IDC MarketScape

IDC MarketScape: Worldwide Application Modernization Services to AWS 2024 Vendor Assessment
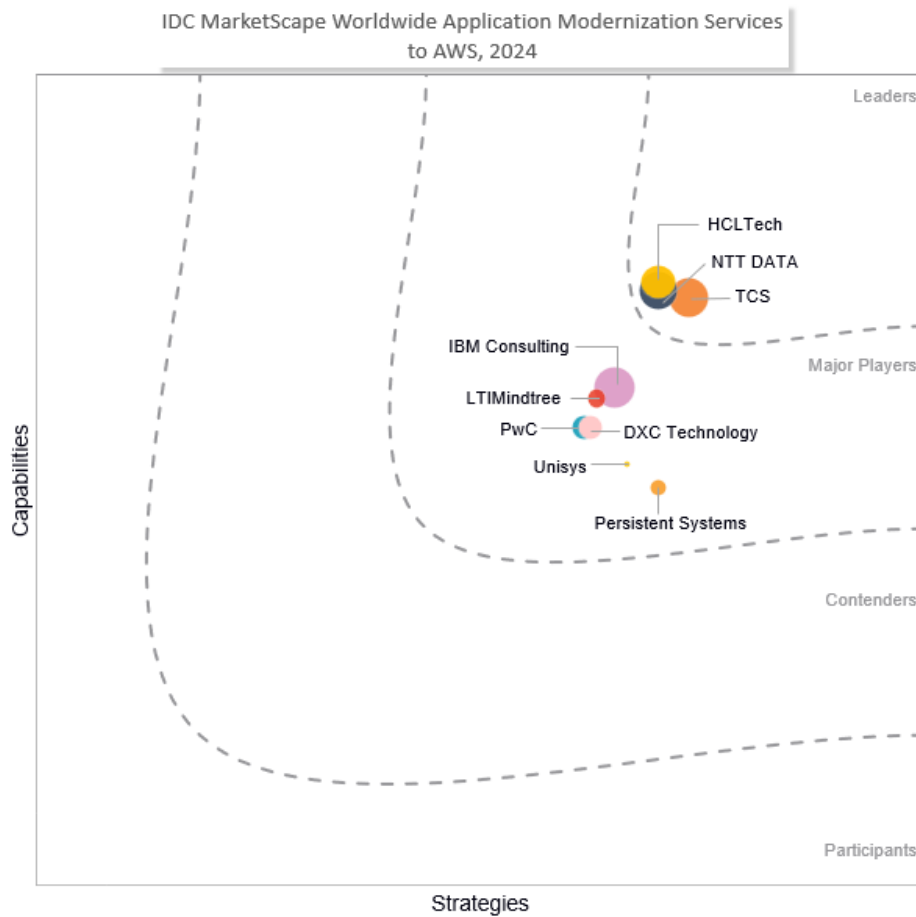
Peter Marston

THIS MARKETSCAPE EXCERPT FEATURES NTT DATA

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Application Modernization Services to AWS Vendor Assessment

Source: IDC, 2024

Please see the Appendix for detailed methodology, market definition, and scoring criteria.

IN THIS EXCERPT

The content for this excerpt was taken directly from *IDC MarketScape: Worldwide Application Modernization Services to AWS 2024 Vendor Assessment* (Doc # US50607523). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Essential Guidance, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Using the IDC MarketScape model, IDC assessed nine third-party organizations that provide application modernization services to AWS. In an environment where digital transformation and digital business have become enterprise imperatives, IDC found that there is fierce competition in service providers offering application modernization services. Some aspects of the application modernization services market, such as migrating to cloud infrastructure and application instance consolidation, have matured, while other aspects of the application modernization services market, like migrating legacy applications to software-as-a-service (SaaS) solutions and microservices architecture, have grown more popular.

