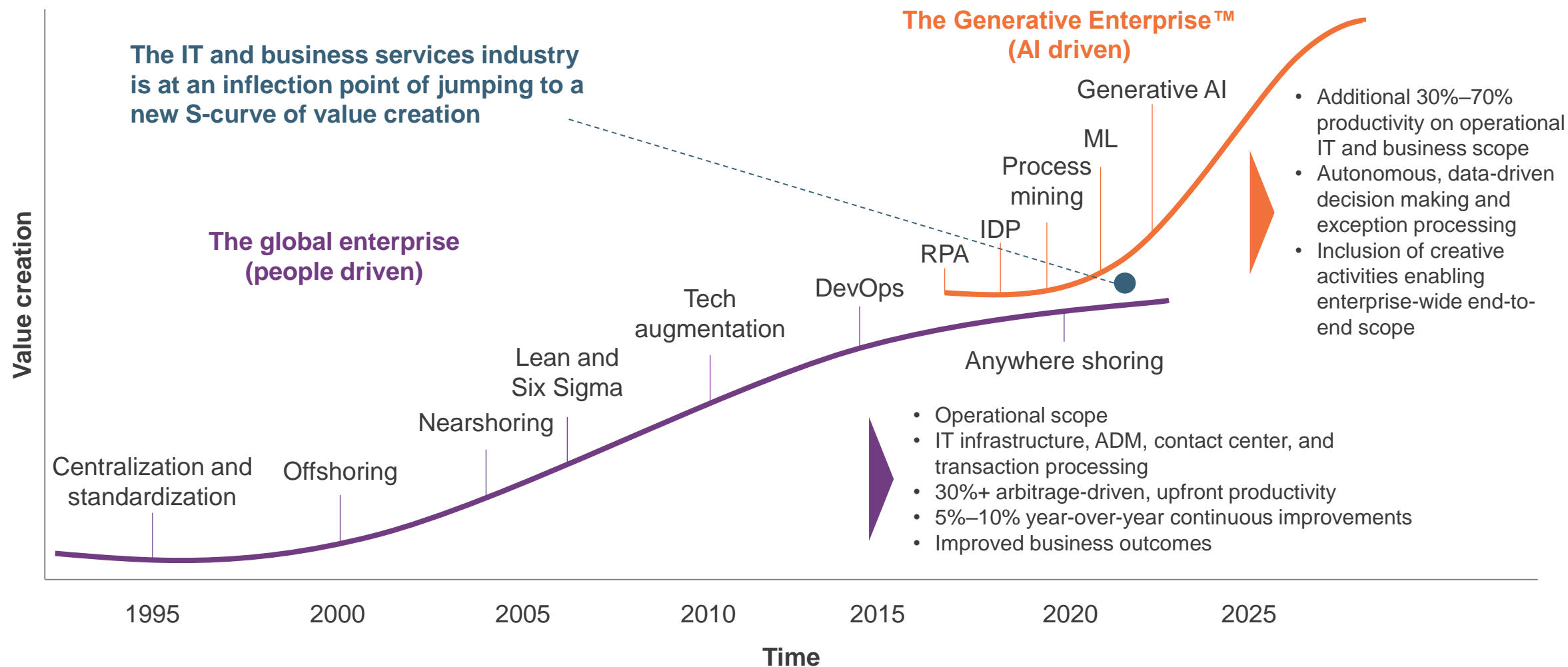
Enterprises expect EX, CX, innovation, and productivity wins

Q: How do you expect GenAI to impact company business economics over the next 12-18 months?



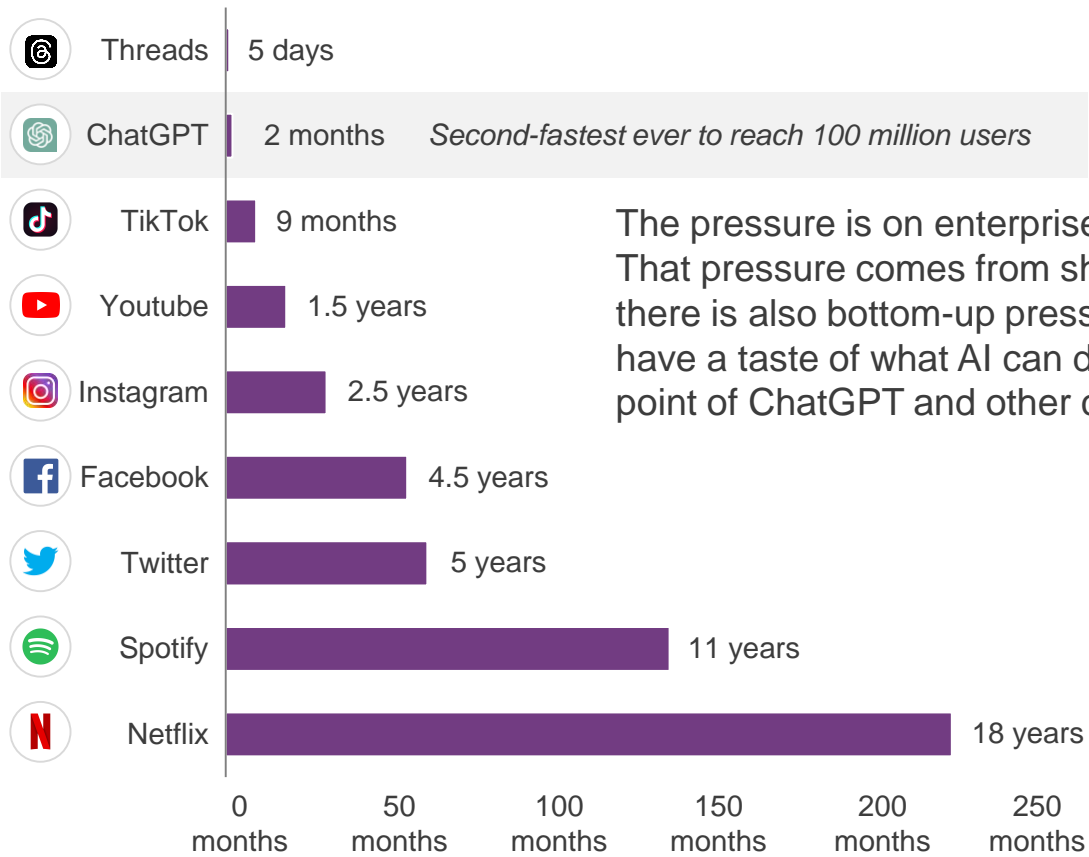
Sample: October 2023, 104 enterprises actively exploring and deploying GenAI across the Global 2000
Source: HFS Research, 2023

The Generative Enterprise inspires a new S-curve of value creation

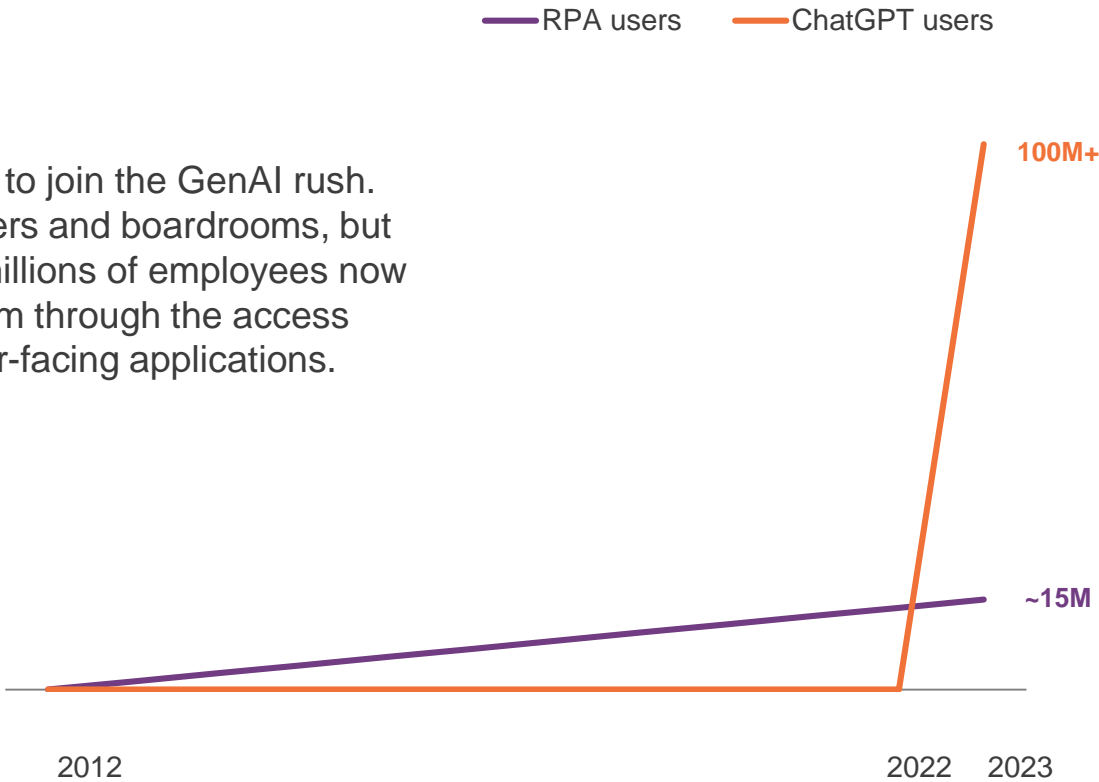


End consumers' ultra-rapid adoption of GenAI technologies drives business-to-business adoption

Road to 100 million users for various platforms



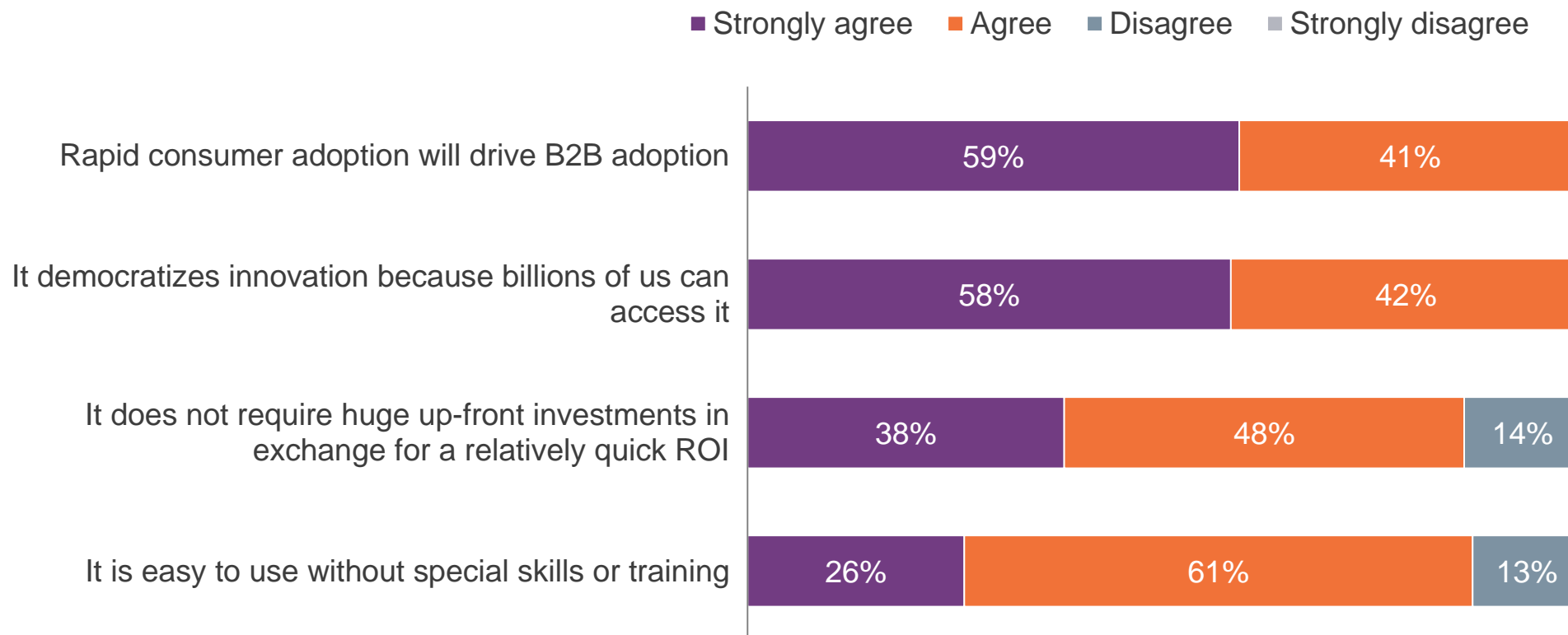
Number of users over time (RPA versus ChatGPT)



