HFS Horizons Report

Digital Engineering Service Providers, 2023

An assessment of digital engineering service providers by why, what, how, and so what

MARCH 2023

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Excerpt for Infosys

Enterprises are creating new revenue channels, making operations more efficient, and transforming their business models to stay relevant, while service providers are driving partner ecosystem synergies, building consulting capabilities, crafting industry-specific go-to-market strategies, investing in emerging tech accelerators, and developing talent for the future. This difference in focus shows that digital engineering is no longer a technology play but a strategic business transformation partnership. We expect the focus on innovation to grow exponentially, increasing collaboration to achieve common objectives.

Nandini Tare, Associate Practice Leader

Digital engineering is a powerful strategy that enables businesses to achieve their full potential by developing and delivering innovative digital products and services on a large scale. With the support of data analytics, artificial intelligence, and cloud computing, digital engineering demands a mindset of constant collaboration, innovation, and ongoing enhancement. Given the rapidly changing digital environment, it has become essential for businesses to incorporate digital engineering as a tool to remain competitive and leverage the full potential of their data.

Mayank Madhur, Associate Practice Leader

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1

Introduction and the HFS value chain

Introduction

- The digital engineering services (DES) market is rapidly changing as more companies adopt digital technologies in product development and engineering processes. Advanced technologies like AI, ML, IoT, 5G, robotics, cloud, automation, data and analytics, blockchain, and AR/VR are revolutionizing product design and development.
- The COVID-19 pandemic accelerated the adoption of digital engineering in various industries. It highlighted the importance of digital technologies in enabling remote work, automating processes, and improving supply chain efficiency. The pandemic also shifted consumer behavior and increased demand for digital products and services. As a result, many companies accelerated their digital transformation initiatives and increased their investment in digital engineering to stay competitive.
- The HFS Horizons: Digital Engineering Service Providers, 2023 report examines service providers' role in digital engineering. We assessed and rated the digital engineering service capabilities of 25 service providers across dimensions addressing why, what, how, and so what.
- This report includes detailed profiles of each service provider, outlining their HFS Horizon placement, provider facts, and strength and development opportunities.
- The report specifically focuses on industry-specific capabilities for service providers as defined in our value chain. It does not focus on horizontal IT or BPS services such as application management or finance and accounting outsourcing.

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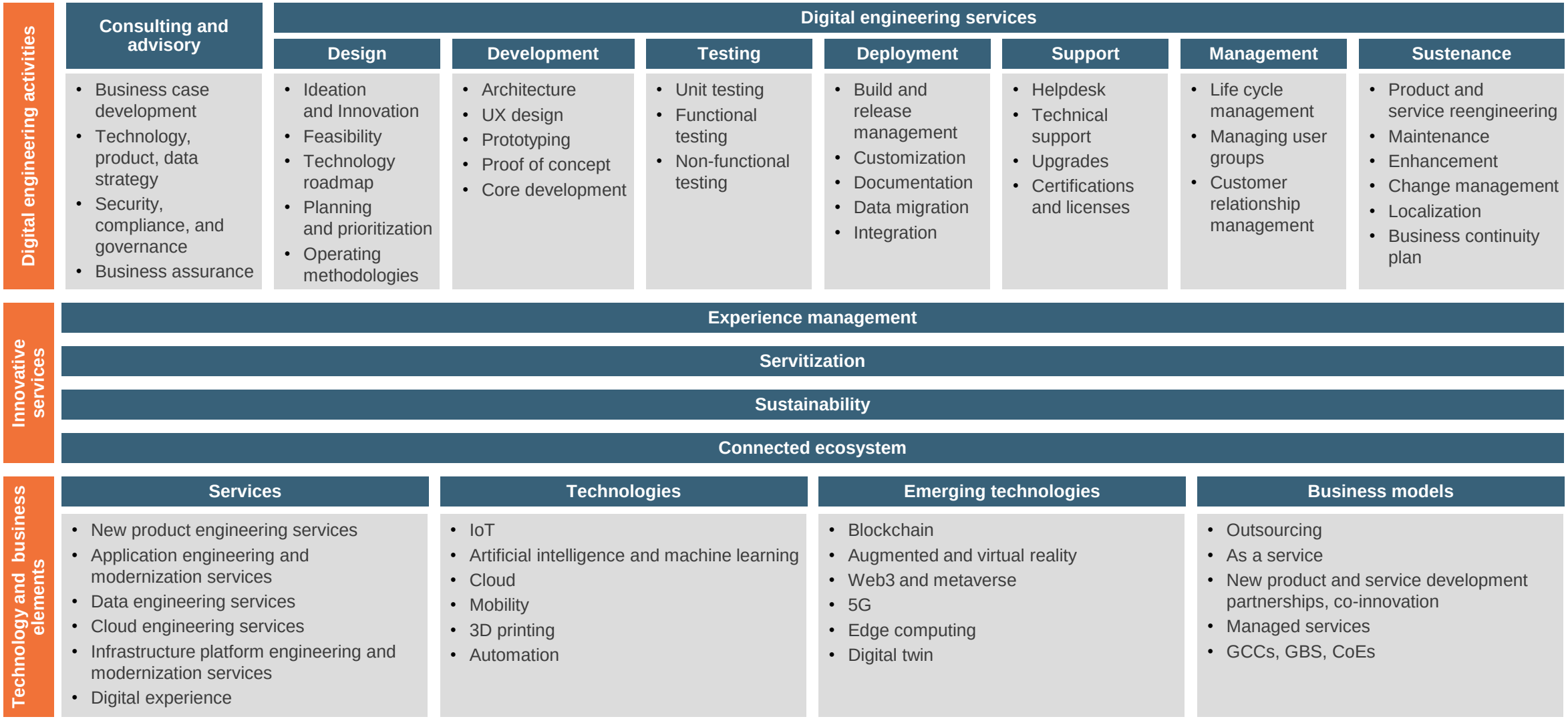
HFS digital engineering services value chain, 2023



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Inclusion criteria

- “Digital Engineering” refers to the practice of creating, capturing, and integrating data into digital tools to support the design, development, deployment, and sustenance of products/solutions. It includes agile frameworks, modeling and simulation, artificial intelligence and machine learning, 3D printing, and augmented/virtual reality. We will assess and rate the Digital Engineering service capabilities of 24 service providers across a defined series of innovation, execution, the voice of the customer, and OneOffice alignment criteria.
- In this report, we are only considering enterprise products/platforms, digital operations, and services. By enterprise products and platforms, we mean those products/platforms that service providers are developing directly for enterprise customers. For example, you are developing an IoT platform/ supply chain platform/ e-commerce platform, etc. for any enterprise (say Walmart, Honeywell, DHL, etc.). Platforms are different from simple application work as platforms interact with multiple entities, have APIs and interfaces, and need scalability, interoperability, reliability, security, and latency similar to products. We are not considering internal product revenue and headcount for the apple-to-apple comparison in this RFI. By the same rationale, for example, we are not considering platforms like Finacle, Edgeverve, Ignio, and Holmes division.
- For, Digital operations & services, the report will only include revenue from the matured enterprise technology and emerging and digital technologies which are part of the scope of the digital engineering engagements. The entire practice revenue of these areas will not be a part of the report.

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2 Research methodology

Service providers covered in this report

accenture
ACL Digital an ALTEN group company
AKKODIS
ASCENDION
BOSCH
Capgemini
cognizant
CYIENT
epam
Globant
HCLTech
Hitachi Vantara
IBM
Infosys Navigate your next
LTIMindtree
L&T Technology Services
Persistent
publicis sapient
Softtek
TATA ELXSI
TCS TATA CONSULTANCY SERVICES
TECH mahindra
UST
virtusa
wipro

*All service providers are listed alphabetically
*LTI AND Mindtree were evaluated as per data before their merging
*Bosch SDS is assessed in the study
*ACL Digital, Cyient, EPAM, Hitachi Vantara, LTI, Persistent, Publicis Sapient, TATA Elxsi, and Wipro did not actively participate.

