IDC MarketScape

IDC MarketScape: Canadian Datacenter Colocation and Interconnection Services 2022 Vendor Assessment

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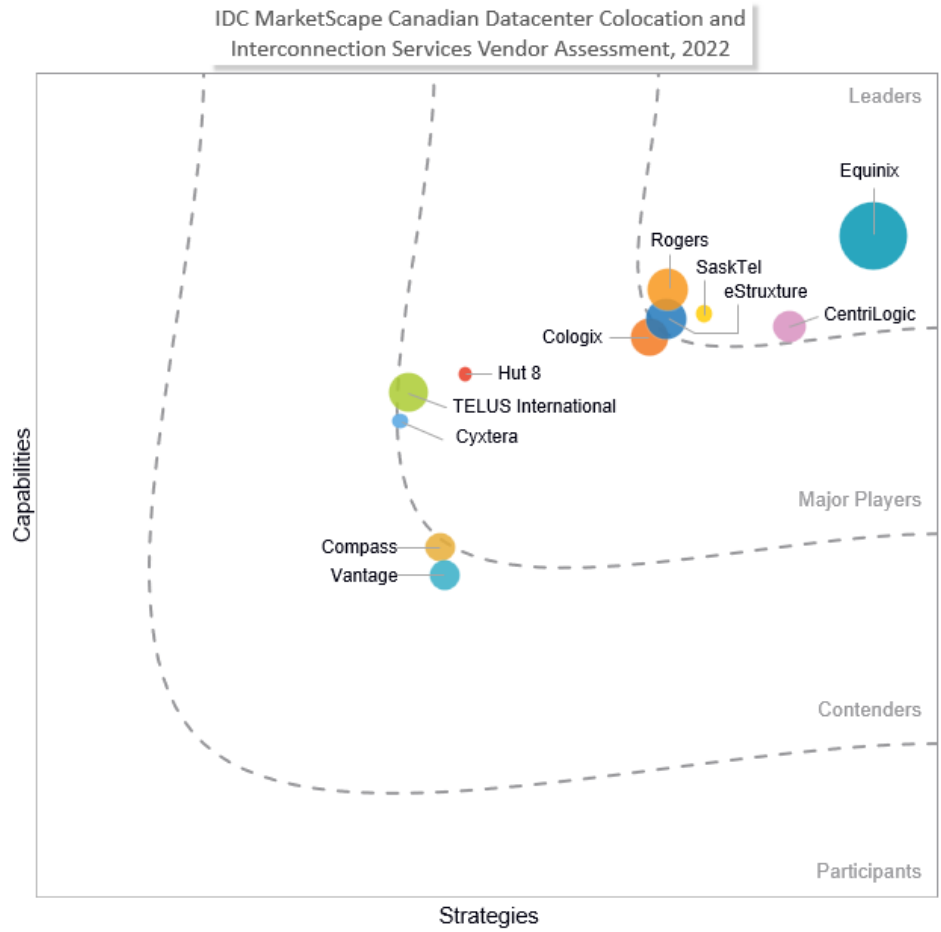
THIS IDC MARKETSCAPE EXCERPT FEATURES SASKTEL

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Canadian Datacenter Colocation and Interconnection Services Vendor Assessment



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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: Canadian Datacenter Colocation and Interconnection Services 2022 Vendor Assessment (Doc # CA49811122). All or parts of the following sections are included in this excerpt: IDC Opinion, IDC MarketScape Vendor Inclusion Criteria, Advice for Technology Buyers, Vendor Summary Profile, Appendix and Learn More. Also included is Figure 1.

IDC OPINION

Canadian organizations have been sourcing datacenter operations and management services from providers for many years. The market has evolved from full-scope datacenter outsourcing, typically by large enterprises, to selective outsourcing of colocation and managed hosting to cloud services. More than one-third of Canadian organizations currently purchase colocation or managed hosting services today. In 2017, IDC research found that colocation and managed hosting was the only form of managed IT services used by 12% of Canadian organizations. While the level of adoption of colocation and managed hosting has remained steady over the past few years with slow to moderate growth in adoption, the mix of datacenter services has evolved over time as traditional datacenter infrastructure has stretched into the cloud and become modern digital infrastructure.