Using more than 100 evaluation criteria and customer interviews to compare providers, IDC found that the application service providers in this evaluation bring deep and differentiated capabilities across a variety of application modernization options. Key differences among the players fell primarily against modernization tactics like modernizing packaged applications such as Oracle and SAP on AWS and modernizing mainframe applications to AWS as well as modernizing applications to AWS Outpost. With many enterprises focused on making application modernization a top strategic priority today and in the next 24 months, the market for application modernization services is positioned to be robust, and buyer organizations will have a bounty of providers to choose from as well as modernization tactics to consider as they look to modernize their applications to AWS.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

IDC collected and analyzed data on nine service providers within its 2024 IDC MarketScape assessment for application modernization services. While the market arena for application modernization services is rich with suppliers that offer application modernization services, IDC narrowed down the field of players that participated in this research based on the following criteria:

- **Services capability across multifunctional disciplines.** Each service provider was required to possess a wide variety of end-to-end service delivery capabilities that included packaged application upgrades, application instance consolidation, infrastructure modernization, custom development, and application migration.
- **Revenue.** Each service provider was required to have total revenue (for application modernization services) that eclipsed $50 million in the prior year or trailing 12 months.
- **Geographic presence.** Each vendor was required to have services delivery capability (i.e., feet on the ground) and minimum thresholds of revenue generation in each of IDC's three macroregions — the Americas, EMEA, and APAC.

- **Global head count and regional minimum criteria.** Each vendor was required to have a minimum of 1,000 certified AWS application modernization services professionals worldwide.

ADVICE FOR TECHNOLOGY BUYERS

Digital transformation and business resiliency have led many enterprises to embark upon new journeys with their application portfolio management. Strategic shifts in business imperatives and IT imperatives have resulted in application modernization initiatives becoming more critical in unlocking the business value of digital. As a result, the strategic importance of application modernization initiatives is on the rise. The transformational journey that enterprises are embarking upon, as well as their appetite to procure application modernization services, has, in turn, sparked significant business opportunities for service providers. While opportunities are robust for application modernization services, the abundance of provider choices and their underlying capabilities have forced application services buyers to wrestle with complex decisions.

The rich landscape of application modernization service providers means buyers can face increasingly complex choices in service provider selection for their application modernization needs. Continued, rapid pace of technology change with web, mobile, and cloud technologies, as well as ongoing risks of legacy and packaged application investments, can complicate corporate financial objectives of minimizing costs, enhancing customer intimacy, and upholding data security. As a result, IDC suggests buyer organizations:

- **Think about application service provider relationships over the long haul.** Before engaging with a service provider to begin discussions over an application modernization initiative, buyers need to think long term about their service provider relationship. In conversations with buying organizations over lessons learned about their application modernization initiatives, many buyers shared perspectives that their modernization and digital transformation journeys were ongoing and not simply a limited scope project. Rather, application modernization was a road map of activities and initiatives becoming more embedded in daily operations. To this end, buyers of application modernization services shouldn't approach the strategy and selection process as a one-time exercise. Rather, they should think about the longer-term relationship and service provider positioning as an asset within their organization for a multiyear operational relationship.

- **Align application modernization needs with provider strengths.** Key to ensuring a successful application modernization initiative is understanding your organization's long-term vision for business transformation and how applications will play a part in your organization's future state. Buyer organizations need to outline business goals and objectives with application transformation before modernizing their applications. Based on defining initial goals and objectives first, buyer organizations can begin to structure frameworks and define deeper-level requirements to how the business needs to operate to achieve those goals and then understand how applications need to support the future enterprise. Start with a requirements framework that's forged with input from lines of business and IT to outline synergies, dependencies, and complexities. From there, buyers can determine where they may have capabilities to execute against their goals and where they may need to complement those capabilities with third-party expertise to reach their ultimate application modernization objectives.