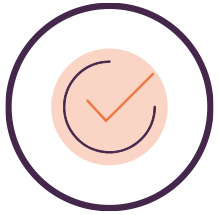
Sources of data

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

RFIs and briefings

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

HFS conducted **briefings** with executives from each vendor.

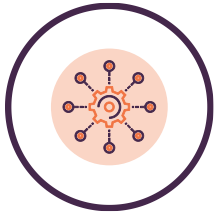


Reference checks

We conducted reference checks with **25+ active clients** of the study participants 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. For this study, we leveraged our fresh from the field HFS Pulse Study data.



Other data sources

Public information, such as press releases and websites.

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

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Assessment methodology

The HFS Horizons Report: Digital Engineering Service Providers, 2023 report evaluates providers' capabilities across a range of dimensions to understand the why, what, how, and so what of their digital engineering services offerings.

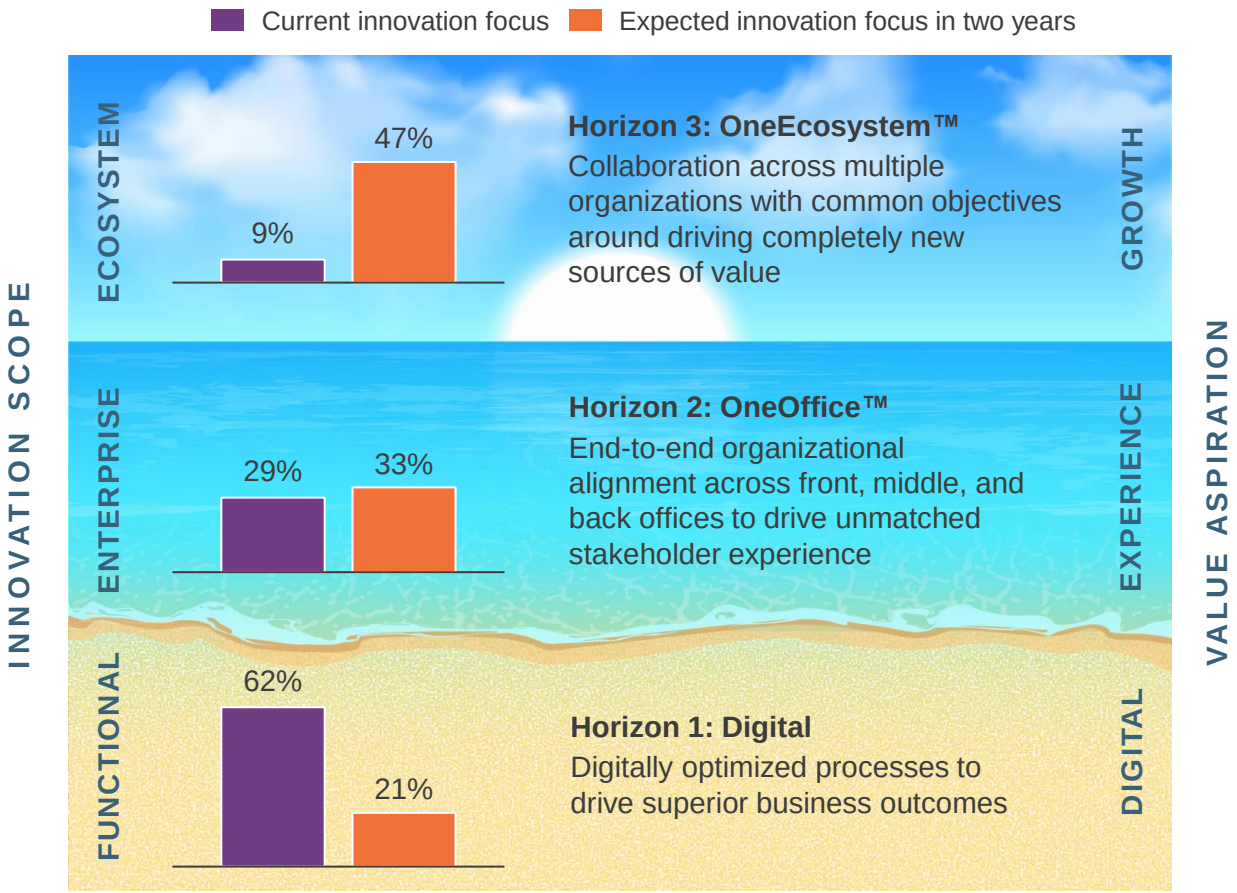
Assessment dimension (weighting)

Distinguishing service provider characteristics

	Value proposition: The why? (25%) 1. Vision for the future of the industry 2. Digital engineering strategy 3. Competitive differentiators	Innovation capabilities: The what? (25%) 1. DES enterprise offerings—breadth and depth of services across the digital engineering value chain and delivery capabilities and differentiated offerings 2. Talent pool—technology and industry-specific talent 3. Technology roadmap—nature of R&D investments	Go-to-market strategy: The How? (25%) 1. Customer acquisition—perceived market share, targeted industries, targeted services, etc. 2. Customer and partner approach—co-innovation, collaboration, and innovative commercial models 3. Alignment to industry needs to address top problem statements (operating model/business model)	Market impact: The So What? (25%) 1. Scale and growth of DES business—revenue, clients, and headcount 2. Proven outcomes showcasing nature of value delivered to enterprises 3. Voice of the customer
Horizon 3	• Horizon 2+ • The ability to drive **OneEcosystem synergy** via collaboration across the ecosystem players with common objectives around driving completely **new sources of value**	• Horizon 2+ • Comprehensive coverage of industries • Comprehensive coverage across the DES value chain and beyond • Strong talent pool across consulting, technology, and industries • Comprehensive industry-specific partnerships with a strong partner ecosystem • Strong industry-specific IPs + JVs	• Horizon 2+ • Investments aligned to ecosystem enablement • Co-creation with customers and partners • Horizon new value creation • C-suite coverage across LOBs and geos	• Horizon 2+ • Proven scale and growth driven by Horizon 2+ ecosystem synergy • Top marks as a global growth partner for enterprises driving new business models (CX) • Referenceable and satisfied clients
Horizon 2	• Horizon 1+ • Enablement of the OneOffice model of **end-to-end alignment** across employees, partners, and customers to provide **unmatched stakeholder experience** (CX)	• Horizon 1+ • Comprehensive coverage across industries • Comprehensive coverage across the DES value chain • Industry-specific talent pool with a talent development strategy • Range of industry-specific partnerships and strong partner ecosystem • Strong industry-specific IPs	• Horizon 1+ • Investments aligned to enterprise experience • Solutions and offerings aligned to enterprise top-down digital transformation • Global coverage and extensive focus across technologies and flexible business models	• Horizon 1+ • Proven scale and growth driven by stakeholder experience • Top marks as an enterprise transformation partner emphasizing stakeholder experience (CX) • Referenceable and satisfied clients
Horizon 1	• Ability to drive **functional optimization outcomes** through cost reduction, speed, and efficiency	• Limited industries covered (2-4) • Partial coverage of DES activities in the HFS-defined value chain • Talent focused on a few technologies • Talent development strategy • Focused partnership strategy • Limited industry-specific IP and a culture to promote innovation	• Investments aligned to functional optimization outcomes • Solutions and commercial models to optimization of outcomes • Focused on certain geo and technology coverage and business models	• Proven scale and growth driven by functional optimization focus • Top marks as an optimization partner across key digital engineering services (CX) • Referenceable and satisfied clients

Horizon 3 is no longer five years away—it is unfolding right before our eyes

The HFS Enterprise Innovation Framework



Data-as-an-asset

Integration of IT, OT, and customer tech is realigning data flow, driving process efficiency, and enabling fast and informed decisions. Integrating ecosystem activities with the digital thread has enabled optimization and automation, creating impactful customer insights to improve products and services. Software capabilities will be the core driving this wave of data intelligence.