Source: Publicly available information, HFS estimates

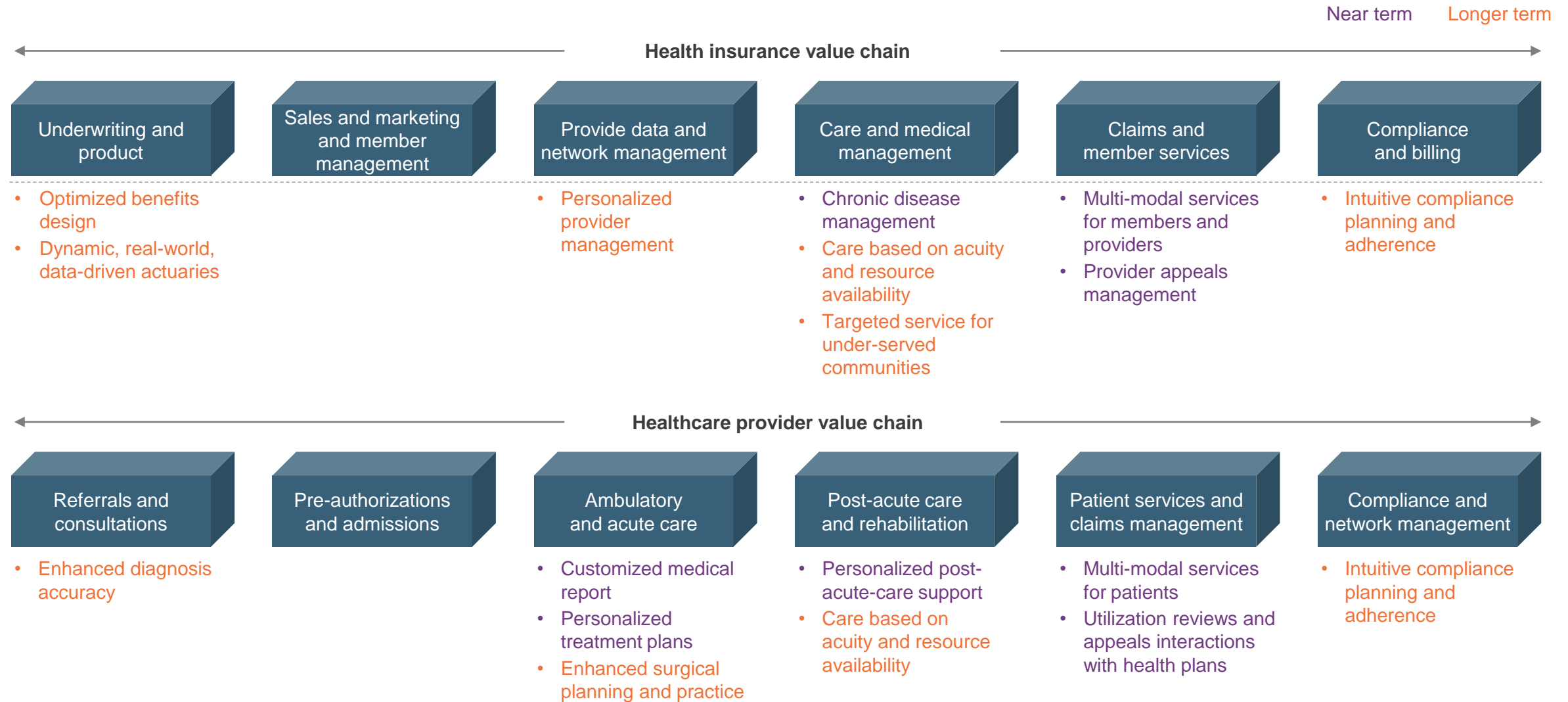
Rapid consumer adoption makes GenAI a different disruption

Q: GenAI is drastically different from other recent technological disruptions (e.g., RPA, blockchain, metaverse, NFTs) because...



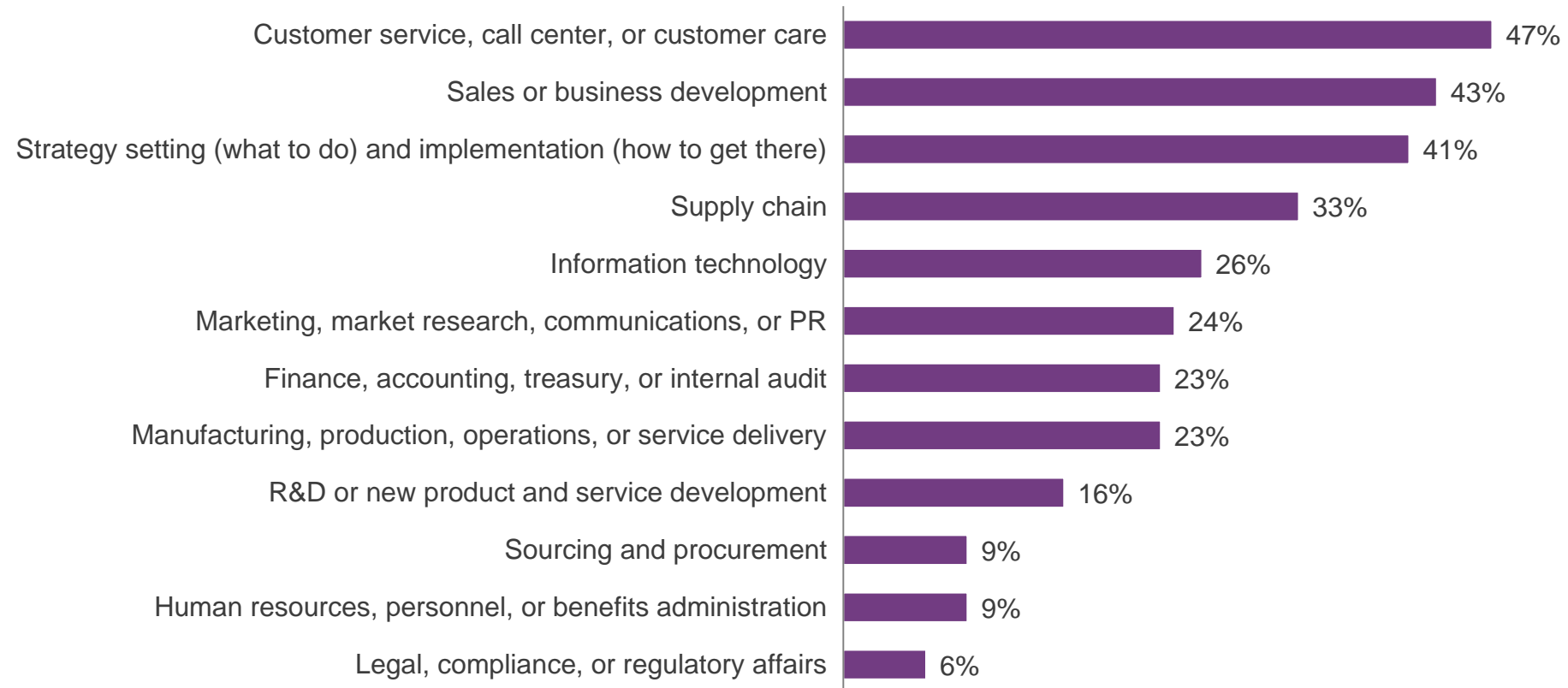
Sample: October 2023, 104 enterprises actively exploring and deploying GenAI across the Global 2000
Source: HFS Research, 2023

Enterprise-grade and governed GenAI can transform the services that IT and business services can provide in this healthcare example



Leaders expect customer ops to create very high value in next 18 months

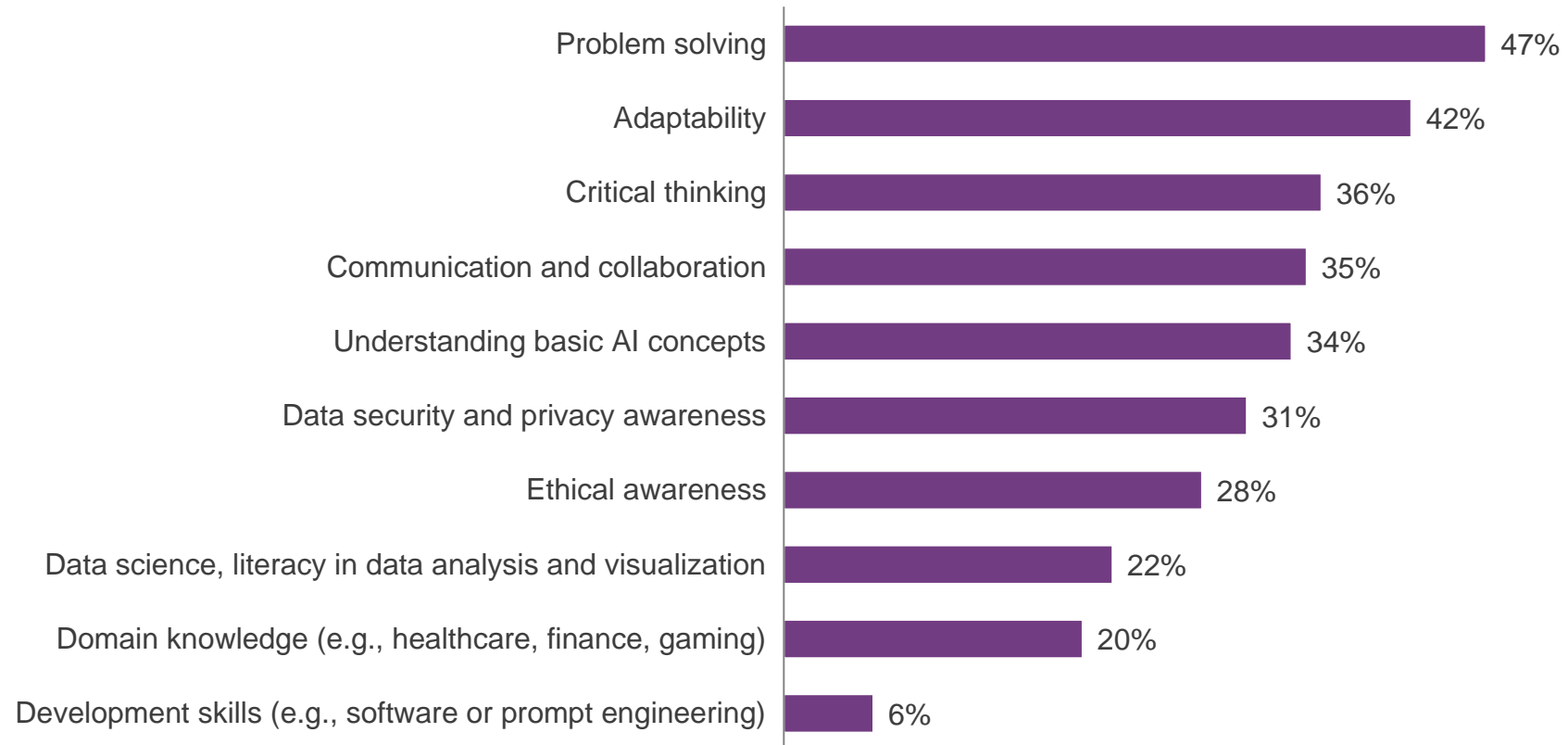
Q: Select the top three business functions where GenAI will create very high value over the next 12-18 months.



Sample: October 2023, 104 enterprises actively exploring and deploying GenAI across the Global 2000
Source: HFS Research, 2023

Top three essential—yet lacking—skills for success in GenAI

Q: Select the top three skills workers need to succeed, but lack, when using GenAI in the next 12-18 months.