- **Narrow providers to a shortlist.** As evidenced through this IDC evaluation, there are plenty of service providers that offer application modernization services geared for enterprises. Though there are differences at more granular levels, delineating among the strengths and

weaknesses of each provider can be highly involved and complex because many possess similar capabilities and delivery methods. Avoid complicating the selection process with vast amounts of providers. It wastes your time as well as the service provider's. To ease the selection process, focus vendor procurement on a distinct few providers and narrow providers down to criteria focused on experience and delivery capability, forward looking vision and strategy, and most importantly, cultural fit with your organization.

VENDOR SUMMARY PROFILES

This section briefly explains IDC's key observations resulting in a vendor's position in the IDC MarketScape. While every vendor is evaluated against each of the criteria outlined in the Appendix, the description here provides a summary of each vendor's strengths and challenges.

NTT DATA

After the assessment of NTT DATA's capabilities and forward-looking strategy, IDC positioned the service provider as a Leader in this 2024 IDC MarketScape for application modernization services to AWS.

NTT DATA utilizes a go-to-market approach based on industry, which enables the firm to create industry-centric strategies and solutions for clients aiming to modernize their applications and IT landscapes. The firm focuses on enabling technology innovation and organizational disruption to create new business value. Its offerings range from large-scale portfolio modernization to smaller incremental solutions. NTT DATA offers an array of collaboration models that range from integrating small teams into client projects to fully managed services offerings for modernization. Its modernization services span analysis, design, development, testing, and installation/integration, and the firm leverages modular services offerings to tailor modernization services according to client needs. The firm leans upon multiple strategic acquisitions that strengthen its global delivery capabilities in product design, software engineering, and platform integration. The acquisitions have helped NTT DATA augment and polish its blended delivery model spanning onshore, nearshore, and offshore. The provider integrates design-led innovation and custom software development to offer outcome-centric contract models and intellectual property powers the firm's modernization capability and product catalog. This includes various proprietary platforms and frameworks that help accelerate the transformation process and deliver a modernized end-state for clients.

NTT DATA provides automation for application modernization services across a range of areas, with particular focus on unit testing, functional testing, and performance testing. The firm also serves a full range of industries with its application modernization services, with particular focus on industries like banking, financial services, and insurance (BFSI) as well as the public sector and healthcare.

Strengths

Key areas where NTT DATA rated highly in the evaluation fell against IDC's ISV modernization to AWS, application modernization tactics, and Microsoft competencies on AWS categories. NTT DATA's high percentage of engagements modernizing Oracle and Infor applications to AWS earned the provider high marks for its ISV modernization to AWS capabilities. Against IDC's categories for application modernization tactics and Microsoft competencies on AWS, NTT DATA received high marks for not only its high percentage of engagements for modernizing custom-built applications to packaged applications and new custom code for legacy applications but also its high percentage of competences for Microsoft technologies as well as its high percentage of competencies focused on

technologies optimizing and automating Microsoft Workloads for security, availability, and manageability.

Challenges

Two areas where NTT DATA has opportunities to improve upon its existing capabilities fall against IDC's application modernization tactics and Microsoft competencies on AWS categories. Against the application modernization tactics category, the proportion of application modernization services to AWS engagements that was focused on modernizing applications to SOA, containers, and microservices trailed industry benchmarks. Similarly, the percentage of Microsoft competencies on AWS that focuses on Microsoft workloads migration also trailed industry benchmarks.

APPENDIX

Reading an IDC MarketScape Graph

For the purposes of this analysis, IDC divided potential key measures for success into two primary categories: capabilities and strategies.

Positioning on the y-axis reflects the vendor's current capabilities and menu of services and how well aligned the vendor is to customer needs. The capabilities category focuses on the capabilities of the company and product today, here and now. Under this category, IDC analysts will look at how well a vendor is building/delivering capabilities that enable it to execute its chosen strategy in the market.

Positioning on the x-axis, or strategies axis, indicates how well the vendor's future strategy aligns with what customers will require in three to five years. The strategies category focuses on high-level decisions and underlying assumptions about offerings, customer segments, and business and go-to-market plans for the next three to five years.