Datacenters are platforms for cloud, connectivity, and applications, positioning them as an essential platform for the digital economy. Because of their central role of dense connectivity to captive, hosted, and cloud environments, third-party datacenters are becoming the core of the hybrid multicloud environment as similar to hyperscale cloud service providers (SPs), always-on and compliant infrastructure is critical for most enterprises and hyperscalers. Business resiliency is top of mind for most executives, and business continuity/disaster recovery (BC/DR) is an essential part of a resilience strategy.

Current developments are forcing executives to consider balancing their strategies and rethink their plans for using hosting services, with the result being that organizations are using datacenter services more often than before as they lock in sources of high-quality, resilient, and secure datacenter infrastructure to support their digital initiatives.

We are seeing the divergence of datacenter SPs into three major categories in the Canadian market: digital managed SPs, colocation and interconnection SPs, and cloud hosting SPs. Key distinguishing characteristics of these categories are datacenter ownership and degree of managed IT services offered. Digital managed SPs offer a broader range of services, from the datacenter and networks to the middleware and application layer, and own or lease their datacenters and technology stacks — or sometimes client datacenters. Colocation and interconnection SPs typically limit their service offering to datacenters and wide area networking and own their datacenters. Cloud hosting SPs is the newest category, with these vendors tending to offer managed services leveraging public cloud technology partners, thereby avoiding ownership of the technology stacks. The focus of this IDC study is providers of colocation and interconnection services, which generally fall into the colocation and interconnection and digital managed SP categories.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The scope of this IDC MarketScape includes service providers that offer remotely hosted datacenter services to the broader Canadian market, addressing the needs of organizations of all sizes. IDC considered more than 20 vendors of such offerings in Canada to be included in this IDC MarketScape. For inclusion in this IDC MarketScape, the vendor had to meet four criteria:

- Actively marketing datacenter colocation and hosting services in Canada
- Operate datacenters in Canada to provide customers with off-premises, multitenant datacenter services
- Have a minimum of one datacenter in at least two cities across Canada
- Earn more than C$5 million in annualized revenue from hosting infrastructure services (i.e., colocation, managed hosting, and interconnection services)

ADVICE FOR TECHNOLOGY BUYERS

The retail datacenter services market in Canada is mature and there are many providers across Canada. According to Industry Canada, there were approximately 1,000 companies in 2019 in the data processing, hosting, and related services industry, of which 95% were small businesses (under 100 employees with average revenue well under C$500,000 annually). Few vendors have the size and capital resources needed to provide service capabilities and datacenter quality required by enterprises. Despite the market maturity, the market continues to grow as datacenters are built across the country. This indicates that retail demand continues to grow across Canada, and datacenters are filling up. At the same time, much of the new datacenter capacity is being consumed by wholesale clients and several providers are specializing in this growing segment.

Demand for datacenter services in part is driven by many Canadian organizations experiencing problems due to aging and increasingly obsolete datacenters. In 2022, 60% of Canadian large and medium-sized organizations told IDC that the level of datacenter modernization does not easily meet their requirements for current operations or new initiatives. Moreover, only 18% of Canadian large and medium-sized organizations said they did not have any failures in their datacenters within the past year.

Getting Started

When evaluating vendors for sourcing datacenter services, IDC recommends a stepped approach with the following guiding principles:

- **Start with the business.** Assess how technology currently supports the strategy, plans, and business environment, and identify any gaps that exist. The gaps could include required technology investments as well as risk exposure.
- **What is on your server?** Infrastructure is nothing without applications. Technology leaders need to view datacenter services as a portfolio of solutions to support a company's applications and systems. This includes prioritizing applications, identifying which systems are core to the business and their associated support requirements, and identifying what delivery models are currently used. An optimized state matches applications and data with the appropriate infrastructure platform and model, on-premises or delivered by a third-party provider. IT plans should also include a migration road map that includes sunsetting, upgrading and, potentially, transitioning to the cloud.