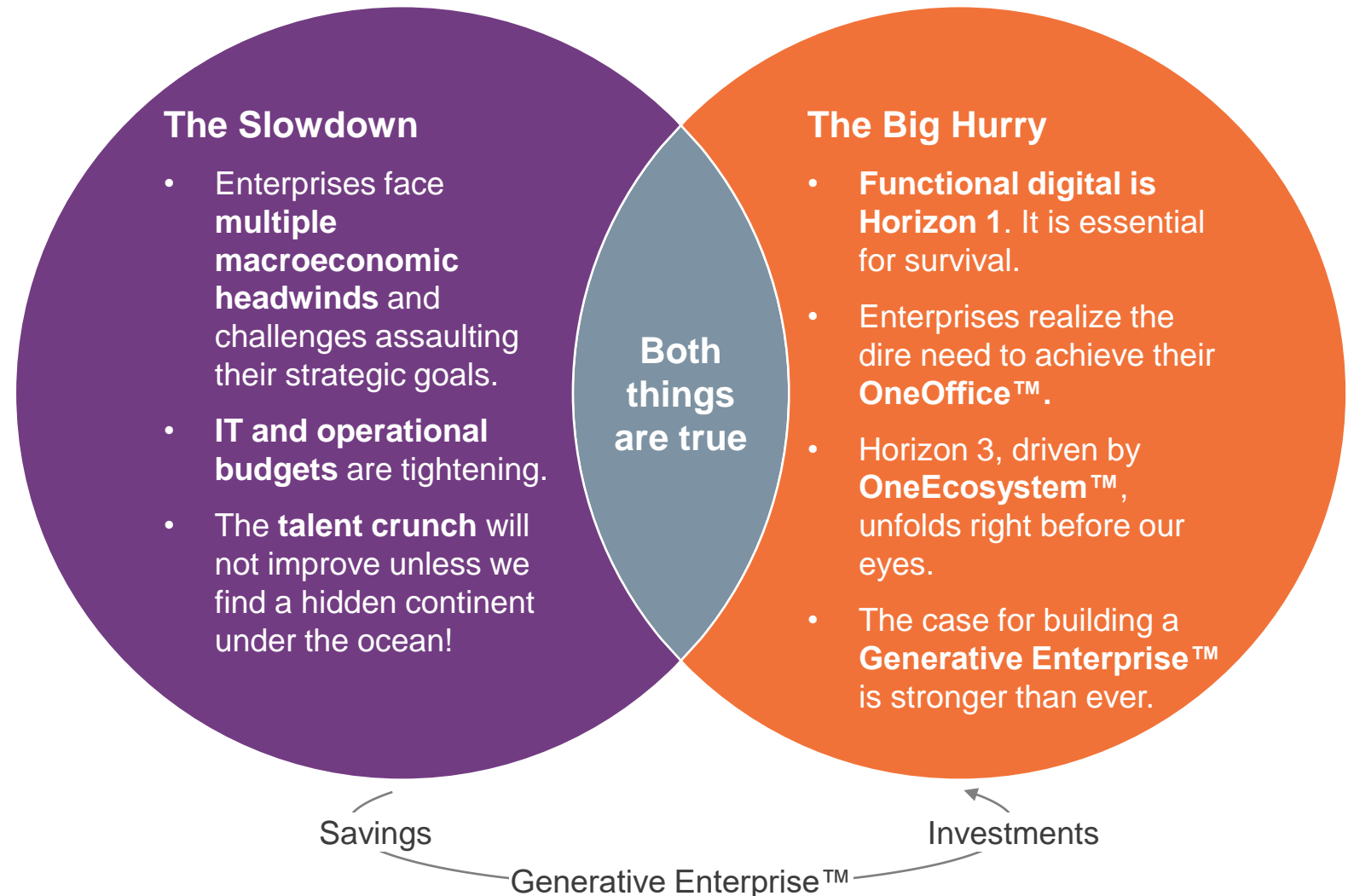
Sample: October 2023, 104 enterprises actively exploring and deploying GenAI across the Global 2000
Source: HFS Research, 2023

The Generative Enterprise can successfully manage the Digital Dichotomy, balancing the macroeconomic Slowdown with the Big Hurry to innovate

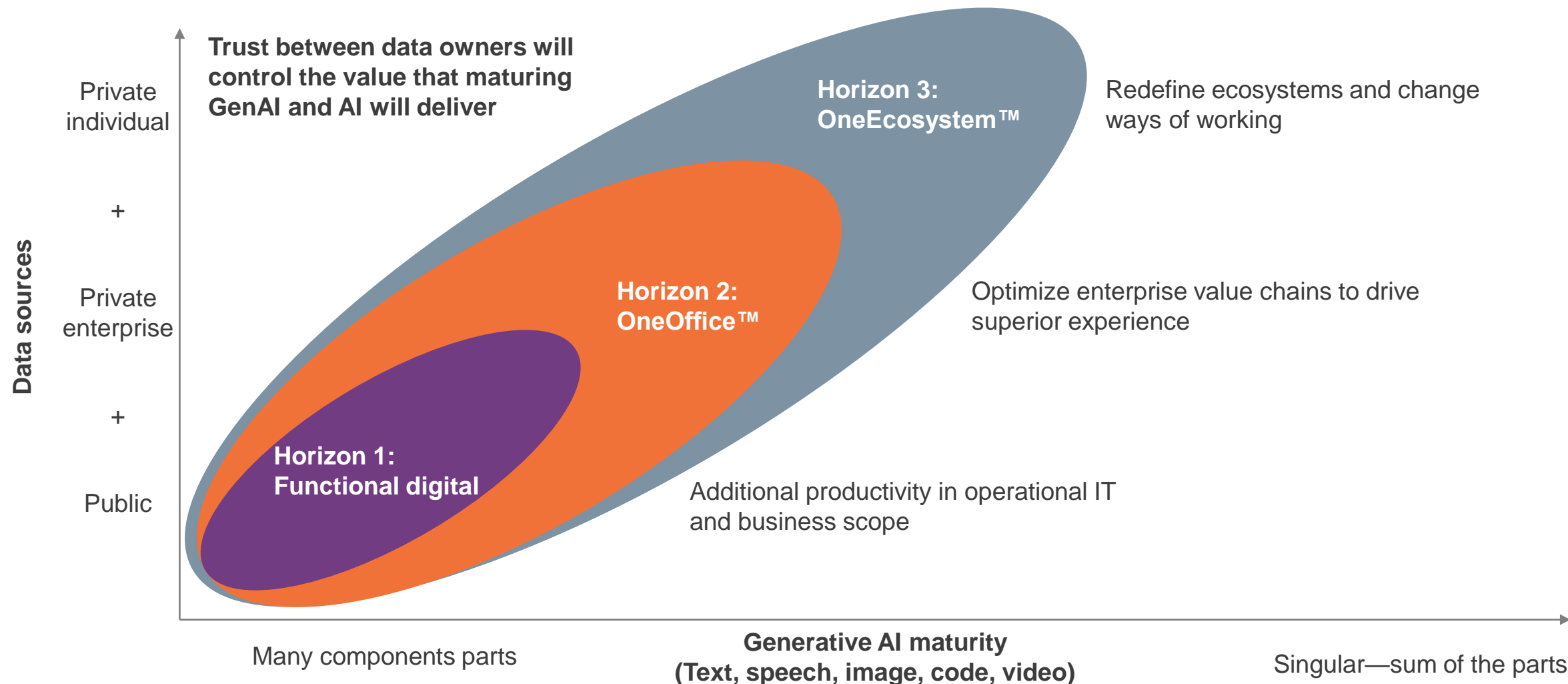
Cost savings are important but no longer sufficient to keep most leaders in their jobs.

Minimizing costs to a desired level is one ceiling of achievement, but ambitious enterprise C-suites must keep striving for new sources of value to stay competitive.

Investment in Generative Enterprise opportunities offers the chance to bridge the gap.

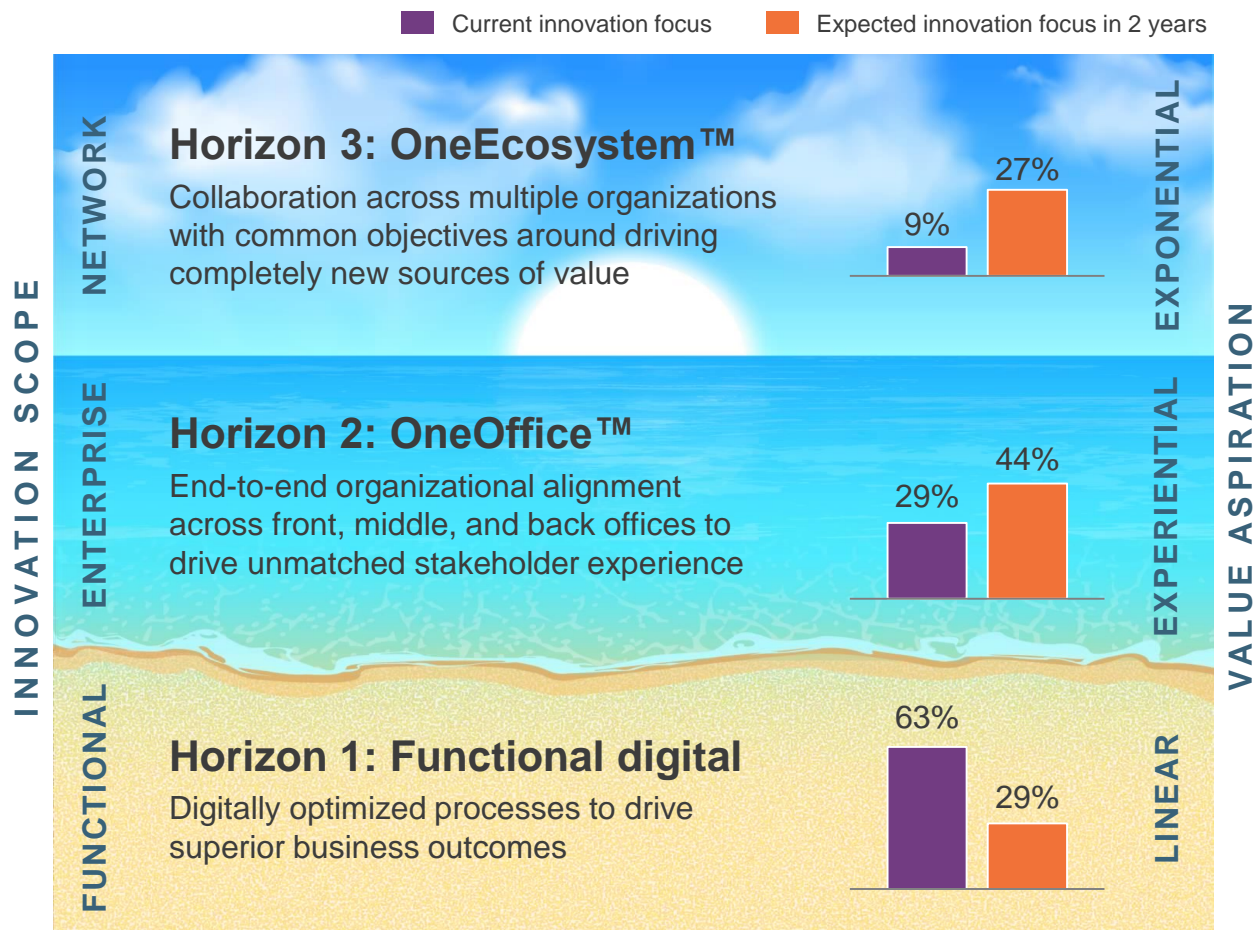


Access to increasingly private data sets holds the key to redefining ecosystems, ways of working, and the value delivered



GenAI could impact more than just productivity

HFS Enterprise Innovation Framework



Sample: 602 executives across Global 2000 enterprises
Source: HFS Research, 2022

Impact of GenAI across the three Horizons of enterprise innovation

Horizon 3: OneEcosystem

Redefine ecosystems and change ways of working

- Exploit generative AI for competitive advantages and to potentially open new revenue streams
- GenAI is embedded into daily lives of consumers to influence and drive the way we live, work, and interact

Horizon 2: OneOffice

Optimize enterprise value chains to drive superior experience

- Integration of generative AI with traditional analytical AI and its application across the value chain
- Autonomous data-driven decision making and exception processing
- Inclusion of creative activities enabling enterprise-wide end-to-end scope