The size of the individual vendor markers in the IDC MarketScape represents the market share of each individual vendor within the specific market segment being assessed.

The IDC MarketScape figure (refer back to Figure 1) shows each vendor's position in the vendor assessment chart. Vendor market share is represented by the size of the circles.

IDC MarketScape Methodology

IDC MarketScape criteria selection, weightings, and vendor scores represent well-researched IDC judgment about the market and specific vendors. IDC analysts tailor the range of standard characteristics by which vendors are measured through structured discussions, surveys, and interviews with market leaders, participants, and end users. Market weightings are based on user interviews, buyer surveys, and the input of IDC experts in each market. IDC analysts base individual vendor scores, and ultimately vendor positions on the IDC MarketScape, on detailed surveys and interviews with the vendors, publicly available information, and end-user experiences in an effort to provide an accurate and consistent assessment of each vendor's characteristics, behavior, and capability.

Market Definition

Application Modernization Services

Application modernization services are services geared toward transforming an organization's existing business applications to newer, up-to-date technologies that enhance the application's utility and value to its intended users and consumers. While many aspects of application modernization services are mature, there are some elements of modernization services delivery that are budding. Application modernization services can revolve around a variety of areas that include:

- **Infrastructure modernization.** These services center on upgrading the underlying infrastructure supporting applications and rehost or replatform legacy or older packaged applications to newer infrastructure (i.e., cloud and virtual infrastructure).

- **Packaged application upgrades.** These services center on upgrading existing packaged applications (e.g., SAP and Oracle) to the most recent or newer packaged application releases.

- **New custom development using modern technologies**. These services center on migrating custom-developed legacy applications (e.g., COBOL) into a new custom application built on newer development languages (e.g., open source, Ruby, and Python).

- **Custom application to packaged application migration**. These services center on migrating existing custom-developed applications (e.g., COBOL and Java) to commercially available packaged applications (e.g., Oracle, SAP, and Microsoft Dynamics).

- **Migration to SaaS.** These services center on migrating existing custom-developed (e.g., COBOL and Java) and/or packaged applications (e.g., SAP, Oracle, and Microsoft) to a SaaS or cloud-based applications.

- **Service-oriented architecture (SOA).** These services center on migrating existing applications (custom and/or packaged) to more modular SOA, containers, and microservices.

- **Instance consolidation.** These services center on consolidating application instances – whether custom developed (e.g., COBOL and Java), packaged, and/or cloud (e.g., SaaS).

- **New custom development using existing technologies.** These services center on developing new application code to extend life and utility of existing custom-coded applications and/or packaged applications.

Exceptions and Exclusions

Application modernization services, as evaluated in this research study, reviewed full end-to-end services delivery. While consulting and advisory activities are often elements of application modernization as it pertains to digital transformation, this study does not provide a deep analysis or assessment of the IT consulting or systems integration components of application modernization services. Rather, the assessment tends to focus more on modernization services that typically accompany those within custom application development and application management engagements, as well as ongoing application managed services.

Situation Overview

Digital transformation has emerged to be a key initiative for many enterprises. To this end, application modernization has surfaced to be a core component and enabler of enterprise digital transformation and a major element within the enterprise journey toward digital business. From upgrading underlying application infrastructure to migrating legacy applications to newer technology platforms, the term "application modernization" has evolved to take on a wide set of meanings. In addition, expanding

application portfolios, as well as enterprise needs to be quicker and more flexible in responding to customers' and prospects' needs, have accelerated digital priorities and there within imperatives to modernize applications. IDC has observed that:

- **Enterprises push further to host applications on cloud.** IDC has found that organizations have 46.2% of their application portfolio hosted on cloud today, and within the next three years, they anticipate that more than 60% of their application portfolios will be hosted on cloud (see Figure 2). Growth in cloud adoption is driven by multiple factors, including enterprise resiliency, customer intimacy, and improved financial management.

