Market Share

Worldwide Cloud Systems Management Software Market Shares, 2016: Year of Monitoring and Analytics Growth
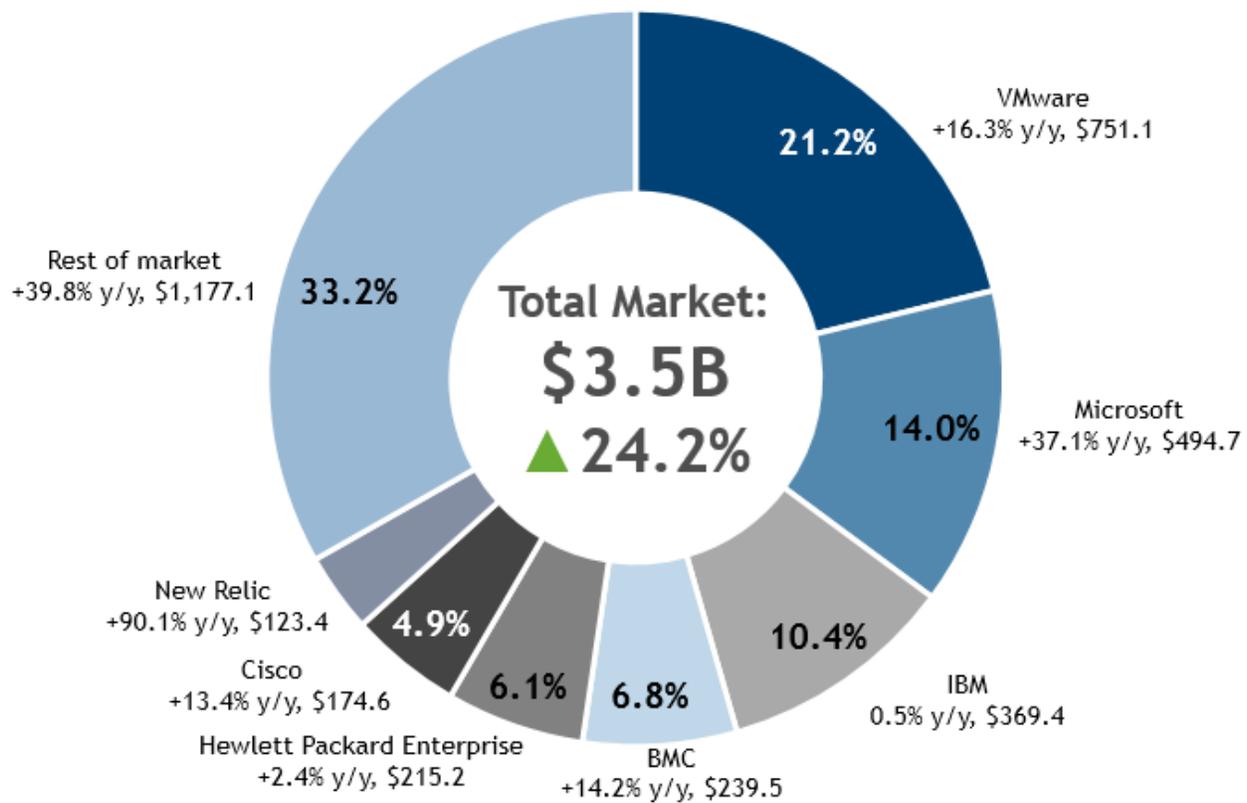
Mary Johnston Turner

THIS IDC MARKET SHARE EXCERPT FEATURES VMWARE

IDC MARKET SHARE FIGURE

FIGURE 1

Worldwide Cloud Systems Management Software 2016 Share Snapshot

Note: 2016 Share (%), Growth (%), and Revenue ($M)

Source: IDC, 2017

IN THIS EXCERPT

The content for this excerpt was taken directly from IDC Market Share: Worldwide Cloud Systems Management Software Market Shares, 2016: Year of Monitoring and Analytics Growth. (Doc # US41375617). All or parts of the following sections are included in this excerpt: Executive Summary, Market Share, Who Shaped the Year, Market Context, Appendix and Learn More. Also included is Figures 1, 2, 3, 4, 5 and 6 and Table 1.

EXECUTIVE SUMMARY

In 2016, the worldwide cloud systems management software market saw significant increase in demand for monitoring and analytics solutions optimized for multicloud environments. Enterprise buyers fueled double-digit growth, and in some cases, triple-digit growth for vendors offering proven multicloud applications performance management (APM), infrastructure performance monitoring, IT operations analytics, capacity analytics, and cost optimization. Demand for standalone provisioning, configuration, and orchestration solutions slowed somewhat as more and more buyers focused on deploying integrated multicloud management platforms that offer a full suite of functions.