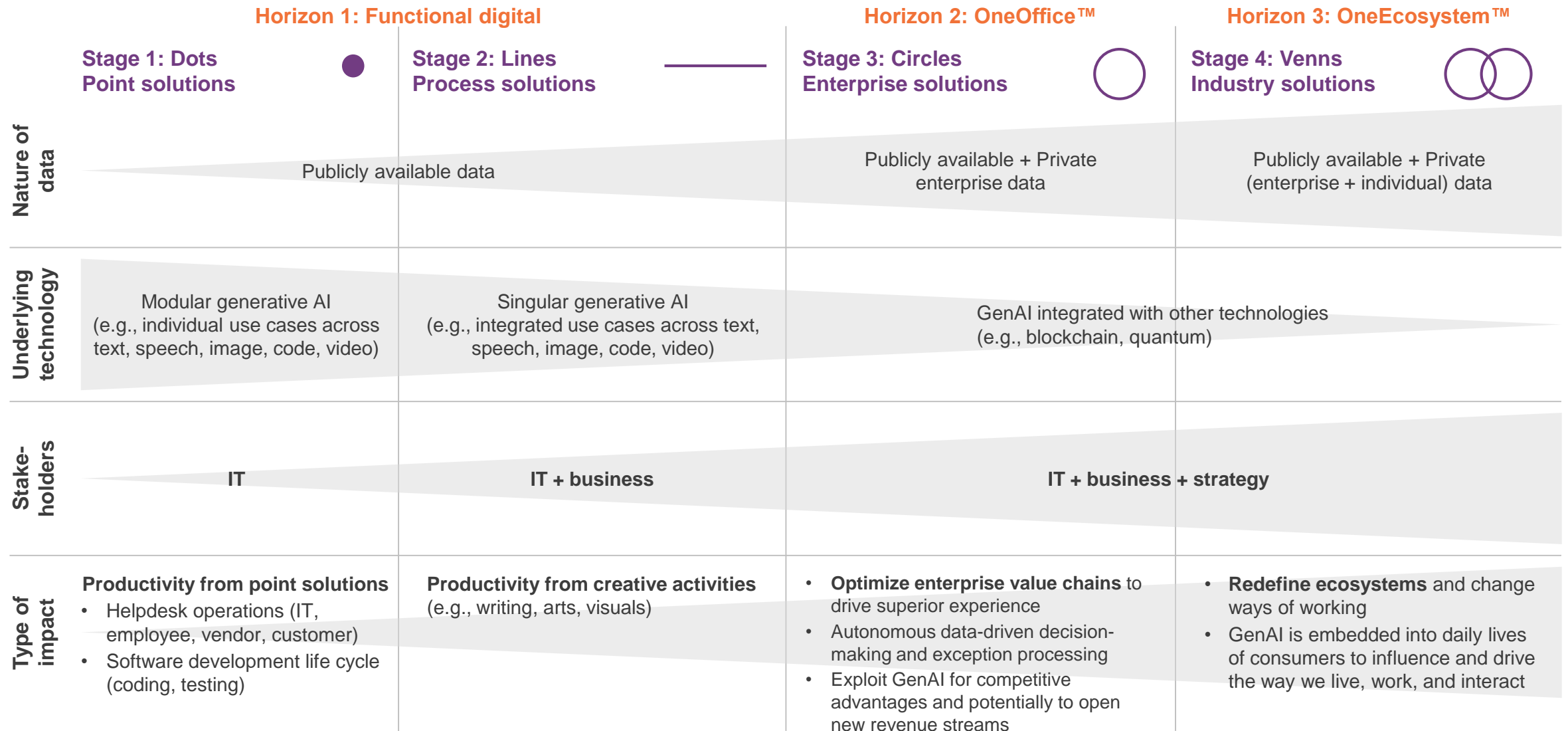
Horizon 1: Functional digital

Additional 30%–70% productivity in operational IT and business scope

- Helpdesk operations (IT, employee, vendor, customer)
- Software development life cycle (coding, testing)
- Cybersecurity (threat hunting)

New offerings to build, deploy, and manage large language models

The role of data, OneOffice, and OneEcosystem in how GenAI will impact the enterprise beyond productivity



An entire ecosystem around GenAI is unfolding right before our eyes

Apps

Consumer uses

Entertainment	character.ai Midjourney
Productivity	OpenAI ChatGPT neeva
Other	trigo laobi

Enterprise stack

General productivity	ADEPT tome	glean AlphaSense
General and administrative	Ironclad eightfold.ai	synthesia
Sales and customer support	GONG Clari	RevComm PolyAI
Marketing	Jasper	WRITER
EPD, IT, security	Moveworks VECTRA	Abnormal GitHub Copilot

Industry verticals

Law firms	Harvey
Creative	runway Midjourney imagen descript
Health	iz.ai BAYESIAN HEALTH insitro PathAI UNLEARN
Defense	ANDURIL Shield AI SLINGSHOT AEROSPACE VANNEVAR Labs
Agriculture and climate	Pachama FarmWise
Construction	CANVAS

Enterprise applications

Adobe
PEGA
Salesforce
SAP
servicenow
workday

Infrastructure

Deploy and monitor

Hugging Face	arize
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Train and fine-tune models

Weights & Biases	mosaicML
PyTorch	JAX

Use open-source models and frameworks

Hugging Face	LLAMA	Stanford Alpaca
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Full-stack large language models

OpenAI	ANTHROPIC	cohere
character.ai	Inflection	

Store and compute

Label and process data

Snorkel	scale	surge	COACTIVE
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Data warehouses or lakehouses

snowflake	databricks
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Cloud service providers

Google Cloud	aws	Azure
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Hardware

NVIDIA	AMD	intel	(etc.)
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Source: HFS Research, Sequoia, 2023

The enterprise journey may be uncomfortable—10 reasons why

“While the promise of GenAI for enterprises is immense, it is too early to celebrate. I think this is not a slam dunk, and it will be an uncomfortable journey. Doing nothing is not the answer, but we need to embrace it with our eyes wide open!



Saurabh Gupta

President, Research and advisory

1. Most GenAI examples are not enterprise-centric, and only a handful of projects have reached production.
2. There is an arms race to build our foundational models with the crazy influx of capital. If the bubble bursts, the technology will be blamed.
3. More power is getting concentrated with hyperscalers. Enterprises are already frustrated with the oligopoly.
4. A brand-new ecosystem including Nvidia, Databricks, and start-ups is emerging. Enterprises don't know how to navigate this.
5. Governance and integration will be key. Most data privacy laws are trying to block a black-box approach. Major legislation is looming, including the US AI Bill of Rights and the EU AI liability directive. Litigation is kicking in.
6. The FTC has opened an investigation into ChatGPT-maker OpenAI over potential harm it could cause and the company's security practices.
7. Most GenAI use cases use public data. Getting enterprises to share private data will be challenging.
8. The singular focus on productivity is misleading.
9. Technology is continuing to evolve very rapidly, but enterprises are still struggling to adopt cloud!
10. The debate around AI's carbon footprint is just getting started.

2

Research methodology

Service providers covered in this report

accenture

AKKODIS

a amdocs

ASCENDION

BAIN & COMPANY

brillio

Capgemini

Cigniti

CIKLUM

cognizant

Deloitte.

EVIDEN
an atos business

EXL

EY

genpact

HCLTech

Hitachi Digital Services

IBM

Infosys®
Navigate your next

KPMG

LTIMindtree

movate™

Mphasis
The Next Applied

NTT DATA
Trusted Global Innovator

Persistent

publicis
sapient

pwc

SONATA
SONATA SOFTWARE

SUTHERLAND®

TaskUs™

tcs TATA
CONSULTANCY
SERVICES

TECH
mahindra

U
S
T

wipro

WNS

Note: All service providers are listed alphabetically

Generative Enterprise services value chain (scope of services)

Training and education	Innovation	Consulting	Engineering	Technology management	Organizational change
<ul style="list-style-type: none"> • C-suite education • Employee education • Employee training • Workshops • Hackathons • Introduction to technology and interfaces • Prompt training • Centers of excellence • Labs 	<ul style="list-style-type: none"> • Use case generation • Build pilots, proofs of concept • Build production environments • Rapid iterative design • Build and test large language models • Identify ecosystem partners • Drive co-creation with ecosystem partners 	<ul style="list-style-type: none"> • Policies and procedures • Privacy and security • Use case validation • Process redesign • Technology choices • Vendor relationship management • Technology selection and validation • Governance • Compliance 	<ul style="list-style-type: none"> • Data strategy • Data engineering • Data analytics • Large language model build • Prompt engineering • Retrieval augmented generation (RAG) • Fine-tuning 	<ul style="list-style-type: none"> • Ongoing technology innovations • Platform implementation • Platform management • Ecosystem management 	<ul style="list-style-type: none"> • Change management • Function redesign • Help enterprises understand the data, processes, and interactions to drive functional optimization • Help enterprises break down the silos of data across the enterprise, continuously find patterns, and maintain robust governance across all decision points • Enable the OneOffice to significantly improve decision making and stakeholder experience • Ability to completely redefine how work is done (e.g., 30%-70% additional productivity, autonomous data-driven decision making, and the inclusion of creative activities, enabling enterprise-wide end-to-end scope)

The emerging Generative Enterprise technology ecosystem consists of many suppliers unknown to the enterprise a year ago

■ Apps ■ Models ■ Infrastructure

End-to-end apps

End-user-facing applications with proprietary models

Examples: ChatGPT, Google Workspace, DALL·E, Midjourney, Runway

Apps (text, code generation, speech, image, video, 3D models, audio, and music)

End-user-facing B2B and B2C applications without proprietary models

Examples: Jasper.ai, GitHub Copilot, Replit, Pictory.ai,

Closed-source foundation models

Large-scale, pre-trained models exposed via APIs

Examples: GPT-3 and GPT-4 (OpenAI), PaLM and LaMDa (Google), LLaMA and Galactica (Meta), Chinchilla AI (DeepMind), Megatron-Turing NLG (Nvidia)

Model hubs

Platforms to share and host models

Examples: Hugging Face, Replicate

Open-source foundation models

Models released as trained weights

Examples: Stable Diffusion (Stability)

Cloud and data platforms: Examples: AWS, GCP, Azure, Databricks, Coreweave

Compute hardware: *Accelerator chips optimized for model training and inference workloads.* Examples: GPUs (Nvidia), TPUs (Google)

Source: Andreessen Horowitz (known as "a16z") and HFS Research

Sources of data

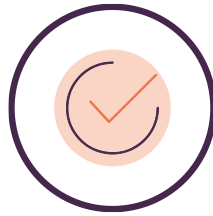
This report relied on a myriad of data sources to support our methodology and help us obtain a well-rounded perspective on Generative Enterprise service providers in our study. Sources are as follows:



RFIs and briefings

Each participating vendor completed a detailed **RFI**.

HFS conducted **briefings** with executives from most vendors.



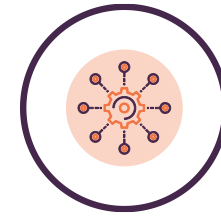
Reference checks

We conducted reference checks with 30+ active clients of the study participants and 40+ active partners via phone-based interviews and detailed surveys.



HFS vendor ratings

Each year, HFS fields multiple demand-side surveys in which we include detailed vendor rating questions.



Other data sources

Public information such as press releases, websites, etc.

Ongoing interactions, briefings, virtual events, etc., with in-scope vendors and their clients and partners.

Assessment methodology

The **HFS Horizons: Generative Enterprise Services, 2023** report evaluates the capabilities of providers to understand the **Why, What, How, and So What** of their Generative Enterprise services offering. Our assessment is based on inputs from clients and partners and augmented with analyst perspectives.