- **Application modernization priorities are on the rise.** According to results of IDC's November 2022 *Application Services Survey,* 61.6% of organizations rated application modernization as a top priority today, with more than 70% rating application modernization a top priority in the next two to three years (see Figure 3). Over the next 36 months, activities like upgrading packaged applications, migrating existing custom applications to packaged applications, developing new application code to extend the life of existing custom-coded applications, and upgrading the infrastructure supporting applications will grow more important as part of enterprise business and IT agendas and will be tactics organizations will most likely pursue in the next 24 months to achieve their business and IT goals.

- **Buyers seek providers with SaaS and modern application delivery expertise.** IDC's *Application Services Survey* found that when it comes to modernizing applications, organizations have varied preferences for capabilities that third-party services providers should possess. However, competencies in SaaS and modern application delivery stand out as most coveted (see Figure 4).

FIGURE 2

Application Portfolio on Cloud Managed by Third Party

Q. *Approximately what percentage of your organization's application portfolio would you estimate is hosted in a cloud environment today, and what percentage of your organization's application portfolio would you estimate will be hosted in a cloud environment in three years?*
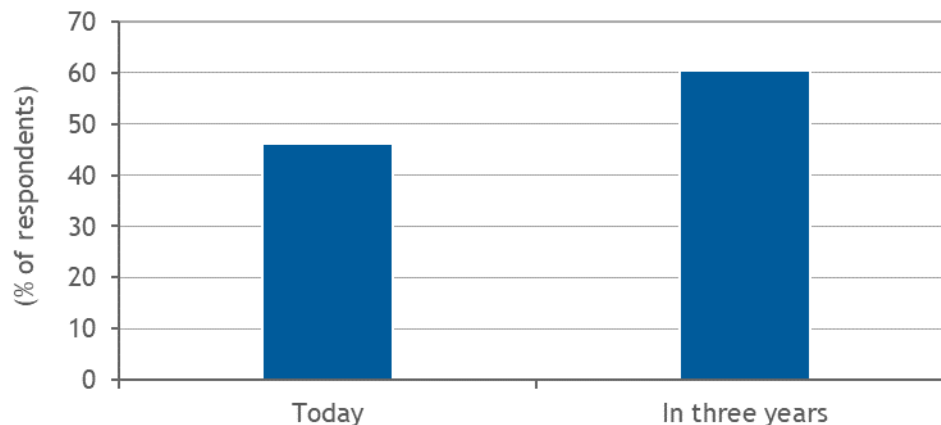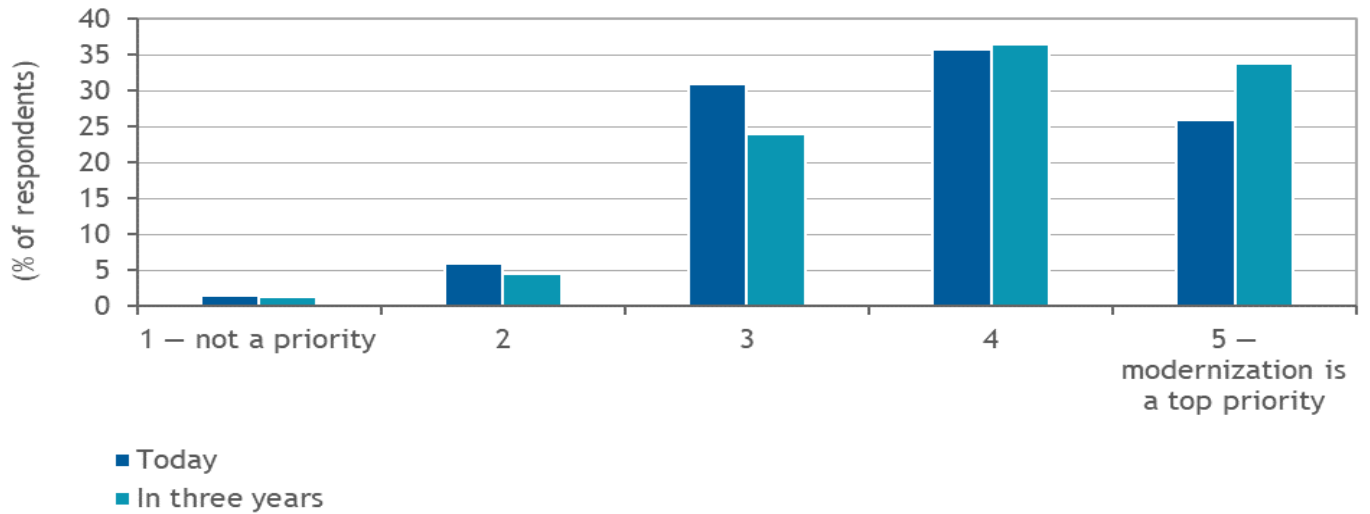