Platformization

Enterprises want to build platforms to accelerate growth for personalized consumption (personalized journeys), build new customer experiences, and reimagine new value chains. Platform growth helps enterprises develop their solutions and integrate ecosystem partner solutions. This shift is occurring across industries.

Customer experience

For enterprises, one of the biggest catalysts has been changing customer behavior. Enterprises are focusing on customer centricity to develop brand loyalty and willingness to pay. We expect this trend to increase as end users become more digitally equipped and more IoT devices communicate with each other.

Digital modernization

Siloed digitalization is moving toward a holistic approach. Using a combination of technologies rather than focusing on single-tech strategies (such as cloud only) unlocks value by improving efficiency, providing visibility across the supply chain, enabling virtualization, and being a catalyst for innovation.

Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises
Source: HFS Pulse Dashboard, 2023

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Our hypothesis

Our hypothesis

The digital engineering landscape has exhibited maturity in technology, however, the differentiating factor has been how providers are aligning themselves with the changing needs of the enterprises.

Digital engineering is currently driven by enterprises' needs to optimize the use of data as an asset, digitally enabling their processes, accelerating growth by personalizing customer journeys and bringing customer intimacy. It has also been fueled by changing business models and connected ecosystems Overall, the goal is to bring together siloed digital initiatives together and look at a holistic picture.

Service providers working with enterprises driving a business transformation play a strategic role in co-innovation, addressing silos, and changing business models at a large scale. While mature and established providers are working on large business transformation play, we cannot arguably downplay players who have been assisting enterprises with enterprise-level transformation and at a function level with niche capabilities with strong implementation capabilities.

All providers recognize the importance of ecosystem play and have forged partnerships that have enabled additional capabilities. These dynamics go to show that there is a potential for growth in the digital engineering space with opportunities to work with enterprises at a function, enterprise, or transformational level.

The study aims to highlight service providers' strengths and skills they bring to the table across all horizons.

The following slides provide insights on our learnings from the study and insights from HFS Pulse Dashboard

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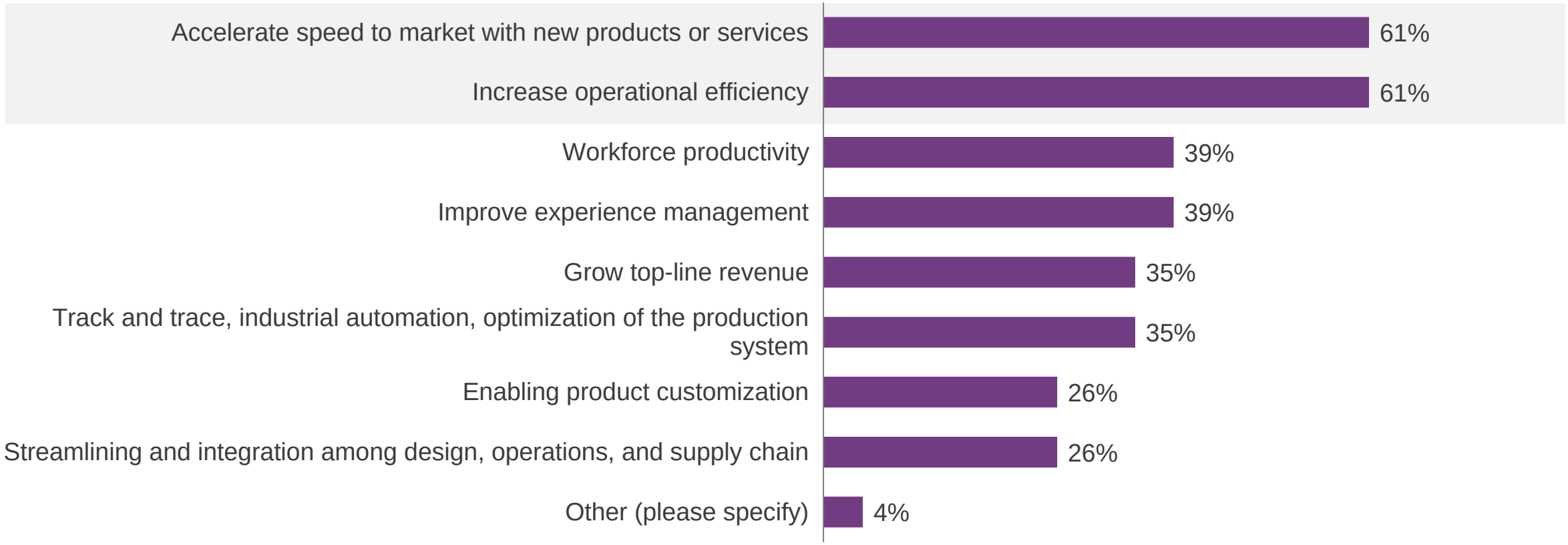
Study findings

Key takeaways

1	**Industry**	The digital engineering industry is distributed with smaller players focusing on niche technology and services. Service providers have an average growth rate of 25%, most of which comes from North America.
2	**Consolidation and ecosystem**	Consolidation is the buzz in digital engineering, with service providers seeking inorganic growth through M&A activity to acquire new capabilities and expand market share. Ecosystem partnerships are also on the rise, as service providers look to collaborate with startups and accelerators to develop new capabilities in anticipation of increased demand from enterprise customers. For example, Accenture, EPAM and Globant each acquired 6 firms, IBM acquired 7 firms, Tech Mahindra acquired 4 firms, Cyient acquired 4 firms and HCLTech acquired 3 firms.
3	**Talent**	The industry's demand and competition for talent are significant. Enterprise clients expect service providers to manage and minimize the churn of highly skilled resources. Service providers are hiring additional resources and training resources in emerging technologies in anticipation of growing demand. For example, Mindtree has a digital learning platform, Yorbit, which has 2,800 courses covering 1,000+ skills. IBM employees used the IBM learning platform and completed more than 70 hours of learning on average in 2021.
4	**Innovation and R&D**	Innovation and R&D investments are crucial in the digital engineering industry. Service providers have been investing in emerging technologies such as metaverse and blockchain to remain relevant. Service providers face growing technology and service demands from clients due to changing business models, leading to new partnership models for co-innovation and exploring new value creation. For example, Accenture invested more than $2 billion in FY21 in its people and R&D. HCL has investments in 100+ engineering labs, 60+ solution accelerators, and 20+ CoEs focused on nurturing next-gen digital technologies. Ascendion commits $5 million annually for its engineering platform, PaaS, and multiple studios and spends an additional $2.5 million on emerging technologies such as blockchain, metaverse, and quantum computing
5	**Service offerings**	Service providers are not just technology providers anymore. Service providers help enterprises navigate the landscape of additional value creation and revenue opportunities. They bring together horizontal capabilities, industry expertise, and advisory services to become holistic technology advisors to enterprises.