Distinguishing supplier characteristics				
Assessment dimension	Assessment sub-dimensions (Briefing questions)	Horizon 1 service providers	Horizon 2 service providers	Horizon 3 service providers
Value proposition: The Why? (25%)	How does your firm define the value of AI for your clients?	<ul style="list-style-type: none"> Help enterprises understand the data, processes, and interactions needed to drive functional optimization 	<ul style="list-style-type: none"> Horizon 1+ Ability to help enterprises break down data silos across the enterprise, continuously find patterns, and maintain robust governance across all decision points Enabling the OneOffice to significantly improve decision making, driving unmatched stakeholder experience 	<ul style="list-style-type: none"> Horizon 2+ Ability to completely redefine how work gets done (e.g., 30%-70% additional productivity, autonomous data-driven decision making, inclusion of creative activities enabling enterprise-wide end-to-end scope)
	What is your firm's point of view on GenAI in terms of value creation potential? What will be the impact of GenAI for 1) clients and 2) your own firm?			
	Why should enterprises choose you for their Generative Enterprise journey as described by HFS? What makes you different or stand out?			
Execution and innovation capabilities: The What? (25%)	Please describe your AI-driven offering(s)? What industries and use cases are you targeting? Which of these are in production versus pilots?	<ul style="list-style-type: none"> Strong machine learning capabilities Typically offshore-focused with strong technical skills 	<ul style="list-style-type: none"> Horizon 1+ Strong machine learning, deep learning, natural language processing, and computer vision capabilities Offshore and nearshore capabilities with both technical and consulting skills Alliances with AI technology leaders Market ready AI-driven proprietary tools, assets, and frameworks 	<ul style="list-style-type: none"> Horizon 2+ Strong GenAI, LLMs, use cases, and capabilities Deep partnerships, including joint IP creation with AI technology leaders Strong frameworks for responsible and ethical AI Well-rounded capabilities across all value creation levers: talent, domain, technology, data, and change management.
	What is your technology roadmap for GenAI? Describe any proprietary IP, frameworks, tools, solutions, and accelerators that you have. Please share your current client experiences with GenAI.			
	What other technologies (e.g., cloud, Web3, automation, metaverse) are important to deliver on the promise of AI?			
	Please describe the current strength of your trained resources on AI technologies? How is this expected to change in the next two years?			
Go-to-market strategy: The How? (25%)	How are you organized internally to develop your AI offerings and capabilities?	<ul style="list-style-type: none"> Primarily effort-based relationships 	<ul style="list-style-type: none"> Horizon 1+ Increasing number of performance-based relationships in the portfolio 	<ul style="list-style-type: none"> Horizon 2+ Driving co-creation with ecosystem partners Strong investments in GenAI Evidence of purpose-based (co-creation) partnerships with clients in addition to increasing number of performance-based relationships in the portfolio
	Where are your main AI-related investments? (e.g., IP, partnerships, training, M&A)			
	How are you making sure the use of AI is responsible and ethical?			
	Please describe your commercial model for AI offerings. Include the approximate percentage of effort-based (e.g., FTE-based, T&M), performance-based (e.g., gain-sharing, innovation funds), and purpose-based (e.g., co-creation with clients) in your portfolio. How do you expect it to change in the next two years?			
	Please describe your AI ecosystem of partners. How do you plan to augment it for GenAI?			
Market impact: The So What? (25%)	How are you organized to develop your Generative Enterprise offerings and capabilities—centralized, regional, or by vertical?	<ul style="list-style-type: none"> Recognized as strong implementation vendors Referenceable and satisfied clients for ability to execute 	<ul style="list-style-type: none"> Horizon 1+ Recognized as strategic partners by clients Referenceable and satisfied clients for ability to execute and innovate 	<ul style="list-style-type: none"> Horizon 2+ Recognized as thought leaders by clients Referenceable and satisfied clients driving new business models with partnerships
	Please share client experiences with Generative Enterprise.			
	Voice of the customer			

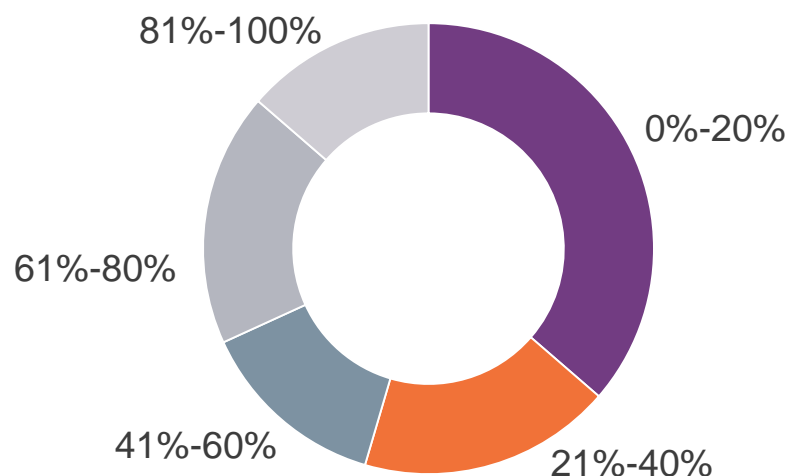
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Demographics and customer and partner data

The average shift in spending from AI to GenAI is already 41%

- We surveyed customer references provided by service providers to understand their current investments. GenAI budgets have primarily been carved out of AI budgets in 2023, and project scale remains small.
- Among enterprises surveyed, the average number of people involved in AI projects was just less than 20.
- The average amount of money spent on third parties to get projects done was about \$560,000.

Proportion of AI spending shifted to GenAI since 2023



Weighted average of spending that switched from AI to GenAI

41%

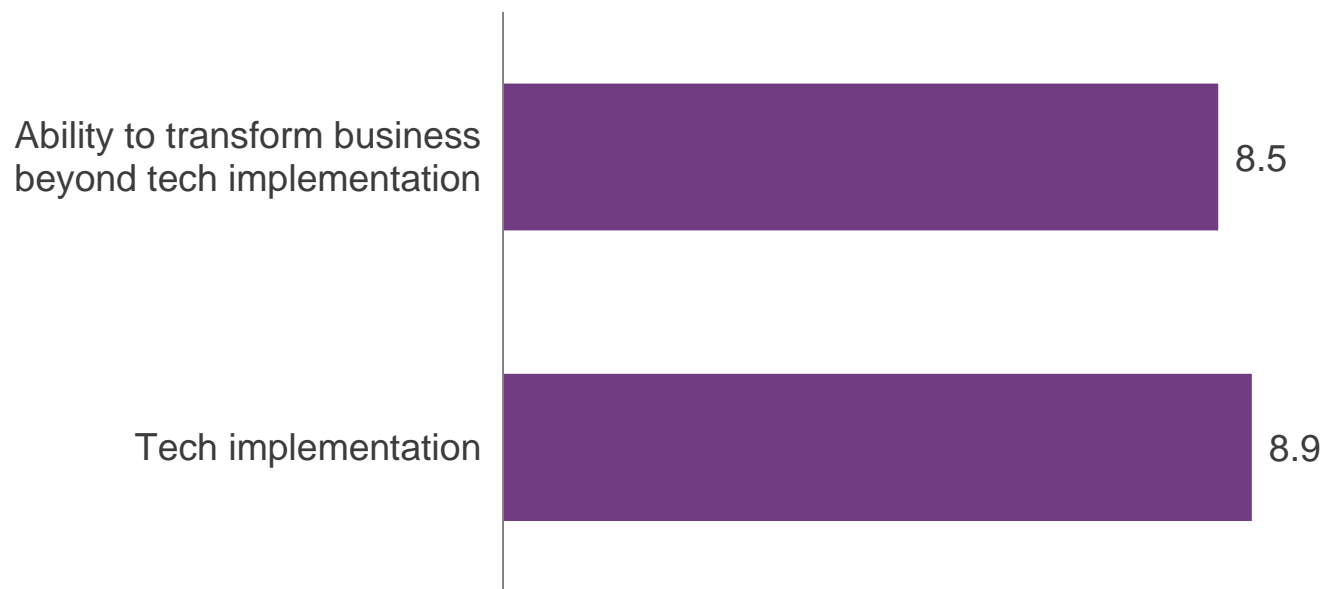
Sample: 31 customer references provided as part of the survey for this report
Source: HFS Research, 2023

Service providers deliver on tech—less so on business change

Customer view: Gap between tech and transformation capabilities

Provider capabilities

Customer ratings of service providers—average out of 10



We asked 31 customer references to score their Generative Enterprise service providers on a scale of 1 to 10.

- Customers see a gap between how well their service providers deliver on tech implementation and their ability to transform business.
- Enterprises want this gap filled as they seek help on their journey to the Generative Enterprise. Knowing the tech is one thing; helping transform ways of working because of the tech is another altogether.

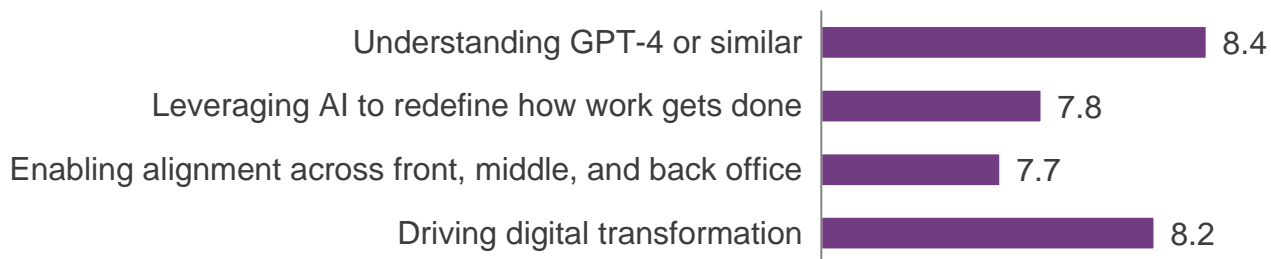
Sample: 31 customer references provided as part of the survey for this report
Source: HFS Research, 2023

Partners see service providers through rose-tinted glasses

Customer view of what service providers best deliver

Provider capabilities

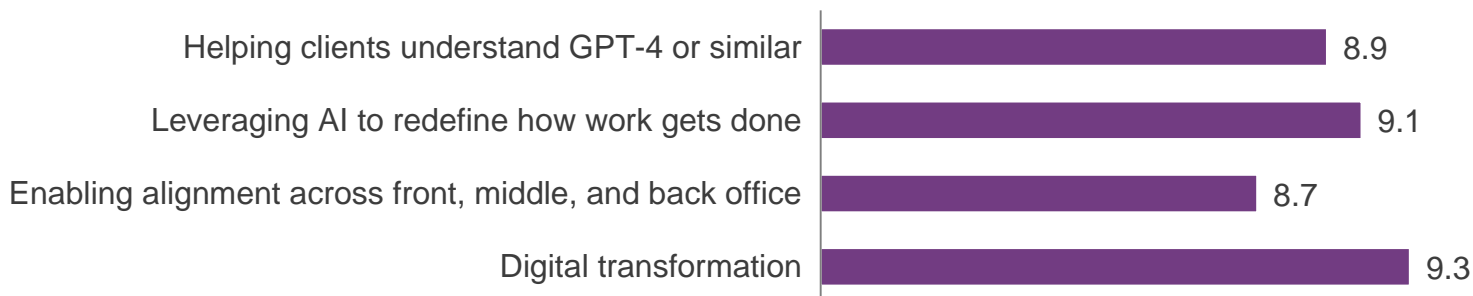
Customer ratings of service providers—average out of 10



Partner view of what service providers best deliver

Provider capabilities

Partner ratings of service providers—average out of 10



- Partners think the service providers they work with are doing a much better job than customers give them credit for.
- For example, customers score service providers an average of 8.4/10 for their capabilities in helping them understand GPT-4 (and similar next iterations) of GenAI. Partners score them close to 9/10.
- There's a gap across the four parameters we asked partners and customers to rate, indicating the need for service providers to question how well they are doing from the customers' point of view.
- The starkest example is the gap between views on how well service providers are helping clients leverage AI to redefine how work gets done. This gap reiterates the gap customers identify between capabilities in tech implementation and the ability to drive change (shown on the previous slide).