n = 702

Source: IDC's *Application Services Survey,* November 2022

FIGURE 3

Priority of Application Modernization

Q. *On a scale of 1 to 5 (where 1 = modernization is not a priority and 5 = modernization is a top priority), how would you rank application modernization as a strategic priority within your organization today and in the next three years?*
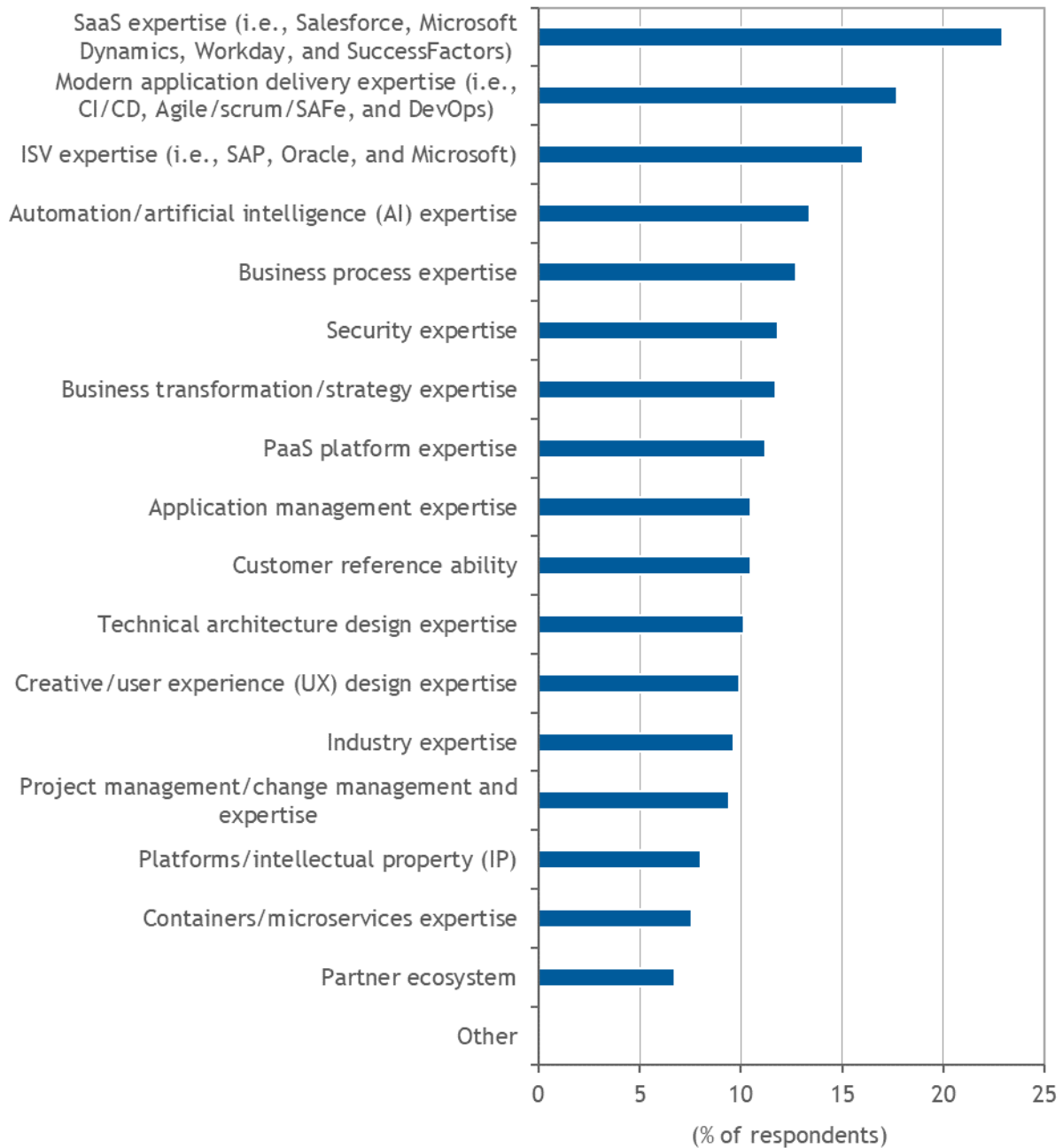