- **What are your current IT management capabilities?** This includes a review of the datacenter operations, network solutions, and staffing and skills. Key in this step is the assessment of your ability to manage IT delivery and vendor relations.
- **No one right answer.** There are more delivery choices available on the marketplace than ever before, from on premises to remote management to private and public cloud. Factors such as regulatory compliance, including data residency, and financial options, such as operating expense versus capital expenditure, need to be taken into consideration. Flexibility and perhaps, most importantly, provider relationship are critical in driving the greatest return from technology. It is not an all-or-nothing decision. The ideal solution is not about one platform, one vendor, or multiple vendors but leveraging the options and choices you have to maximize the value of IT.

Key Questions to Ask

The datacenter colocation and interconnection vendor landscape continues to change. Provider differences include physical facility characteristics, regional footprint, partner ecosystems, connectivity, and value-added services. When considering a vendor for colocation and interconnection services, IDC advises that organizations ask the questions discussed in this section to guide their decision making.

Facilities

The fundamental value proposition of the third-party datacenter is the facilities. Many enterprise datacenters are aging and are struggling to keep up with the demands of digital transformation (DX) and IoT. Next-generation applications based on artificial intelligence (AI), machine learning (ML), and augmented reality (AR) technologies are placing workload demands on legacy datacenters that aren't sufficiently engineered to handle the power and cooling requirements. The commonly used power efficiency metric is power usage effectiveness (PUE) with a target to keep the number as close as possible to 1. In considering connectivity needs, ask yourself:

- Do you have high-density workloads, such as AI, ML, and AR, that require high-performance computing (HPC), integrated infrastructure, or hyperconverged appliances that increase rack density?
- Is your organization in an industry in which environmental factors, such as energy efficiency, are subject to governmental, media, or public scrutiny?
- Does government industry regulations require your datacenter to comply with or become accredited for certain engineering, environmental, or security standards or accreditations?

Connectivity

One of the key differentiators between an enterprise and a third-party datacenter is the density of the networks available in the facility. In an enterprise datacenter, typically, every network connection will need to be individually commissioned. In a third-party datacenter, many network SPs will have an established presence, and connections can be quickly established with internal physical cross-connects within the facility. The meet-me-room (MMR) is where data communications media physical connections converge and are interconnected. Within the MMR, services-facilitated cross-connections include voice circuits, data circuits, and IP traffic. An internet exchange (IX) point can also be present in an MMR to allow many organizations to interchange traffic without having to make physical interconnections between every possible pair of organizations.

Some enterprises require dense internet connectivity or are globally sensitive for latency. This requirement can be met in a number of ways, including:

- Close proximity to submarine cables and international landing stations for the internet,
- Software-defined WAN (SD-WAN) and cloud fabrics to enable virtual connectivity to other datacenters and cloud services, such as Equinix Fabric and Megaport
- Physical cloud on-ramps to cloud SPs within the facility.

When considering your connectivity needs, ask yourself:

- Is it important for the third-party datacenter provider to be either perceived as or actually is carrier neutral?
- Are you an over-the-top (OTT) or digital services company that requires diverse cloud connectivity?
- How important is connectivity to your internal and external cloud?
- Does your business require dense internet connectivity and is globally latency sensitive?

Value-Added Services and Ecosystems

In addition to connectivity services, many third-party datacenter providers offer a range of value-added services. These services range from basic services within the facility, such as remote hands for operational support and staging areas for infrastructure builds, to colocation and hosting services. Datacenter operators may also offer a range of sophisticated professional and cloud services, such as cloud migration/integration and security services, from their own resources or more commonly through alliances with professional services specialists within their ecosystem. This has been a comparatively recent evolution of datacenters in which they have been building communities or ecosystems to provide broader services within facility walls.