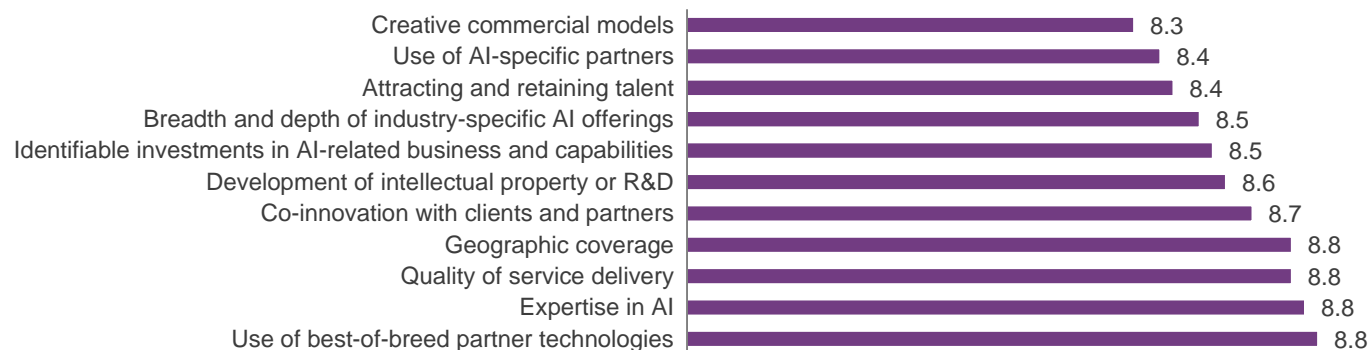
Sample: 47 GenAI partners and 31 customer references provided as part of the survey for this report
Source: HFS Research, 2023

Partners and customers call out service provider talent issue

Customer ratings of service providers for delivery capabilities

Provider capabilities

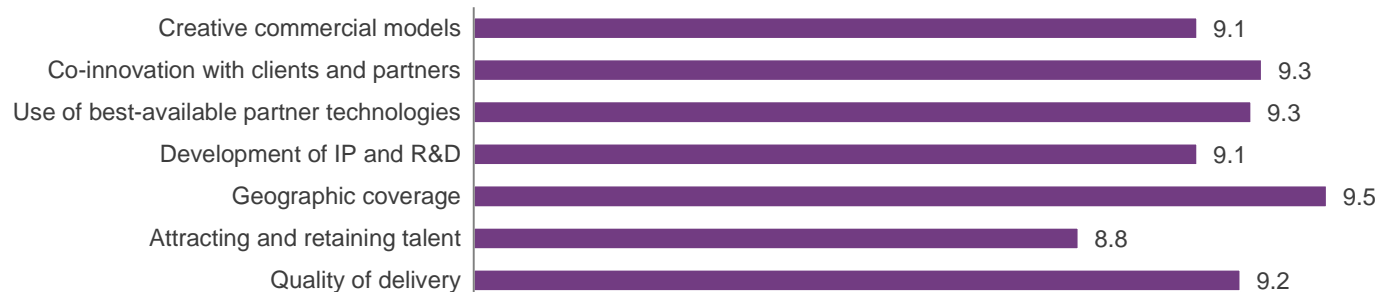
Customer ratings of service providers—average out of 10



Partner ratings of their service provider partners

Provider capabilities

Partner ratings of service providers—average out of 10

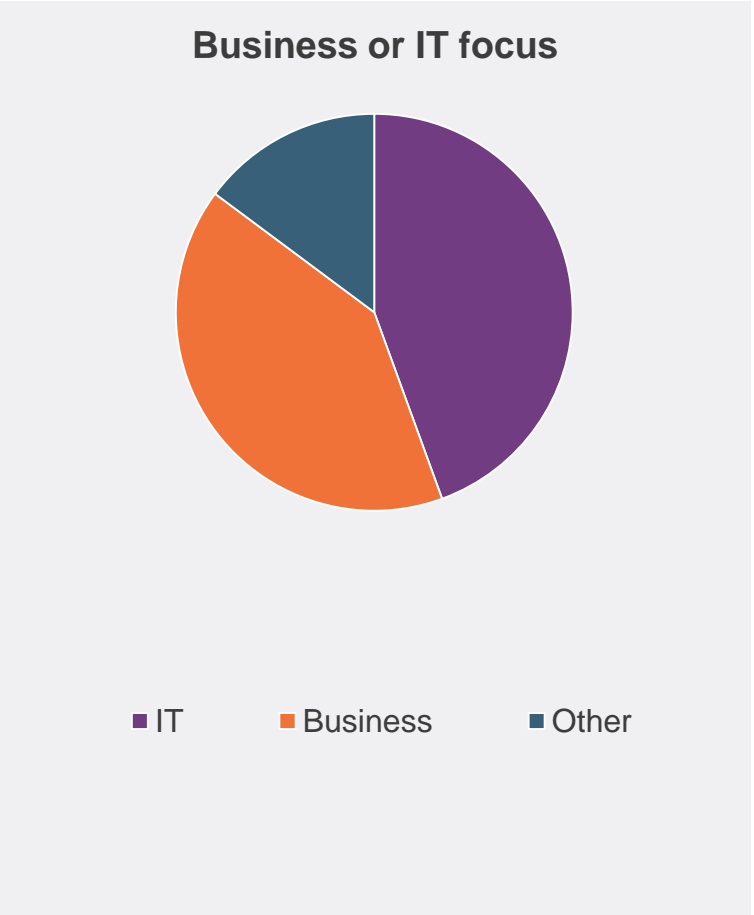
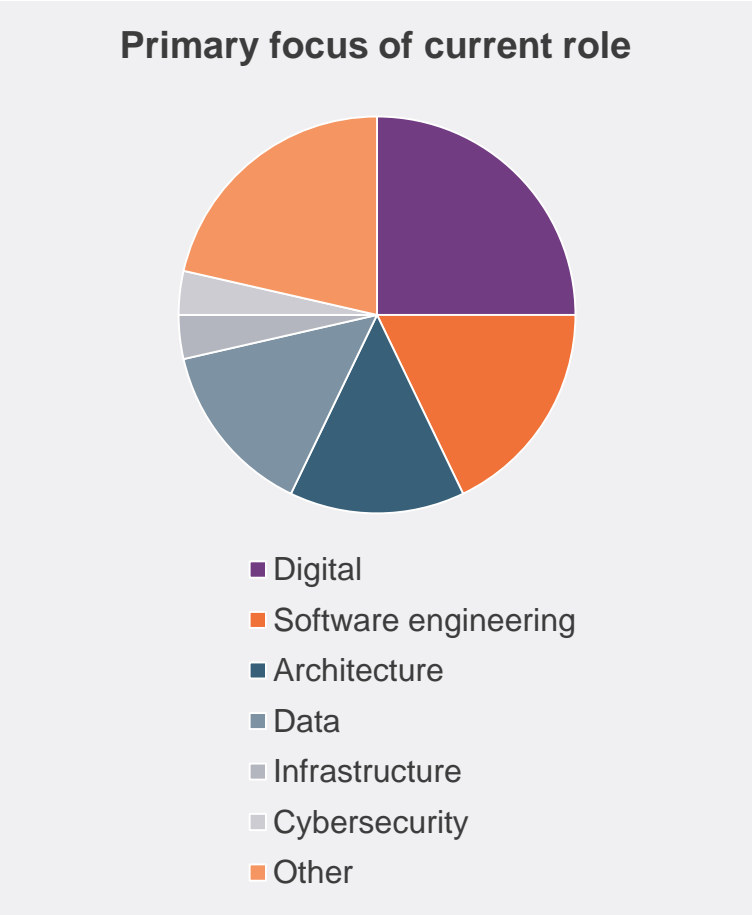
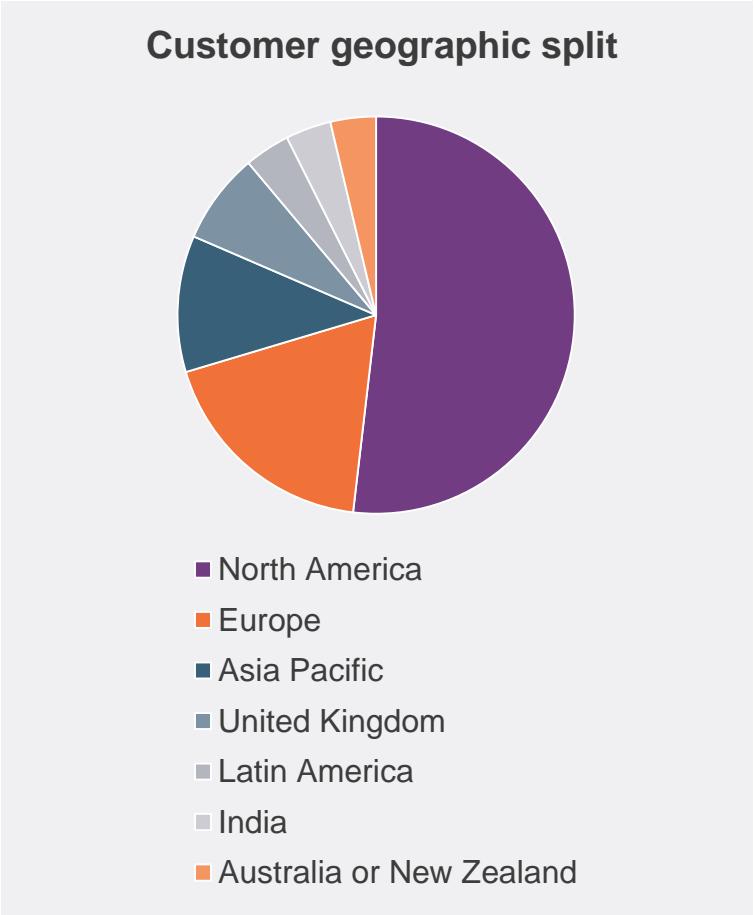


- Again, partners are happier to slap the backs of their service provider colleagues than service provider customers are.
- Partners and customers score service providers relatively low on attracting and retaining talent. It's a talent war out there!
- Partners and customers want more creativity when it comes to commercial models. GenAI lends itself to outcome models, but we aren't seeing the data reflect that yet.

Sample: 47 GenAI partners and 31 customer references provided as part of the survey for this report

Source: HFS Research, 2023

Survey demographics (enterprise customer respondents)



Sample: 31 customer references provided as part of the survey for this report
Source: HFS Research, 2023

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Horizons results: Generative Enterprise™ services, 2023

HFS Horizons—summary of Generative Enterprise service providers assessed in this report (1/2)

Providers (alphabetical order)	HFS point of view
Accenture	\$3 billion investment to apply GenAI and AI to industry's toughest challenges
Akkodis	A data and ROI governance focus to drive innovation
Amdocs	Taking GenAI deep into telco
Ascendion	Becoming a Generative Enterprise to help clients become Generative Enterprises
Bain	Helping enterprise leaders understand GenAI disruption to augment with it
Brillio	Quick start with vertical solutions and outcome-based pricing
Capgemini	Converting GenAI delivery experience into services for CX, strategy, software, and data privacy
Cigniti	Pushing back against the hype of GenAI with an expectation-setting reality stick
Ciklum	Agile engineering chops to get GenAI out of the blocks fast
Cognizant	Enabling human-machine creative collaboration