Adoption of SaaS-based cloud systems management solutions also increased, including subscriptions to management and monitoring services offered by major public cloud IaaS providers. Public cloud IaaS vendors such as Amazon Web Services (AWS) and Google Cloud Platform often monetize basic configuration and orchestration functionalities solely as part of compute charges and do not recognize management software or SaaS revenue for those functions. As a result, those vendors are taking some revenue away from licenses for cloud management portals and provisioning platforms, without contributing to the overall size of the market. In most cases, these vendors do monetize monitoring and analytics services with separate charges, which does contribute to the overall market size for cloud systems management software worldwide.

VMware continued to lead the market in terms of revenue, with Microsoft taking the second spot. Some of the fastest-growing vendors included Dynatrace, New Relic, AppDynamics (recently acquired by Cisco), Datadog, AWS, ServiceNow, Oracle, and Splunk.

This IDC study discusses 2016 vendor shares and market activity across the worldwide cloud systems management software market.

"IDC estimates that worldwide spending on commercial cloud systems management software and SaaS solutions grew 24.2% and totaled $3.5 billion in 2016," states Mary Johnston Turner, IDC research vice president, Enterprise Systems Management Software. "Market demand continues to be strongest among enterprise customers in the Americas where large-scale multicloud architectures supporting a range of mission-critical workloads are becoming the norm. Demand for multicloud APM, IT operations analytics, capacity management, and cost optimization grew, with more and more customers seeking cloud management platforms that provide a unified monitoring, analytics, and automation environment using API-based integrations."

ADVICE FOR TECHNOLOGY SUPPLIERS

The worldwide cloud systems management software market continues to expand rapidly as increasing numbers of enterprise and service provider customers embrace multicloud architectures for a wide range of production and DevOps workloads. Customers are gaining confidence with their ability to

optimize multicloud environments that match workloads across a mix of on-premise and/or public cloud infrastructure, development platforms, and software-as-a-service options.

As part of this transition, customers are shifting priorities away from simply automating cloud IaaS provisioning and self-service and putting greater emphasis on application performance, infrastructure capacity and cost optimization, configuration compliance, and integrated service management workflows. Enterprise customers are becoming more and more comfortable with SaaS-delivered cloud management solutions and are seeking management platforms that support unified, API-based integrations across monitoring, analytics, governance, reporting, and automation.

To take full advantage of this rapidly rising cloud systems management software market, technology vendors need to:

- Offer enterprise customers cost-effective, unified cloud systems management software solutions and licensing options including SaaS options. IDC believes customer purchasing preferences are shifting toward multifunction management software and SaaS suites and unified licenses in an effort to reduce complexity and better manage budgets, as they transition from traditional tools to next-generation, cloud-enabled management solutions – whether SaaS or on-premise. Successful vendors are making it easier for customers to transition from traditional product-specific licensing to more unified and integrated management solutions. Subscription usage-based pricing models and try-and-buy options are also important to many customers.

- Provide open API integrations between on-premise and public cloud-based management solutions that will allow customers to create the mix of services and tools needed to monitor, manage, and optimize the full range of resources included in today's multicloud environments. Customers will increasingly desire the ability to link performance, capacity, and cost analytics to provisioning and migration automation and service management ticketing systems on a seamless, real-time basis.

- Engage with MSPs and other midtier and niche cloud service providers. IDC expects that hyperscale cloud service providers will continue to largely rely on internally developed and open source management software solutions, but smaller service providers are expected to become increasingly important channels and partners for cloud management software and SaaS. It will be important for software and SaaS providers to engage with this emerging set of public cloud providers, including industry clouds, in the coming years.

In addition to modern, cloud-native workloads, IDC sees growing numbers of enterprise IT teams evaluating and moving legacy workloads to public cloud infrastructure when the economics and operational considerations make sense. After years of resisting in-house chargeback for cloud services, more and more enterprises are recognizing the need to take a unified view of cost, security, and performance across all workloads and cloud assets, if only to ensure that the enterprise can maintain regulatory compliance, protect its information assets, and hold down infrastructure costs.

MARKET SHARE

The worldwide cloud systems management software market totaled $3.5 billion in 2016, which represents an increase of 24.2% over 2015 (see Table 1). The top vendors by share were VMware, Microsoft (including Azure), and IBM. APM and IT operations analytics vendors such as New Relic, Splunk, Dynatrace, Datadog, and AppDynamics as well as AWS were some of the fastest-growing vendors. ServiceNow and Oracle also showed significant growth, serving customers seeking unified,

fully functioning SaaS-based cloud management platforms. Revenue from SaaS-based solutions increased 78%, while on-premise solutions grew just 15%. This market total was consistent with prior forecasts.