The top two problems digital engineering services solve are accelerating speed to market for new products and services and increasing operational efficiency

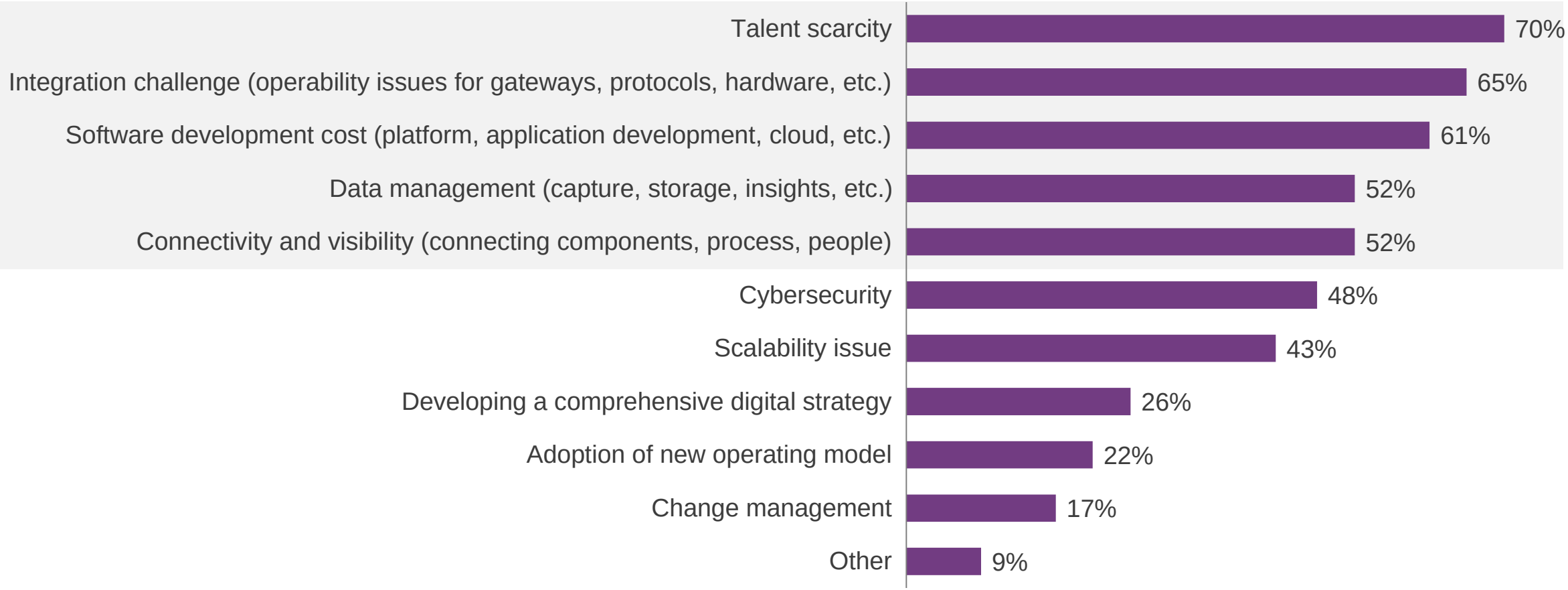
Describe briefly the business problems that you are trying to solve through digital engineering. Select all that apply.
Percentage of respondents



Sample size: 25 reference survey
Source: HFS

Companies are encountering a shortage of skilled digital engineers

What are the top five digital-engineering-specific challenges you are facing?
Percentage of respondents



Sample size: 25 reference survey
Source: HFS

Acquisitions in the digital engineering space in the last 2 years

Service providers	# of acquisitions	2021	2022
Accenture	6	Umlaut, DI Square, Imaginea	Eclipse Automation, Trancom, Headspring
Capgemini	1	Empired	
EPAM	6	Core SE, White-Hat, S4N, Emakina Group, Optiva Media	Enginiety
Globant	6	CloudShift, Habitant, Atix Labs	Sysdata, eWave, GeneXus
HCL	3	DWS Group	Starschema, Quest Informatics
IBM	7	BoxBoat Technologies, SXiQ	Dialexa, Octo, Neudesic, Sentaca, Taos
Infosys	2		Oddity, BASE Life Science
Mindtree	1	NxT Digital Business	
TechM	4	Infostar, DigitalonUs, Brainscale	Thirdware
UST	1	Accrete Hitech Solutions	
ACL Digital	2		AFour Technologies, Volansys
Cognizant	2	Magenic	DevBridge
Cyient	4		Klaus IT Solutions, Celfinet, Grit Consulting, Citec
Hitachi Vantara	1	GlobalLogic	
LTI	1	Cuelogic	
Persistent	2		MediaAgility, Data Glove
Publicis Sapient	2		Changi Consulting, Tremend
Wipro	1	Ampion	

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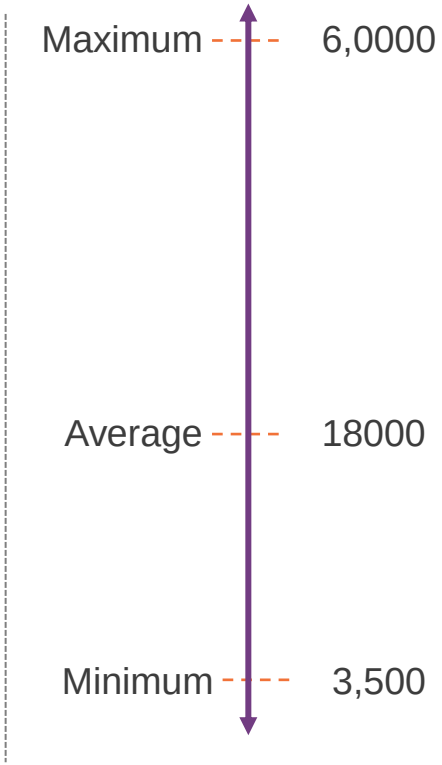
Digital engineering services engagement landscape

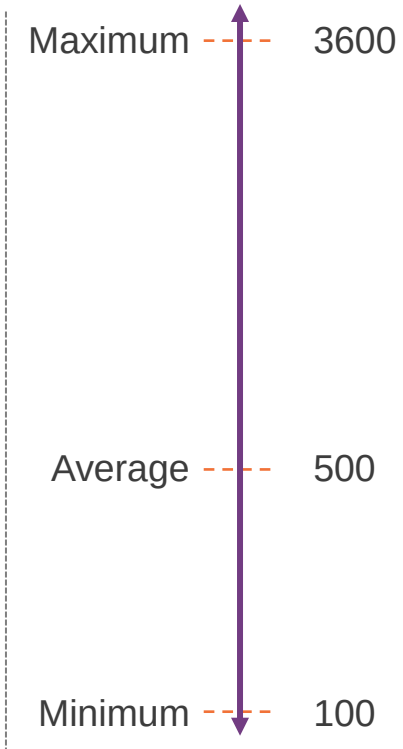
Digital engineering Y-o-Y average growth

20%-25%

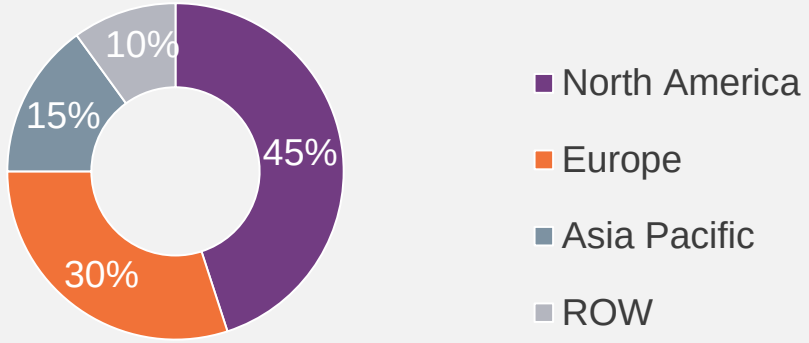
FTE landscape



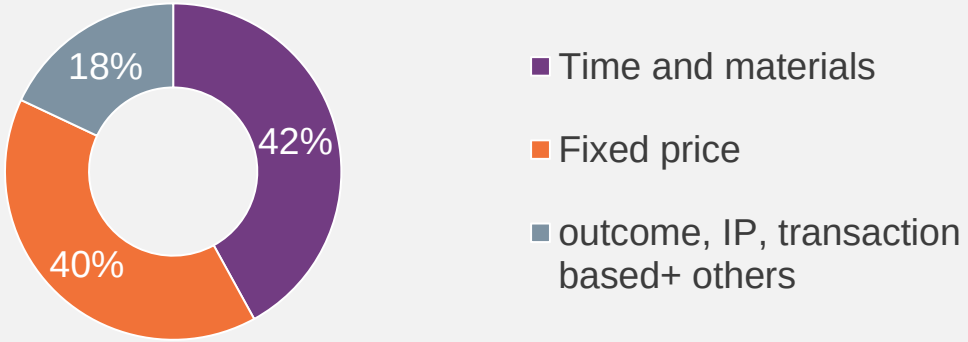
Client count



Clients by geography



Pricing model breakdown



Sample: Based on the assessment of Digital engineering input from 15 service providers
Source: HFS Research, 2023