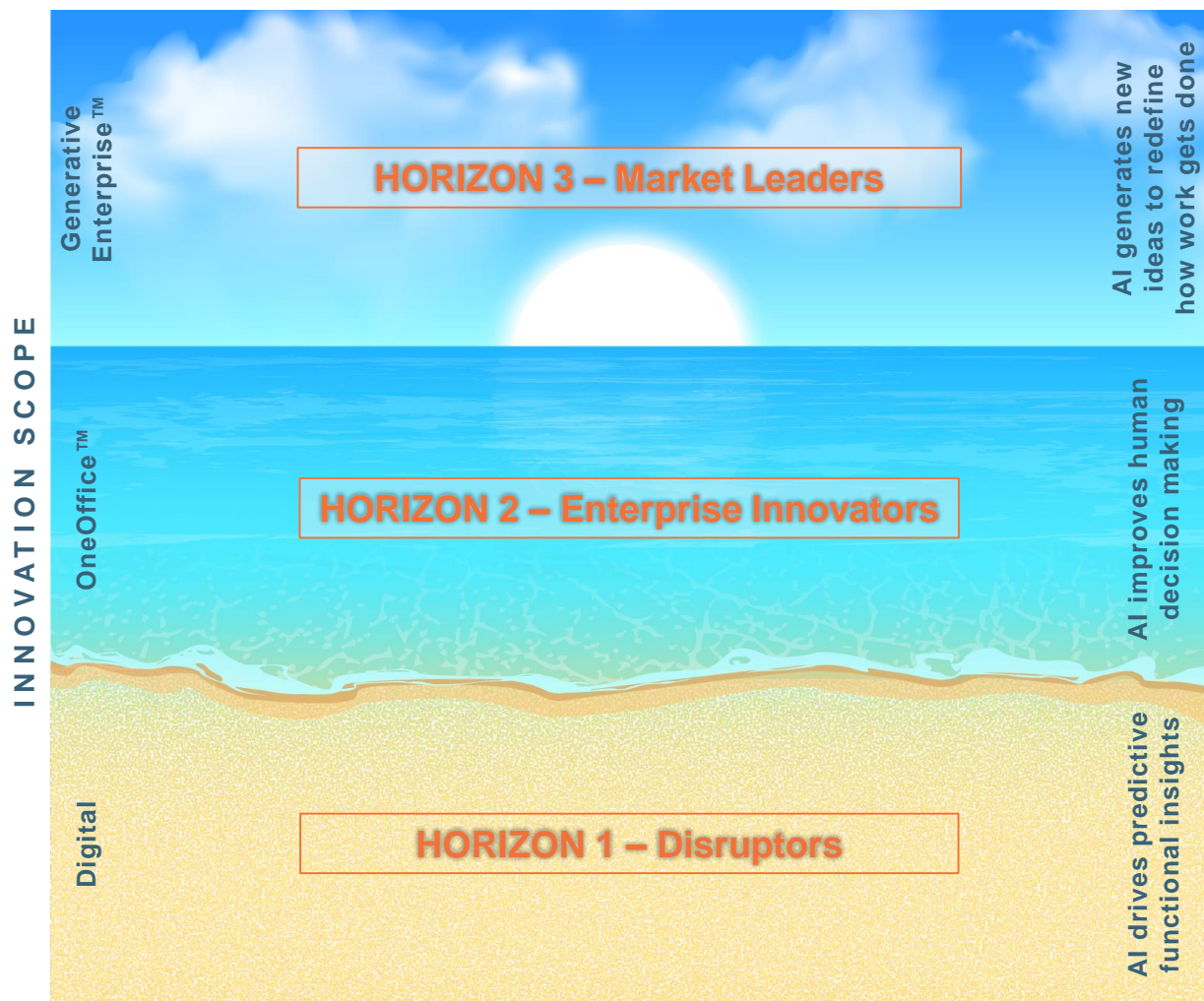
Providers (alphabetical order)	HFS point of view
Deloitte	Value-led approach to integrating GenAI into AI strategy
Eviden	Accelerating the GenAI journey with AI and cloud
EXL	Data, AI, and domain chops for a vertical GenAI approach
EY	Re-thinking how the enterprise works through AI and GenAI
Genpact	Targeting the shift to outcome-driven processes
HCLTech	Data-focused, experienced early adopter of all things AI
Hitachi Digital Services	Relatively slow starters must now prove considered approach will pay off with rapid market traction
IBM	Serious AI chops show the way to the Generative Enterprise
Infosys	Navigating from digital to an AI-first core infused with GenAI
KPMG	Balancing and managing the GenAI risks and rewards

HFS Horizons—summary of Generative Enterprise service providers assessed in this report (2/2)

Providers (alphabetical order)	HFS point of view
LTIMindtree	Platform approach with prompts, ethics, and other controls to de-risk GenAI
Movate	Helping customers learn the value of GenAI in CX
Mphasis	Listening and responding to clients' needs in customer service, developer productivity, and service desk transformation
NTT Data	Embedded GenAI—beyond innovation for transformation
Persistent	Data-led GenAI engineering expertise prepares the way ahead
Publicis Sapient	GenAI walks hand in hand with digital business transformation for CX and EX
PwC	Regulatory know-how to de-risk GenAI investments
Sonata	Responsible-first approach focused on governance

Providers (alphabetical order)	HFS point of view
Sutherland	GenAI is just a tool to deliver better customer outcomes
TaskUs	Deep LLM know-how focused on multiple CX cases
TCS	Applying GenAI to level-up employees across the enterprise
Tech Mahindra	Use-case-focused guidance for experimentation
UST	Credible GenAI solutions built to keep bias out
Wipro	Building digital-era AI-first intelligent enterprises
WNS	Reduced-risk domain-focused GenAI through co-creation and outcome pricing

HFS Horizons for Generative Enterprise Services, 2023



Horizon 3 market leaders enable the Generative Enterprise by leveraging AI to generate new ideas to redefine how work gets done

Horizon 3 service providers demonstrate

- Horizon 2 +
- Strong GenAI and LLM models, use cases, and capabilities
- Ability to completely redefine how works done (e.g., 30%-70% additional productivity, autonomous data-driven decision making, inclusion of creative activities enabling enterprise-wide end-to-end scope)
- Strong frameworks for responsible and ethical AI
- Driving co-creation with ecosystem partners
- Well-rounded capabilities across all value creation levers: talent, domain, technology, data, and change management
- Deep partnerships including joint IP creation with AI technology leaders
- Strong investments in Generative AI
- Evidence of purpose-based (co-creation) partnerships with clients in addition to increasing number of performance-based relationships in the portfolio
- Recognized as thought leaders by clients
- Referenceable and satisfied clients driving new business models with partnerships

Horizon 2 enterprise innovators enable the OneOffice by leveraging AI to improve decision making and driving unmatched stakeholder experience

Horizon 2 service providers demonstrate

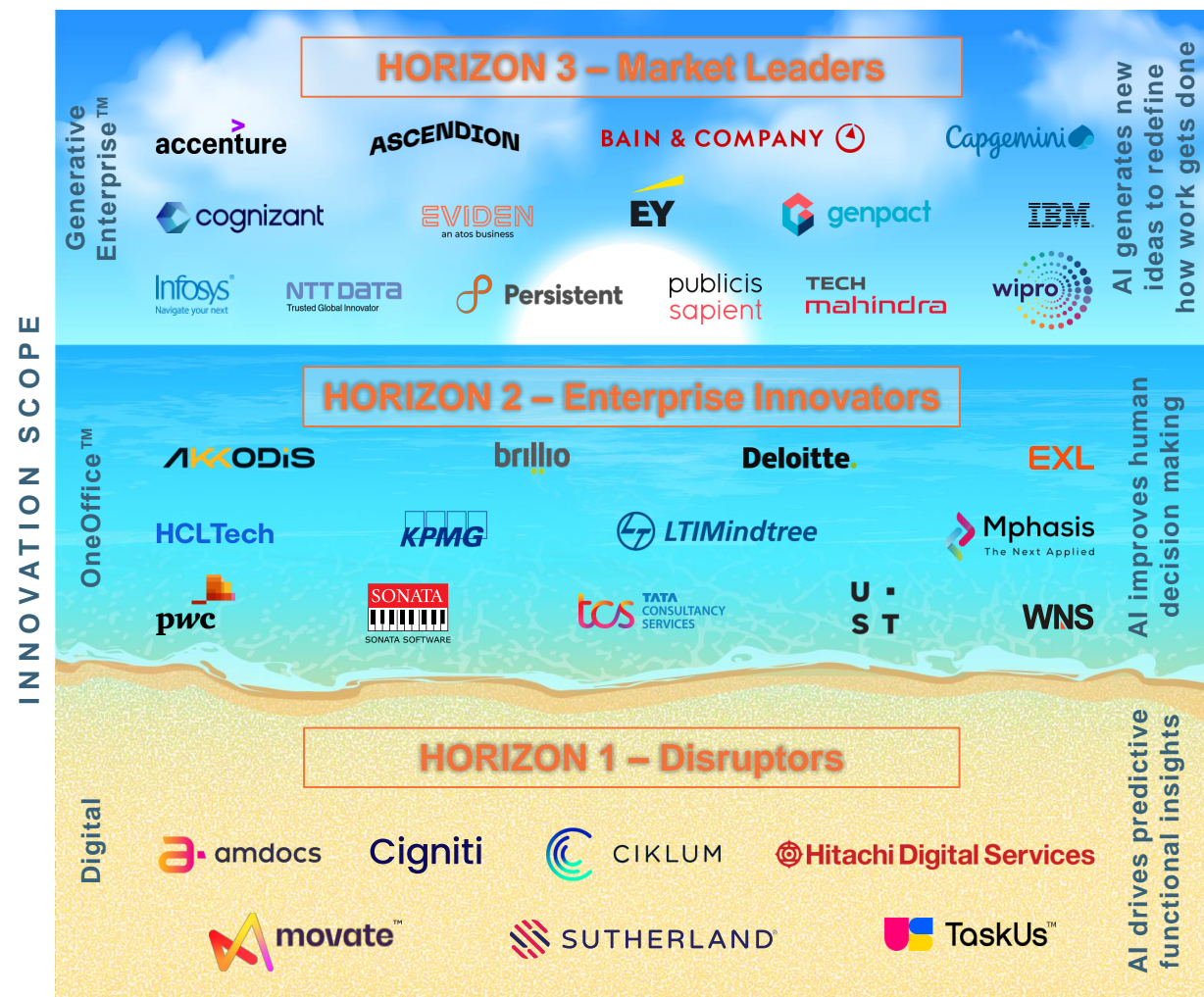
- Horizon 1 +
- Strong ML, deep learning, natural language processing, and computer vision capabilities
- Ability to help enterprises break down the silos of data across the enterprise, continuously find patterns, and maintain robust governance across all decision points
- Enabling the OneOffice to significantly improve decision making driving unmatched stakeholder experience
- Increasing number of performance-based relationships in the portfolio
- Market ready AI-driven proprietary tools, assets, and frameworks
- Offshore and nearshore capabilities with both technical and consulting skills
- Alliances with AI technology leaders
- Recognized as strategic partners by clients
- Referenceable and satisfied clients for ability to execute and innovate

Horizon 1 Disruptors drive digital transformation by leveraging AI to drive predictive functional insights

Horizon 1 service providers demonstrate

- Strong ML capabilities
- Help enterprises understand the data, processes, and interactions needed to drive functional optimization
- Primarily effort-based relationships
- Recognized as strong implementation vendors
- Typically offshore-focused with strong technical skills
- Referenceable and satisfied clients for ability to execute

HFS Horizons for Generative Enterprise Services, 2023



Note: All service providers within a “Horizon” are listed alphabetically

Horizon 3 market leaders enable the Generative Enterprise by leveraging AI to generate new ideas to redefine how work gets done

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Horizon 2 service providers demonstrate

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NTT Data profile: Generative Enterprise™ services, 2023

NTT Data: Embedded GenAI—beyond innovation for transformation



Strengths	Development opportunities
<ul style="list-style-type: none"> • Value proposition: GenAI is baked into already mature approaches. NTT Data aims to take GenAI beyond innovation to transformation. It is using GenAI to reinvent itself. • Growth proof points: NTT Data has trained 9,000 GenAI developers this year and has 54,000 expert developers, with plans for 117,000 (60% of total employees) by 2024. • Key differentiators: NTT Data uses GenAI to transform its practices to apply learnings for clients. It has dozens of value-realizing case studies. It offers flexible pricing. • Outcomes: Outcomes include conversational bots to enhance multichannel customer experiences, documents turned into an interactive knowledge resource for employees, and improved document management and team collaboration. • Customer kudos: Customers like its realistic milestones, business-outcome focus, AI expertise, collaboration, and quality service and delivery talent. • Partner kudos: Partners appreciate its ability to understand client needs, execution, talent, deep insights, and strong client relationships. 	<ul style="list-style-type: none"> • What we'd like to see more of: Turn up the marketing volume. With 300+ opportunities in just "several" clients, NTT Data should be reaching a wider audience with its dozens of successfully implemented GenAI-related case studies. • What we'd like to see less of: Let's see GenAI applied to discover new ways of working rather than augmenting more mature approaches. • Customer critiques: Customers struggle where team members aren't as multilingual as they'd like, and they'd like to see more creative commercial models in AI. • Partner critiques: Partners would like to see solutions catering to middle-market customers instead of only high-end customers and leverage innovation and client base to scale across clients.