TABLE 1

Worldwide Cloud Systems Management Software Revenue by Vendor, 2014–2016 ($M)

	2014	2015	2016	2016 Share (%)	2015-2016 Growth (%)
VMware	505	646	751.1	21.2	16.3
Microsoft	268	360.8	494.7	14	37.1
IBM	340	367.4	369.4	10.4	0.5
BMC	195	209.7	239.5	6.8	14.2
Hewlett Packard Enterprise	199	210.2	215.2	6.1	2.4
Cisco	118.4	154	174.6	4.9	13.4
New Relic	21.6	64.9	123.4	3.5	90.1
Splunk	18.4	60.1	95.5	2.7	58.9
Oracle	30	55.7	84.8	2.4	52.2
ServiceNow	28.4	51.9	79	2.2	52.3
Dynatrace	9.4	35.9	77.2	2.2	115
Other	557.8	638.1	840.5	23.71	31.7
Total	2,291.00	2,854.70	3,545.00	100	24.2

Source: IDC, July 2017

The 2016 market share table lists 24 named vendors with more than $10 million in cloud systems management software and/or SaaS revenue. The top 7 vendors represent approximately two-thirds of the market. It is important to acknowledge the fact that dozens of smaller cloud systems management software vendors are also active in the market and collectively represent over $1 billion of revenue.

WHO SHAPED THE YEAR

This Excerpt was prepared for VMWARE but also included the following vendors: Microsoft, and ServiceNow as well as leading APM vendors Dynatrace, New Relic, and AppDynamics.

- VMware's continued market leadership and growth reflected the company's ongoing efforts to offer customers a unified approach to cloud management monitoring, analytics, and automation. Since the 2012 introduction of vCloud Suite and the 2013 launch of vSphere with operations management, VMware has used its management software portfolio to differentiate vSphere and help maintain overall corporate revenue growth, even as its core hypervisor market has matured and standalone hypervisor sales have flattened. As many enterprises have opted to build private clouds using VMware technology, the company's management offerings have been widely deployed into cloud environments. At the VMworld 2016 customer event in San Francisco, VMware introduced a series of new products, technology previews, and betas that demonstrate the company's commitment to evolving its infrastructure management portfolio to support the needs of multicloud enterprise strategies. These included VMware Cloud Foundation, a hyperconverged, software-defined datacenter (SDDC) platform designed to support both public and private clouds. IBM was introduced as the first public cloud service provider to make VMware Cloud Foundation available as a public cloud service. VMware also introduced a technology preview of cross-cloud services, a new set of SaaS-delivered solutions, to provide consistent discovery, microsegmentation, monitoring, analytics, and governance of cloud resources across multiple public and private clouds. Cross-cloud services leverages NSX technology as well as selected vRealize cloud management platform IP and new, organically developed code. VMware's cross-cloud architecture, an emerging VMware framework for enabling workload portability and management across private and public clouds, was also previewed.

MARKET CONTEXT

In 2016, the worldwide cloud systems management software market saw continued strong growth. As shown in Figure 2, the Americas continued to be the largest region with 71.1% share due to the relative majority and larger scale of many enterprise and public IaaS and PaaS clouds in the region. This represented a noticeable increase over the estimated 59.3% share for the Americas in 2015.

FIGURE 2

Worldwide Cloud Systems Management Software Revenue Share by Region, 2016
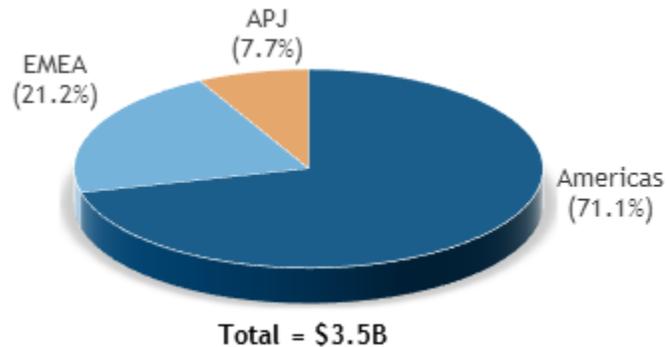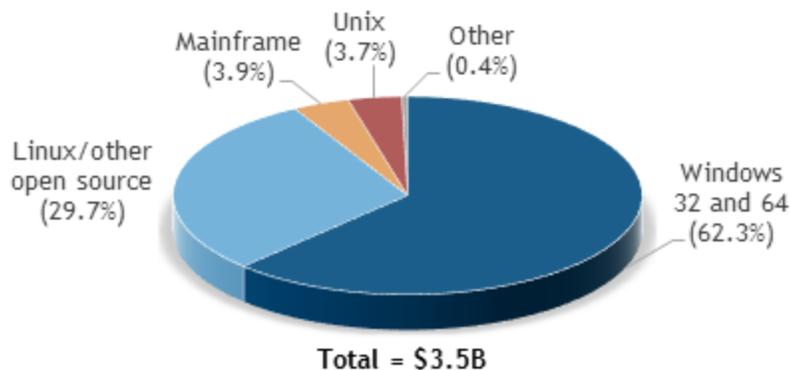