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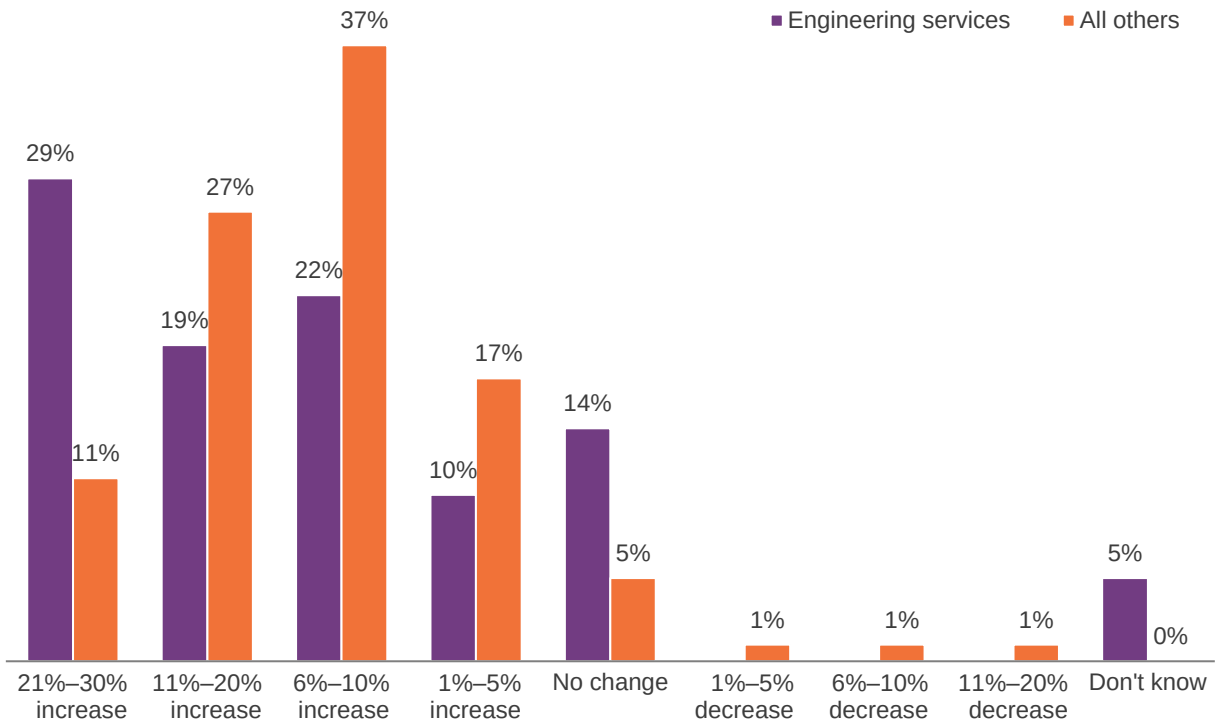
Enterprise focus- Pulse dashboard

Despite macroeconomic headwinds, we digital expect engineering services to grow faster than other technology and business services

Q: How is your IT budget expected to change in the next 12 months?
Percentage of respondents



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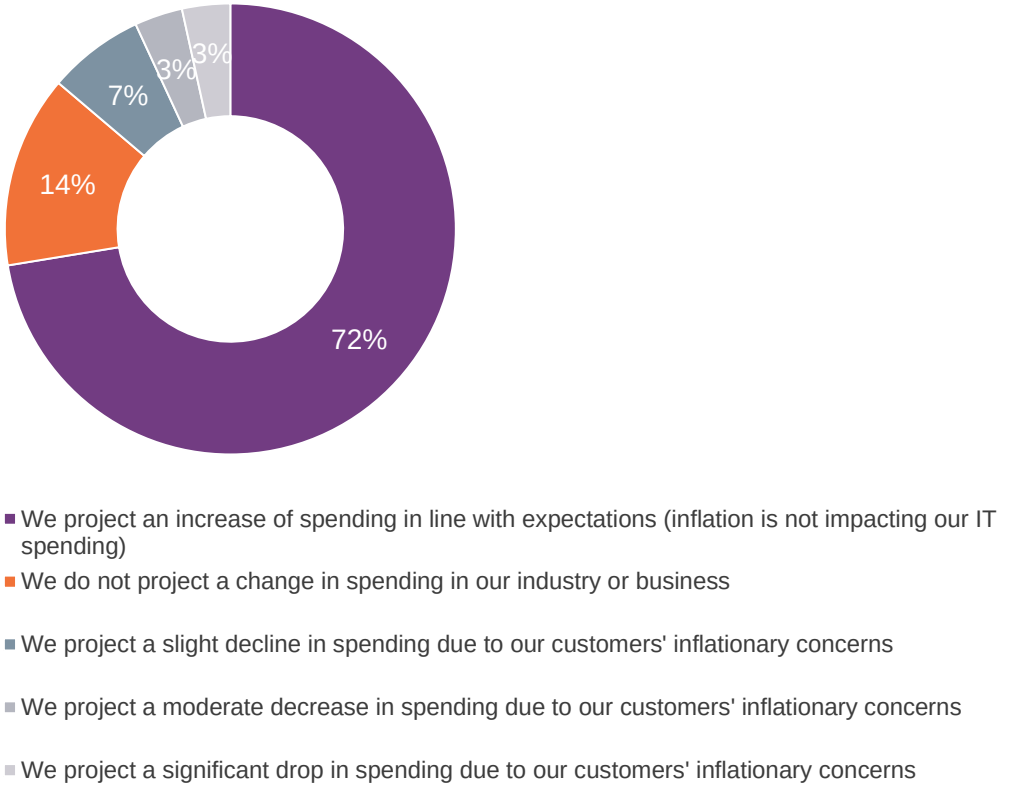