It is important for enterprises to consider the following value-added services questions when assessing a datacenter services vendor:

- Do you require a dense ecosystem of content, cloud, and network service providers?
- Do you require access to a physical or virtual ecosystem of your business' supply chain to deliver digital services or experiences?

Geographic Focus

Data sovereignty laws, edge workload deployments, end-user proximity to datacenters to reduce latency, and other geographic considerations are important for enterprises to consider when assessing a datacenter colocation and interconnection provider. Ask yourself:

- What constitutes the edge for you (country, province, city) and how far do you need to push out into it?
- Which countries you intend to expand to have data sovereignty laws that require in-country compute and storage?
- Is the current regional footprint and expansion plans of the datacenter provider consistent with your expansion plans?

Scale Is Important But Providers of All Size Can Offer Value

This IDC MarketScape examined a broad range of providers addressing the datacenter services needs of enterprise customers. IDC could have assessed many more providers as the barriers to enter the

market are low. As a provider can easily lease datacenter space and power instead of making large capital investments in facilities, the technology platforms to deliver managed services are more available and increasingly can leverage public cloud infrastructure as a service (IaaS) and operations staff can be staffed with subcontractors rather than hiring employees.

Capital investment is an important factor in the ability to deliver datacenter services, particularly if providers want to scale to lower their costs, invest in innovative technologies, and ramp up go-to-market efforts – attributes of market leadership in the datacenter space. In the issue of capital investment, size is important – so the larger the vendors, the more capital they are likely to have access to.

At the same time, for the individual customer considering datacenter services, size is not necessarily better. Some of the customers we spoke with were extremely satisfied with the outcomes they received from their service engagements with their provider – even though the provider is small. The same was found with some customers of the largest vendors we studied.

Customers are advised to prioritize their requirements and consider several (or more) of the providers able to meet them in terms of service delivery, ability to grow with you, relationship management, and cost constraints. Find the right provider that fits your requirements and culture.

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.

SaskTel

SaskTel is positioned in the Leaders category in the 2022 IDC MarketScape for Canadian datacenter colocation and interconnection services.

Saskatchewan Telecommunications (SaskTel) is a Crown corporation of the Province of Saskatchewan that provides ICT services and solutions in that province, across Canada, and around the world. As a Crown corporation, SaskTel's overall strategic direction aligns to the priorities of the provincial government while meeting the needs of the market. The province is committed to invest in SaskTel to support economic growth of other industries and consumers in the province by expanding its rural broadband communication services and its suite of business services. Today, SaskTel offers businesses wireless and wireline connectivity, managed network services, managed security services, datacenter and cloud infrastructure services, and collaboration and conferencing services. SaskTel employs 3,400 people across 64 Saskatchewan communities and the four Western Canada provinces. SaskTel also has its SaskTel International subsidiary that provides software and professional services to communication service providers worldwide, including Bahamas, Mozambique, the Philippines, Tanzania, Trinidad, and the United States.

SaskTel has been delivering datacenter services to external clients for more than 15 years. It offers colocation, managed hosting, cloud backup, and cloud disaster recovery services. SaskTel's datacenter business revenue is evenly split between colocation and managed hosting. Clients can purchase from a flexible set of service options, such as rack size, network connectivity, power, and support plans. Customers can opt for caged environments for greater security. In addition, SaskTel offers managed network and managed security services and supports clients with a 24 x 7 x 365

network operations center. Microsoft is a key technology partner for SaskTel, with SaskTel incorporating Microsoft Azure solutions into its future offering road map. Cloud hosting is becoming an important option for clients, and SaskTel offers its cloud hosting platform from its Regina and Saskatoon datacenters. SaskTel's cloud access services provide private interconnection from the customer's network to Microsoft Express Route, AWS Direct Connect, Google Cloud Interconnect, Oracle Fast Connect, and IBM Direct Connect.