Source: IDC, July 2017

In 2016, Windows continued to represent the majority of the market with 62.3% of revenue, although this was a slight drop from the 63.3% previously estimated. Linux increased its share to 29.7% (see Figure 3).

FIGURE 3

Worldwide Cloud Systems Management Software Revenue Share by Operating Environment, 2016

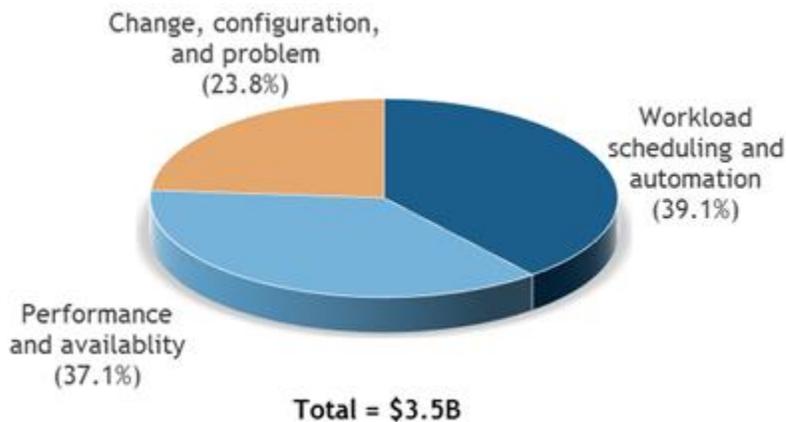Source: IDC, July 2017

Significant Market Developments

In 2016, enterprises around the world acknowledged that multicloud architectures spanning on-premise and hosted private clouds, several public clouds, and selected legacy physical and virtual platforms will dominate most IT infrastructure strategies for a number of years. Organizations that were once happy to let individual developer teams dabble with public cloud services now recognize the cost, complexity, and potential business risk of lightly managed multicloud environments. As a result, more and more enterprises are working to implement unified multicloud management environments that not

only automate infrastructure provisioning but optimize capacity utilization, application performance, IT staff productivity, and over cloud spending.

This increased emphasis on performance and analytics can be seen in the shifting allocation of cloud systems management software revenue across IDC's functional markets as defined by *IDC's Worldwide Software Taxonomy, 2016* (IDC #US41572216, July 2016). As shown in Figure 4, IDC estimates performance and availability represented 37.1% of the market. Performance and availability was the fastest-growing functional market segment, increasing approximately 50% in terms of revenue compared with 2015. Workload scheduling and automation continues to be the largest segment of the market, although its growth rate is slowing to under 15% as it loses some ground to public cloud IaaS providers, unpaid open source, and on-premise server and converged infrastructure vendors, which have provided advanced provisioning and orchestration without recognizing revenue for management. Additional information on functional market dynamics will be included in the upcoming update to the 2017-2021 cloud systems management software forecast.

FIGURE 4

Worldwide Cloud Systems Management Software Revenue Share by Functional Market, 2016
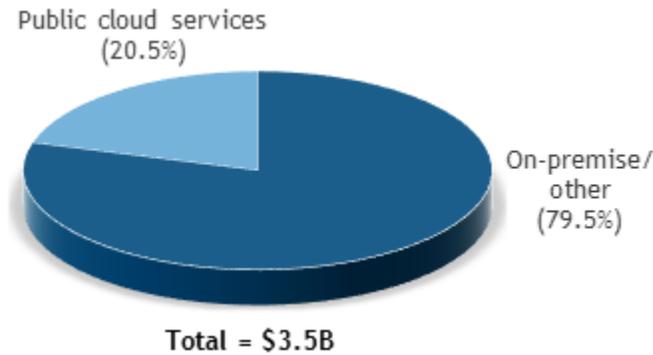

Source: IDC, July 2017

SaaS-based delivery of cloud systems management solutions has continued to increase, particularly in the performance and availability segment, which includes APM, IT operations analytics, and capacity optimization solutions. As shown in Figure 5, IDC estimates SaaS delivered (i.e., public cloud services deployment type) public cloud services represented 20.5% of the market in 2016. This equals revenue of about $727 million, a 78.1% increase over the previously estimated 2015 SaaS delivered revenue of $408 million for cloud systems management software worldwide.