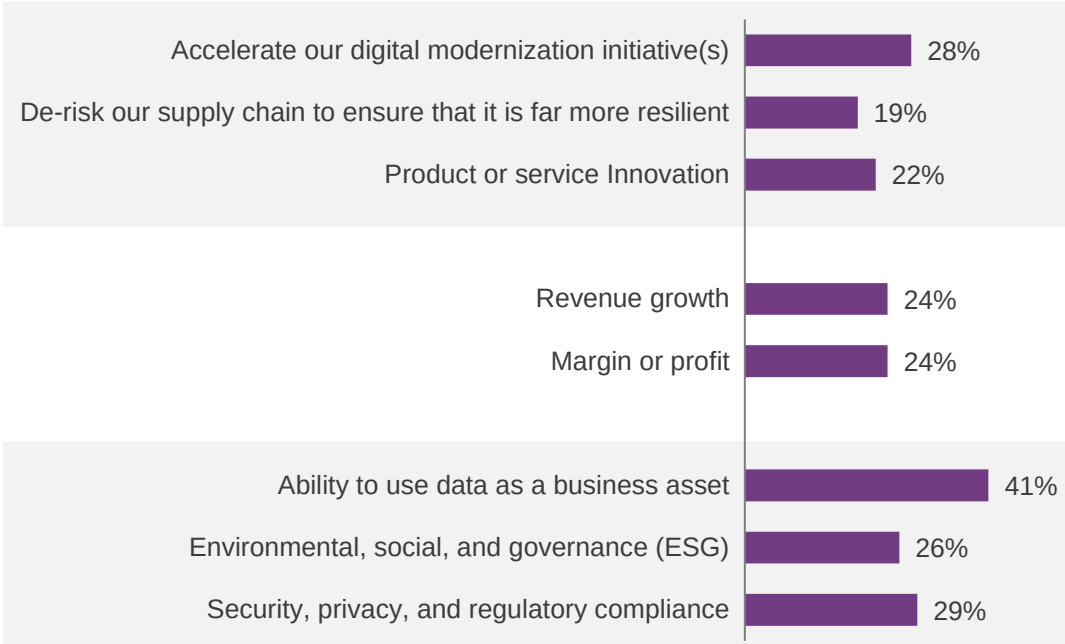
Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises (602 respondents overall)
Source: HFS Pulse Dashboard, 2023

There is a lag between what clients want to do and what they are doing, implying the need for a three-horizon go-to-market strategy

Relative importance

Rank in order how important you believe each of the following are to your leadership agenda

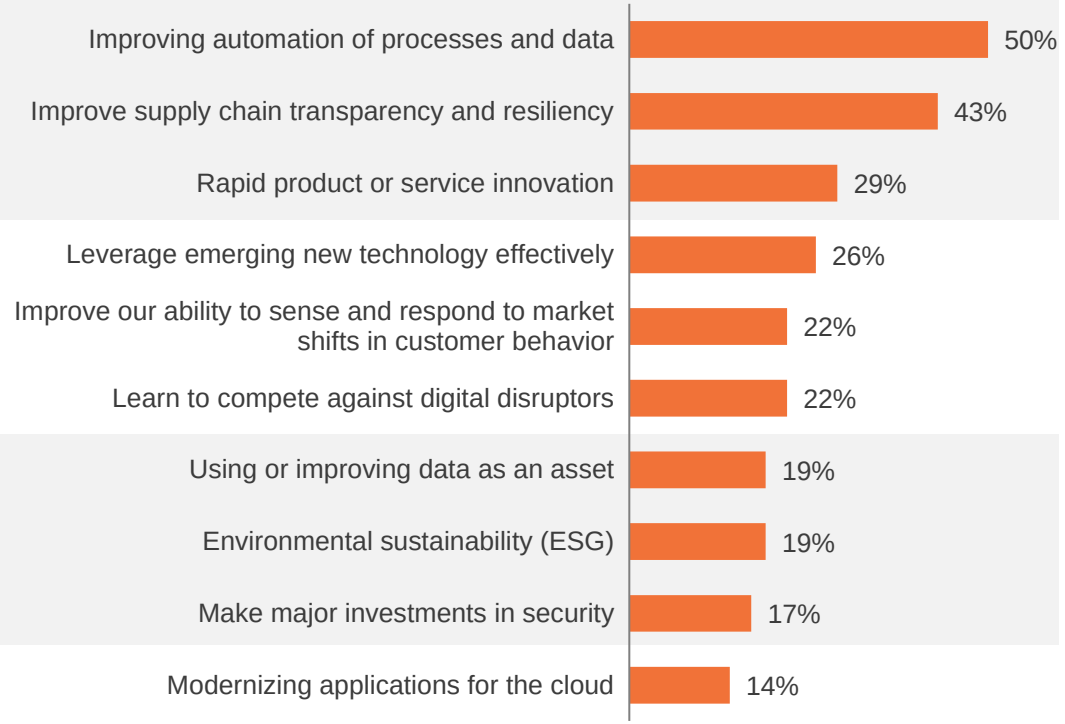
Percentage of respondents



Current initiatives

Rank the top three initiatives that you are currently undertaking to help meet your organization's strategic priorities

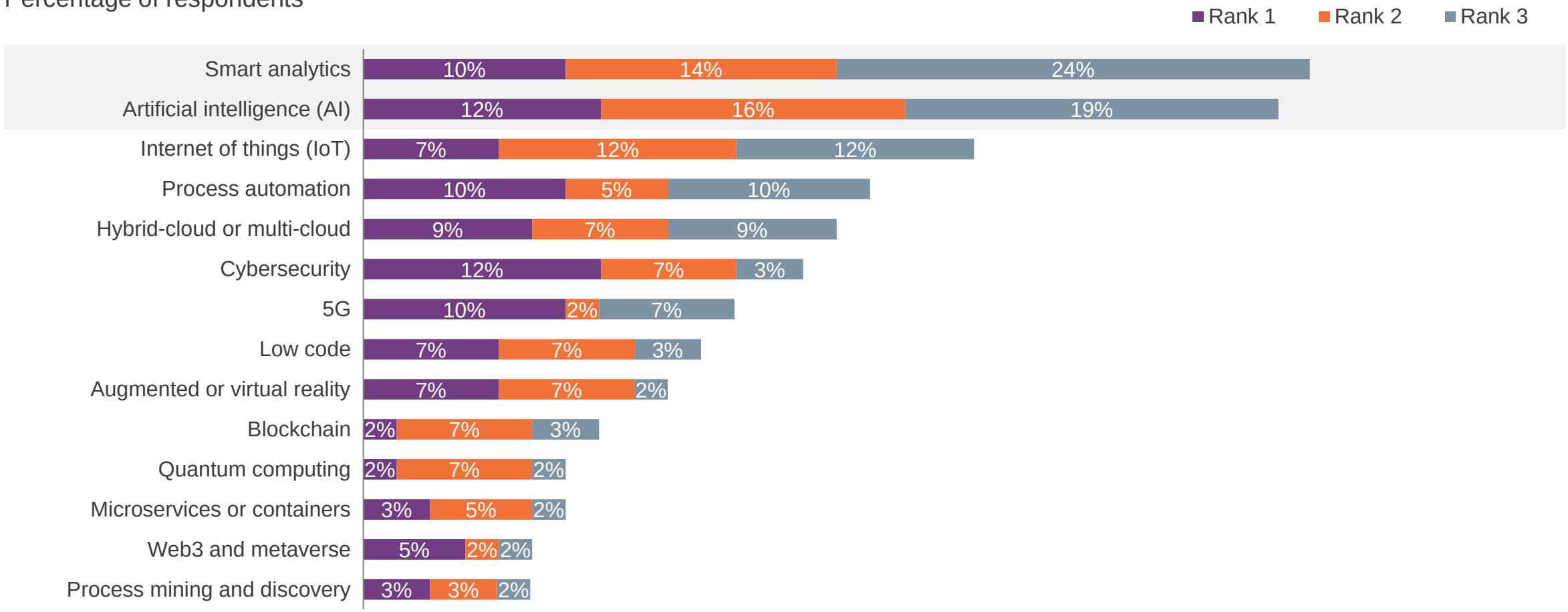
Percentage of respondents



Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises
Source: HFS Pulse Dashboard, 2023

AI-powered analytics to receive maximum investment over the next 12 to18 months from digital engineering services clients