SaskTel owns all its six datacenters, three in Regina and three in Saskatoon. The location of the datacenters enables customers to have geo-redundancy within and between the province's two largest cities. Four of the datacenters have colocation space, while two are reserved for managed hosting and cloud hosting services with no customer access. SaskTel has 41,000 sq ft of usable raised floor space, and it has datacenter capacity for customers. All colocation datacenters have multilevel physical security zones, biometric security access, onsite customer workrooms, fault-tolerant cooling and power, and multiple network connectivity suppliers. Two of the colocation datacenters are Uptime Tier III certified and the other two are designed to those standards. The Tier III certified datacenters have availability SLAs up to 99.999% and the other datacenters have availability up to 99.99%. SaskTel offers remote hands, migration planning, and equipment installation services for its colocation datacenters. All six datacenters are certified as SOC Type 2. SaskTel also has presence in five internet exchanges in Vancouver, Toronto, Seattle, Minneapolis, and Chicago.

SaskTel's differentiation in the Canadian market is its base in Saskatchewan. Among the vendors assessed in this IDC MarketScape, alone has datacenters in Saskatchewan. Though most clients are based in Saskatchewan, many are not, and SaskTel has datacenter customers in Canada and the United States. It has invested in go-to-market capabilities to support further expansion of its business outside Saskatchewan. SaskTel has customers in government, healthcare, mining, financial services, energy, wholesale and distribution, and sports and entertainment.

SaskTel's positioning is that it has the scale and capabilities of a large Canadian ICT service provider that focuses on a regional market that is underserved. One element of its value proposition in datacenter services is that it is a financially stable provider with substantial investments across Saskatchewan. Another element is its technology and process expertise in its SaskTel IT team, which datacenter service customers are able to access. The team is available to support customers in the design, deployment, and management of their colocation environment or for fully managed hosting. Another element is its ability to support customers holistically with voice and data communication services and IT services, for both professional and managed service engagements. Finally, SaskTel is also able to support Saskatchewan organizations accelerate digital transformation by leveraging SaskTel's experience in transforming itself. This encompasses implementing new technologies like IoT, 5G, AI, and other technologies. It also encompasses cloud services, and SaskTel is investing its cloud capabilities to enable hybrid cloud strategies and round out its cloud offering portfolio.

Strengths

SaskTel's niche is Saskatchewan, but its strategy and capabilities are well aligned to the needs of companies in that province and beyond. SaskTel's strategy for extending edge workloads and supporting hybrid and multicloud leverages its own and partners' R&D. It offers value-added services like managed security and managed applications, and its offering road map includes emerging requirements like multicloud networking, a cross-cloud management control plane, bare metal, and DCIM.

From a capabilities perspective, SaskTel has floor space and power capacity to meet customer demand. SaskTel uses several pricing models, giving customers flexibility when purchasing datacenter services, and offers several pricing options to meet customer budget needs. Its offering has essential and value-added functionality that clients are looking for. IDC research indicates the market has positive perceptions on SaskTel's datacenter security, connectivity options, range of services, and price competitiveness. Furthermore, the market has a positive impression of SaskTel's reputation for customer satisfaction. Clients that IDC interviewed stated that SaskTel exceeded their expectations in terms of value for money, governance of their datacenter service engagements, and overall satisfaction.

Challenges

An obvious challenge for SaskTel is that its datacenters are in Saskatchewan. SaskTel does have limited market awareness outside Saskatchewan, which can be addressed through out-of-province marketing and promotional activities. SaskTel's reach across Canada can be enhanced through revising its channel strategy for sales and delivery. SaskTel has an ESG strategy and framework that adheres to ISO 14001 environmental management standards. However, its datacenters are not powered on 100% renewable energy due to power sources available in Saskatchewan.

Consider SaskTel When

SaskTel is based in Saskatchewan but not limited to the province, and it has strengths seen in larger datacenter service providers. Consider SaskTel if you are an organization that needs to deploy workloads with low latency and high availability in the Prairie provinces.