Key offerings	Mergers and acquisitions (2019 – 2023)
<ul style="list-style-type: none"> • Infrastructure and tools: Development of use cases, responsible governance • GenAI is embedded in NTT DATA's storylines specifically designed for CxOs challenges, for example the CDO journey and the Intelligent Platform (CTOs) • Data and intelligence business strategy and advisory: AI governance, AI prototyping, AI service-driven design, AI regulation, generative AI, AI-driven organization, AI hub • Data and intelligence technology modernization: AI architectures, MLOps, AI solutions 	<ul style="list-style-type: none"> • Aspirant Consulting: Data analytics, digital product development, digital enablement, management consulting and strategy (2022) • Chainalytics: Supply chain consulting and managed analytics services (2021) • HashMap: Data-driven services as cloud modernization, data protection, and data platforms and architecture (2020)

Partnerships	Key clients	Relevant global operations and resources	Flagship internal IP
<ul style="list-style-type: none"> • Microsoft • Adobe • IBM • OpenAI, Hugging Face, Google, Amazon, Meta • SAP, Kore.ai 	<p>Number of clients: 50+</p> <p>Key clients</p> <ul style="list-style-type: none"> • Utilities: Iberdrola and others • Pharma: Pfizer Inc., Almirall, AvMed • Banking: Top global bank • Public sector: Machida City, Madrid, several municipalities • Retail: Walmart Chile, L'Oréal • Top telco in EMEAL 	<ul style="list-style-type: none"> • AI-driven revenue: Not disclosed • Headcount: 10,000 FTE in data and intelligence • Talent profile: Business consultants, data scientists, data engineers, AI engineers, platform admins • Headcount growth locations: Japan, EMEAL, APAC, Americas • Targeted industries: None specified • AI labs: Six innovation centers in Japan, United States, Italy, Germany, China, and India 	<ul style="list-style-type: none"> • IDP and knowledge management: Dolffia, Litron, and Knowler to extract information from documents, augmented Q&A, improved knowledge graphs and ontologies • Conversational AI: Eva leverages GenAI to provide 24x7 customer service and applies cognitive learning. • Code generation and transformation: Coding by NTT Data, Dedalow for fast code, automating end-to-end software development • Intelligent managed services: Nucleus, Clonika, uses GenAI to automate enterprise outcomes, including IT environment management and workflow optimization

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Further reading

Primers, advice, and guidance for the new world of GenAI

GenAI is very new to most enterprise leaders. In this report, you may read references to terms such as large language models (LLM), fine-tuning, prompt engineering, and other language that has only recently broken out of the AI lab. The HFS Points of View articles below provide primers and additional advice and guidance. Click each to read in full.

HFS

The dos and don'ts and potential costs of GenAI

David Cushman, Executive Research Leader

CEOs are under intense pressure to adopt generative artificial intelligence (GenAI) as their boards and shareholders look to them to solve [the digital dichotomy](#). We've all lived through disruptive forces, but it's the sheer rate of acceleration of the capabilities, seen in examples such as ChatGPT and Midjourney, keeping CEOs up at night.

To ease your sleep, we have identified what you should and shouldn't do when determining how to integrate GenAI into your business—and how much you can expect to pay to use it. Yes, pay. For example, many of us have kicked the tires on ChatGPT in a free version. But ChatGPT [costs \\$700,000 a day](#) to run. Someone has to pay, and it's going to be the enterprise.

HFS

Generative AI meets software development: the advent of generative coding

Joel Martin, Executive Research Leader

HFS predicts the rapid rise of “generative coding,” which goes beyond the current use of generative artificial intelligence (GenAI) to convert code. Generative coding will embrace the automated creation, manipulation, conversion, and optimization of code. While humans will oversee the requirements and approve the delivery of outcomes, generative coding will intertwine human and machine coding practices throughout the software development lifecycle (SDLC) to craft composable applications and microservices that human and machine teams reintegrate as microservices—built for cloud deployment and curated by Kubernetes.

HFS

Generative AI offers personalization and loyalty across the enterprise—if you get it right

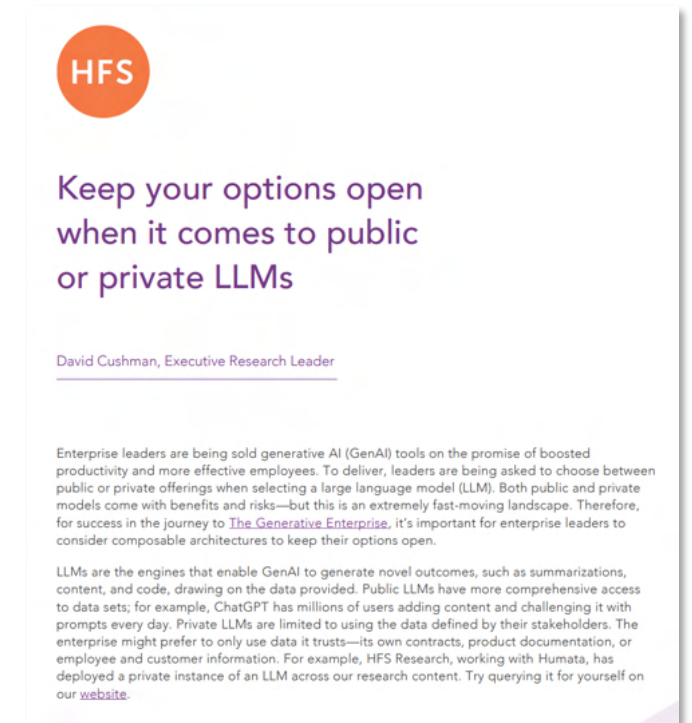
Lasse Rindom, Associate Practice Leader

Generative AI (GenAI) has exploded onto the business agenda with a promise of next-generation personalization. With it, enterprises could be on the verge of huge improvements in customer experience and employee experience. It enables more granular interactions and eventually makes every interaction a conversation—not just a message. To unlock the value, enterprise leaders must carefully manage how they access and apply personal data. Get this wrong, and hyper-personalization can result in creeped-out customers and employees running from you rather than buying into you.

More to read

Primers, advice, and guidance for new world of GenAI

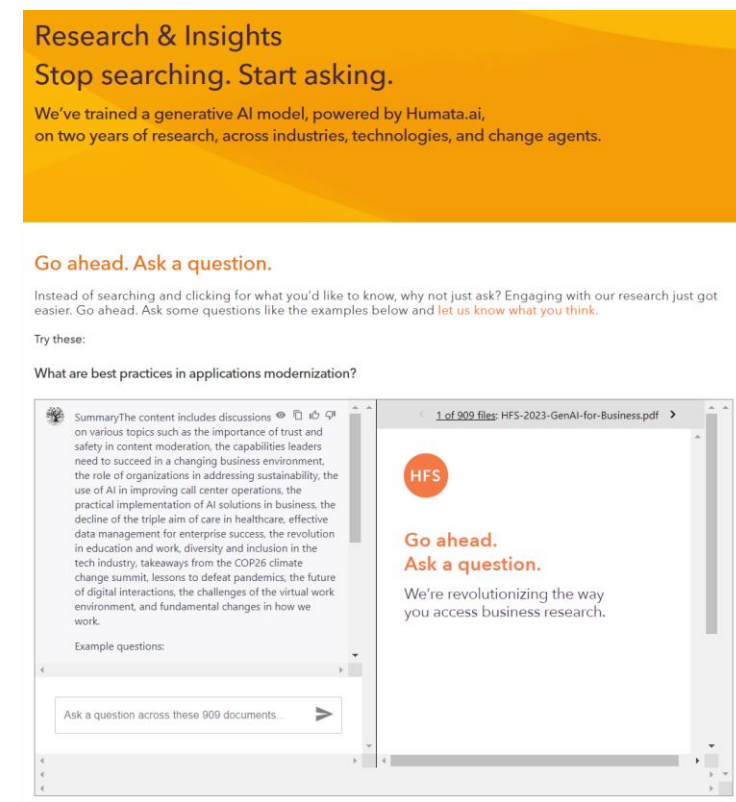
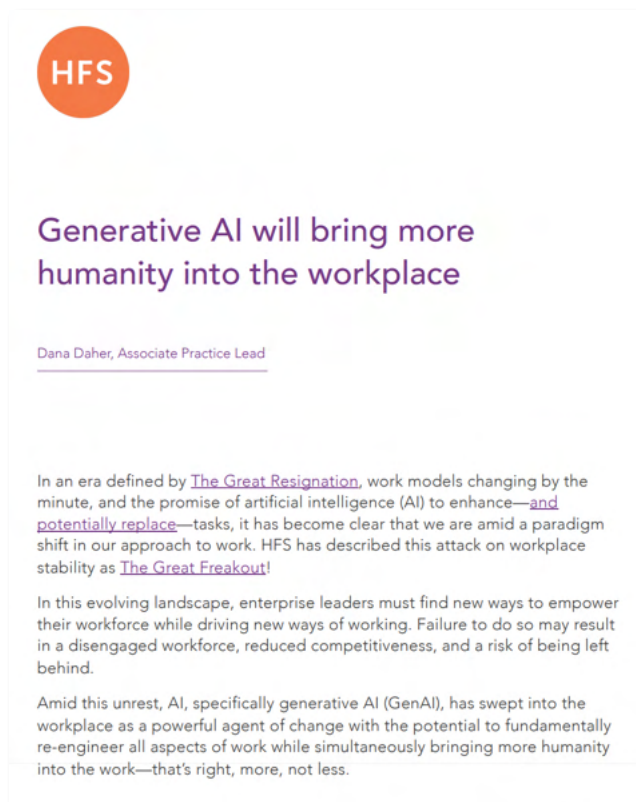
Click each image below to read in full.



More to read

You and your teams should be using GenAI daily

Click each image below to read in full. Click the image on the far right to try HFS' LLM.



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HFS Research authors

Phil Fersht, CEO and Chief Analyst, HFS

Phil Fersht is widely recognized as the world's leading industry analyst focused on the reinvention of business operations to exploit technological innovations and the globalization of talent.

He identifies change agents that enable organizations to streamline digital operations, access rapid and critical data to base decisions, and exploit the increasingly available global base of talent. He coined the term “Generative Enterprise™” in 2023 to articulate the pursuit of AI technologies based on large language models (LLMs) and ChatGPT to reap huge business benefits to organizations in terms of continuously generating new ideas, redefining how work gets done, and disrupting business models steeped in decades of antiquated processes and technology.



He has a global reputation spanning more than two decades 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, which has today grown into one of the leading industry analyst and advisory firms and the undisputed leader in IT business services and process technologies research.

In 2012, he authored the first analyst report on robotic process automation (RPA), introducing this topic to the industry. He is widely recognized as the pioneering analyst voice that created and inspired today's RPA and process AI industry. 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. OneOffice is the foundation of the hybrid (virtual-physical) workforce, where automation and AI tools augment the employees' digital capabilities and the workplace becomes a plug-and-play, work-from-anywhere scenario. Silos between the front, middle, and back offices are collapsed into a single office, where all employees are empowered and motivated by common outcomes and common values.

Prior to founding HFS in 2010, Phil has held various analyst roles for Gartner (AMR) and IDC and was BPO Marketplace leader for Deloitte Consulting across the United States. Over the past 20 years, Fersht has lived and worked in Europe, North America, and Asia, where he has advised on hundreds of operations strategy, outsourcing, and global business services engagements.

David Cushman, Exec Research Leader, HFS

David leads our Emerging Technology Practice, tracking OneOffice™ and OneEcosystem™ enablers from automation and AI, data and design thinking, process orchestration, workflow, and intelligence, metaverse, and Web3. He also engages in the impact of technology on how we work and on our employee experience.

David leads our HFS Hot Vendors program, too. 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), and he holds a joint honors degree in Philosophy and Sociology from the University of Essex.

David lives in Cambridgeshire, UK, with his wife and daughter, and he enjoys reading, writing, traveling, and thinking (exploration of all kinds). He embraces change and always seeks the learning opportunity. But, for all that, he has supported Leeds United Football Club since he was seven years old. Some things just can't be unlearned.



HFS Research authors



Saurabh Gupta

President, Research and advisory

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Saurabh Gupta is President, Research and Advisory Services at HFS. He sets the strategic research focus and agenda for HFS Research, understanding and predicting the needs of the industry and ensuring that HFS maintains its position as the strongest impact thought leader for business operations and services research. He oversees HFS' global research function managing the global team of analysts and operations across US, Europe, and Asia.



Niti Jhunhunwala

Senior Analyst

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Niti is a senior analyst at HFS Research. She works on competitive intelligence across IT and business process services. She joined us with more than six years of experience in market research. She holds an MBA degree specializing in Finance and Marketing and B.Tech in Information Technology. She is based out of Kolkata. In her spare time, she loves reading, travelling, and going for walks. On weekends she enjoys painting, spending time with her nephew and binge-watching series on Netflix.



About HFS

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Our analysts and strategists have deep, real-world experience in the subjects they cover. They're respected for their independent, no-nonsense perspectives based on thorough research, demand-side data, and personal engagements with industry leaders.

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