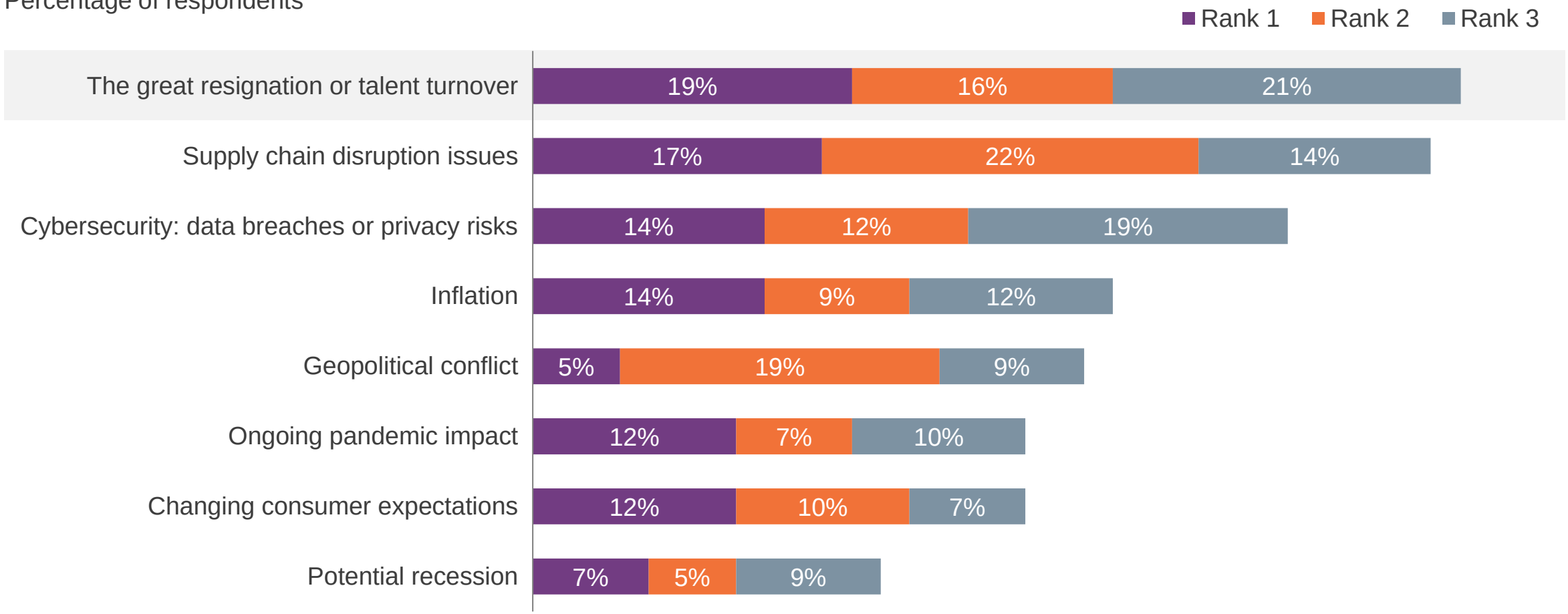
Q: Rank the top three technologies that your organization expects to invest the most in the next 12-18 months
Percentage of respondents



Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises
Source: HFS Pulse Dashboard, 2023

Among multiple macro-economic headwinds, talent emerges as the biggest challenge for engineering services clients

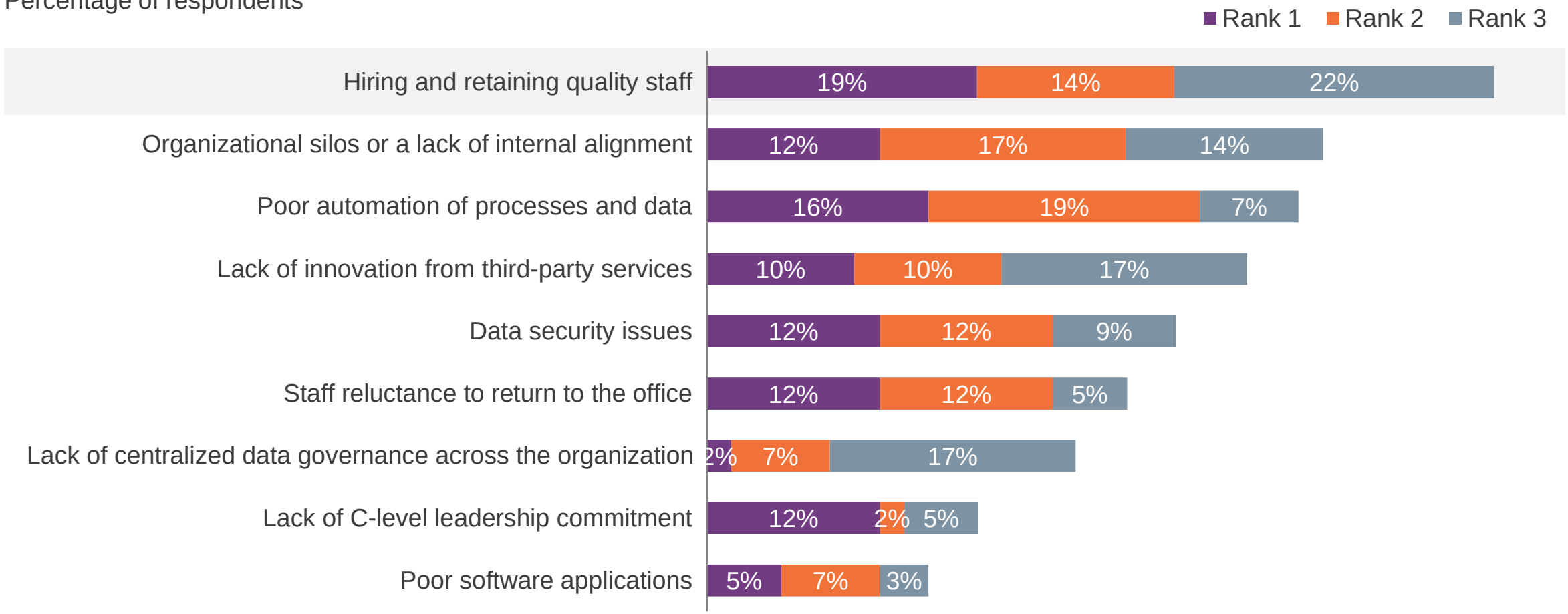
Q: What are the most concerning macro-environmental factors that are currently adversely impacting your organization's goals?
Percentage of respondents



Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises
Source: HFS Pulse Dashboard, 2023

Hiring and training quality staff is the single biggest internal challenge for engineering services clients

Q: What are your company's challenges to meet your strategic objectives?
Percentage of respondents



Sample size: 58 operations, innovation, R&D, and product development executives across Global 2000 enterprises
Source: HFS Pulse Dashboard, 2023

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Horizons results: Digital engineering service providers, 2023

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HFS Horizons digital engineering service providers—summary of providers assessed in this report (page 1 of 2)

Providers (alphabetical order)	HFS point of view
Accenture	Provider of an end-to-end, personalized platform and smart connected-product experience
ACL Digital	Providing digital experiences with a focus on design-led digital transformation and product innovation
Akkodis	Digital engineering and tech provider with end-to-end talent management services
Ascendion	Ascendion's AVA is an integrated platform for transparent software engineering
Bosch SDS	Leveraging parent company expertise to develop and deliver digital solutions worldwide
Capgemini	Combining its digital and engineering expertise to create a robust digital engineering proposition
Cognizant	Strengthening its expertise through acquisition of niche firms
Cyient	Leveraging its engineering expertise with an aggressive acquisition strategy to strengthen its consulting practice
EPAM	Driving digital engineering services through a strong focus on innovation in emerging technologies
Globant	A provider of studio model-based offerings delivering innovative solutions to clients
HCL	Legacy of engineering expertise helping to build a digital engineering portfolio
Hitachi Vantara	Driving design-led digital engineering expertise with Lumada and GlobalLogic
IBM	Leading the way in applied innovation

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HFS Horizons digital engineering service providers—summary of providers assessed in this report (page 2 of 2)