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.

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

Colocation services are defined as a customer's use of a third party's datacenter facilities (i.e., physical floor/cage/rack space, network capacity, and HVAC/power infrastructure) in which the customer operates its own servers/storage systems, network equipment, and other types of infrastructure:

- **Retail colocation:** This segment includes the rental of rack/cage/cabinet space in the datacenter, network capacity within the datacenter, and access to/use of critical facilities infrastructure such as power and cooling. The customer retains ownership of the equipment housed in the datacenter (typically servers, storage, and networking devices such as firewalls and load balancers) and controls and manages the IT environment. Contracts are typically short term to medium term in duration and include a reserved amount of power per rack.
- **Wholesale colocation:** In this segment, the customer leases the building/shell or data hall/suite level rather than the smaller scale of retail colocation (racks/cages/cabinets). Projects generally involve heavily customized builds, although many operators in this segment are moving toward a mix of build-to-suit and turnkey offerings. Customers of wholesale colocation are typically hyperscale content and media/entertainment providers, scale-oriented cloud service providers, and hosting, IT managed services, and telecommunications companies.
- **Interconnection:** Colocation providers facilitate digital exchange points for network providers, internet peering providers, cloud providers, content providers, managed service providers, and enterprises to connect to each other's networks. The modern hyperconnected digital ecosystem relies on low-latency scalable bandwidth. These carrier-neutral facilities offer direct one-to-one, one-to-many, or many-to-many connectivity as required by each segment. This is an essential aspect of the colocation business and will become increasingly important in the future.
- **Managed services:** Colocation providers also offer a range of managed services to enterprises including remote configuration, on-demand compute, and server capabilities, as well as monitoring, security, and cabling services.

For more information on the market definitions, see *IDC's Worldwide Services Taxonomy, 2022* (IDC #US47769222, July 2022).

LEARN MORE

Related Research

- *Market Analysis Perspective: Canada Hosting Services and Colocation, 2021* (IDC #CA47050521, October 2021)
- *IDC MarketScape: Worldwide Datacenter Colocation and Interconnection Services 2021 Vendor Assessment* (IDC #US46746121, June 2021)
- *IDC MarketScape: Canadian Cloud Professional Services 2021 Vendor Assessment* (IDC #CA46215320, January 2021)
- *Buyers Guide 2019: Canadian Datacenter Services* (IDC #CA43803919, September 2019)

- *IDC MarketScape: Canadian Datacenter Operations and Management Services 2019 Vendor Assessment* (IDC #CA44463419, April 2019)

Synopsis

This IDC study represents a vendor assessment of the Canadian datacenter colocation and interconnection services market through the IDC MarketScape model. It covers a variety of vendors including global and Canada-based firms. The research is a quantitative and qualitative assessment of many characteristics that buyers consider when selecting a datacenter colocation provider. This evaluation is based on a comprehensive set of parameters important to meeting the customer's current and future needs for digital infrastructure involving datacenter colocation. This IDC MarketScape covers 11 vendors participating in the Canadian datacenter colocation and interconnection services market.

"Many Canadian organizations continue to expand their use and spending on colocation and interconnection services as datacenters have evolved to become critical elements of digital infrastructure," according to Jason Bremner, research vice president, Industry and Business Solutions at IDC. "The cost to maintain and expand a high-quality datacenter to meet the needs of today's digital business operations continues to grow. As such, we see organizations weighing buy versus build decisions more. Factors shaping those decisions are changing and buyers should carefully consider which provider best fits their needs."

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. IDC helps IT professionals, business executives, and the investment community make fact-based decisions on technology purchases and business strategy. More than 1,100 IDC analysts provide global, regional, and local expertise on technology and industry opportunities and trends in over 110 countries worldwide. For 50 years, IDC has provided strategic insights to help our clients achieve their key business objectives. IDC is a subsidiary of IDG, the world's leading technology media, research, and events company.

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