n = 702

Note: Scores are based on a scale of 1 to 5 (where 1 = modernization is not a priority and 5 = modernization is a top priority).

Source: IDC's *Application Services Survey,* November 2022

FIGURE 4

Top Application Modernization Capabilities

Q.   What top 2 capabilities do you believe your organization considers most important for third-party service providers to possess to support application modernization for your organization?

n = 702

Source: IDC's *Application Services Survey,* November 2022

Related Research

- *The Metrics That Matter for Modern Application Delivery* (IDC #US50423723, March 2023)
- *Application Modernization Standardization – Worldwide, 2023* (IDC #US50168023, February 2023)
- *IDC Survey Spotlight: Application Modernization Standardization – Industries* (IDC #US50167923, February 2023)
- *IDC Survey Spotlight: Application Modernization Standardization – United States* (IDC #US50038116, February 2023)
- *Application Modernization Standardization: Worldwide Regions, 2023* (IDC #US50038016, January 2023)
- *Worldwide Application Services, 2023* (IDC #US50037816, January 2023)
- *Market Analysis Perspective: Worldwide Intelligent Application Services, 2022* (IDC #US49621620, September 2022)
- *Worldwide Application Management Services Forecast, 2022-2026* (IDC #US49031122, May 2022)

Synopsis

This IDC study represents a vendor assessment of providers offering enterprise application modernization services through the IDC MarketScape model. The assessment reviews both quantitative and qualitative characteristics that define current market demands and expected buyer needs for application modernization services. The evaluation is based on a comprehensive and rigorous framework that assesses how each vendor stacks up to its peers, and the framework highlights the key factors that are expected to be the most significant for achieving success in the application modernization services market over the short and long terms.

"Modernizing applications has grown to be a major enterprise initiative, and organizations are hard at work transforming their applications portfolios to build business agility and achieve digital transformation and business objectives. Many early adopters of application modernization services have achieved business benefits from their modernized applications, and those successes have sparked other enterprises to make application modernization a higher priority within their business transformation imperatives." – Pete Marston, research director, Intelligent Application Services at IDC

About IDC

International Data Corporation (IDC) is the premier global provider of market intelligence, advisory services, and events for the information technology, telecommunications, and consumer technology markets. With more than 1,300 analysts worldwide, IDC offers global, regional, and local expertise on technology, IT benchmarking and sourcing, and industry opportunities and trends in over 110 countries. IDC's analysis and insight helps IT professionals, business executives, and the investment community to make fact-based technology decisions and to achieve their key business objectives. Founded in 1964, IDC is a wholly owned subsidiary of International Data Group (IDG, Inc.).

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