Providers (alphabetical order)	HFS point of view
Infosys	Building consulting capabilities to strengthen its transformative solutions
Erstwhile LTI	Industry-aligned, platform-driven provider of cloud-based transformation, software engineering solutions, and data and analytics
LTTS	Core engineering firm infusing digital in physical for a phygital approach
Erstwhile Mindtree	A provider of end-to-end solutions and services across the digital engineering landscape
Persistent	Following a platform-centric approach with a growing focus on newer technologies
Publicis Sapient	A provider of end-to-end digital business transformation with a focus on platform engineering and product management
Softtek	Driving digital transformation through digital architecture consulting, innovation labs, and experience engineering
TATA Elxsi	Design- and technology-led product engineering services and solutions provider
TCS	Deep digital engineering expertise with industry-ready solutions
TechM	An end-to-end digital services provider with focus on experience engineering and enterprise productivity
UST	A cloud-native led digital transformation provider with product engineering and emerging-tech expertise
Virtusa	Empowering ingenuity through user-centric design and experience-driven engineering
Wipro	Empowering enterprises through its transformational partnerships

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HFS Horizons—Digital Engineering Service Providers, 2023

Horizon 3 – Market Leaders

Horizon 3 service providers demonstrate

- Horizon 2 +
- Ability to drive a **OneEcosystem synergy** via collaboration to create completely **new sources of value**
- Strategy and execution capabilities at scale across industries
- Well-rounded capabilities across all value creation levers talent, domain, technology, data, and change
- Ability to drive large-scale **business transformations at the scale** (driving outcome-based revenue)
- Driving co-creation with clients as ecosystem partners
- Referenceable and satisfied clients driving new business models with the partnership

Horizon 2 – Enterprise Innovator

Horizon 2 service providers demonstrate

- Horizon 1 +
- Ability to drive **end-to-end organizational alignment** to drive **unmatched stakeholder experiences**
- Ability to support clients in aligning customer and employee experience
- Global capabilities with strong consulting skills and enterprise transformation
- Capability to **deliver enterprise transformation** as an ongoing, multi-year managed service
- Proven and leading-edge proprietary tools, assets, and frameworks
- Referenceable and satisfied clients for the ability to innovate

Horizon 1- Disruptors

Horizon 1 service providers demonstrate

- Ability to **drive functional transformation, with ecosystem partners and co-innovate solutions**
- Driving innovation projects for a few industries
- Strong implementation partners
- Offshore-focused with strong technical skills (incubators, accelerators, etc)
- Robust GTM digital engineering storyline delivered
- Referenceable and satisfied clients for ability to execute

All service providers are listed alphabetically.
LTI and Mindtree were evaluated before they merged as LTIMindtree
Bosch SDS is assessed in the study
ACL Digital, Cyient, EPAM, Hitachi Vantara, LTI, Persistent, Publicis Sapient, TATA Elxsi, and Wipro did not actively participate. We profiled companies using publicly available information.

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Infosys profile: Digital engineering services, 2023

Infosys: Building consulting capabilities to strengthen its transformative solutions

Strengths	Development opportunities
• **Offerings focus:** Infosys has a client-focused approach by balancing its service offerings with experience, domain knowledge, and technology depth and breadth. Its digital engineering services are centered around smart, connected, digital, and autonomous systems. • **Talent management:** Infosys-Lex provides access to training across industries and all digital technologies 24/7 for its employees. It loops in a rewards strategy, career progression plan, opportunity to work across technology, domains, and industries, work flexibility and employee engagement, employee welfare, and an environment that upholds its culture to engage and retain talent. • **Differentiation:** Infosys has been building its advisory services as a part of the GTM strategy. It has been working on flexible and innovative engagement models with industry players. It has invested in a partner ecosystem and created Infosys Innovation Networks to engage with industry bodies, start-ups, and venture firms. • **Technology innovation:** Infosys has established CoEs and innovation labs in experience design, additive manufacturing, 5G and edge, Industry 4.0, and robotics and autonomous systems. It collaborates with the industry, universities, and partner networks to co-innovate. • **Customer kudos:** Infosys clients acknowledge its long-term relationship and its strength in domain knowledge, expertise, and absolute price of service.	• **What we'd like to see more of** - Infosys has a strong partner ecosystem and its offering has evolved with the industry landscape, bringing out a strong impact-led storyline will strengthen the GTM strategy. • **What we'd like to see less of** - A strong technology narrative needs to be balanced with a business narrative to engage clients in business and digital transformation conversations. • **Customer kudos:** Clients would like to see more of digital transformation capabilities in the portfolio

Relevant M&A and partnerships	Key digital engineering clients	Global operations and resources	Flagship internal IP—digital engineering
Acquisitions (2020–2022) • **Oddity:** A digital marketing, experience and commerce agency creating digital solutions, brand worlds, campaigns, and liquid content for social media (2022) • **BASE Life science:** Domain experts with a focus on data and AI to bridge and integrate business logic and technology in healthcare (2022) • **Kaleidoscope:** Consulting, market intelligence for new product design, prototyping, and final experience design and validation (2020) **Partnerships (representative list)** Microsoft, Amazon Web Services, Google Cloud, Dassault Systemes, PTC, SAP, Intel, Siemens, TechSolve, Verizon, ServiceNow, Tulip, Rockwell Automation, Nokia, Oracle, Pega, IOTICS	**Number of digital engineering clients:** 350+ **Key clients (representative list)** • Microsoft • Toyota Material Handling • ABB • Johnson Controls	**Digital engineering headcount:** 18,500+ **Delivery and innovation locations** Presence in 54 countries and 247 locations, operating in • Americas: 7 countries • APAC: 12 countries • Europe: 31 countries • Middle East and Africa: 4 countries	• **Cloud-based device simulator:** Used in IoT development projects to build a robust platform in the absence of hardware, covering the development, testing, and support phases • **Infosys Intelligent Workplace platform:** A platform solution for smart spaces, energy management, and remote operations that covers the design and development phase • **Infosys Robotic Platform:** Automates testing and validation of HMI activities in non-traditional service areas

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Nandini is our Associate Practice Lead driving our research around engineering services and Industry 4.0 in the manufacturing sector.

She has fifteen plus years of experience in research and consulting with a focus on automotive, industrial manufacturing, and technology sectors. She has authored and co-authored multiple thought leaderships, managed consulting deliverables, and market research studies on key topics across industries. Prior to starting the HFS journey, she worked with KPMG in research and consulting in various roles and capacities. Her area of expertise are topics related to telematics and Industry 4.0. Nandini is an emerging technologies enthusiast and is keen to see how these technologies will continue to be the building blocks of Industry 4.0.

Nandini graduated in commerce and has completed her Executive General Management Program at the Indian Institute of Management, Bangalore. She is based out of Bangalore and likes to travel whenever she gets a chance, meet new people and learn about new cultures.

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Mayank Madhur is an Associate Practice Leader at HFS Research, supporting different practice leads with a horizontal focus on IoT, Industry4.0, and Engineering. He also works with practice leads with a focus on industry verticals (mainly across healthcare; life sciences; manufacturing; retail and CPG; and travel, hospitality, and logistics).

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Nikhil is a seasoned research professional delivering excellence in strategic consulting, and innovation through technology and business insights. At HFS, he works closely with practice leaders to churn out valuable insights for his clients, particularly in the BFSI sector. He is also an ESG enthusiast.

Nikhil has more than 10 years of research, pre-sales and competitive intelligence experience in a multitude of technical domains. Prior to joining HFS, Nikhil held managerial/analyst roles for Thomson Reuters and various start-ups. At Thomson Reuters, he was responsible for designing off-the-shelf and custom periodicals to cater to research needs of over 150 clients including Fortune 500 companies. He has worked in the areas of competitive intelligence and innovation lifecycle and advised clients on hundreds of product launch and innovation strategy.

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.

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