#US41375617e   7

FIGURE 5

Worldwide Cloud Systems Management Software Revenue Share by Deployment Type, 2016

Public cloud services (20.5%)

On-premise/other (79.5%)

Total = $3.5B

Source: IDC, July 2017

Private/hybrid cloud enablement continues to represent about two-thirds of the market, slightly higher than previous forecasts (see Figure 6). Larger cloud service providers continue to resist purchasing third-party cloud systems management software solutions and instead rely on homegrown or open source management technologies. As a result, cloud systems management software market continues to be driven by enterprise spending for private and hybrid/multicloud management rather than to enable public cloud services.

FIGURE 6

Worldwide Cloud Systems Management Software Revenue Share by Private/Hybrid and Public Cloud Enablement, 2016

Public cloud enablement (32.7%)

Private/hybrid enablement (67.3%)

Total = $3.5B
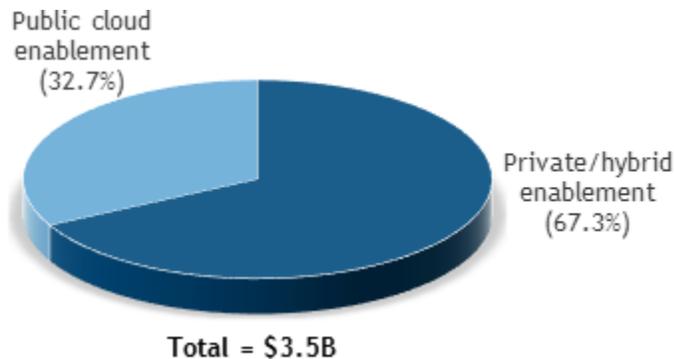
Source: IDC, July 2017

METHODOLOGY

The IDC software market sizing and forecasts are presented in terms of commercial software revenue. IDC uses the term *commercial software* to distinguish commercially available software from custom software. Commercial software is programs or codesets of any type commercially available through sale, lease, rental, or as a service. Commercial software revenue typically includes fees for initial and continued right-to-use commercial software licenses. These fees may include, as part of the license contract, access to product support and/or other services that are inseparable from the right-to-use license fee structure, or this support may be priced separately. Upgrades may be included in the continuing right of use or may be priced separately. These are counted by IDC as commercial software revenue.

Commercial software revenue excludes service revenue derived from training, consulting, and systems integration that is separate (or unbundled) from the right-to-use license but does include the implicit value of software included in a service that offers software functionality by a different pricing scheme. It is the total commercial software revenue that is further allocated to markets, geographic areas, and sometimes operating environments. For further details, see *IDC's Worldwide Software Taxonomy, 2016* (IDC #US41572216, July 2016).

Bottom-up/company-level data collection for calendar year 2016 began in January 2017, with in-depth vendor surveys and analysis to develop detailed 2016 company models by market, geographic region, and operating environment.

The data presented in this document is IDC estimates only.

Note: All numbers in this document may not be exact due to rounding.

MARKET DEFINITION

The worldwide cloud systems management software market is an IDC competitive market that reflects portions of revenue reported in the following functional markets as described in *IDC's Worldwide Software Taxonomy, 2016* (IDC #US41572216, July 2016):

- Workload scheduling and automation
- Change and configuration management
- Performance management
- Event management
- Problem management

Revenue estimates for this competitive market include license, maintenance, and subscription revenue for packaged software and SaaS solutions used to actively manage on-premise solutions and hosted private and hybrid clouds as well as public cloud services environments, including virtual private clouds, which IDC considers to be public cloud services.

It is important to note that in cases where cloud systems management software functionality is bundled as part of converged or integrated hardware platforms or free features of public cloud services, software value is not recognized as revenue, unless it is tracked and reported by the hardware or cloud services vendor using separate SKUs or similar revenue recognition methods. Professional services, training, and implementation support services are excluded as well.

IDC's revenue estimates include flagship cloud management software solutions and associated systems management software, management packs, and SaaS to the extent that they are sold and deployed specifically to enable the operation of private, public, and/or hybrid cloud environments.

In general, cloud environments will have many of the following cloud systems management software capabilities actively in use:

- Self-service cloud infrastructure, middleware, and application provisioning automation, including a service catalog and policy-based life-cycle management capabilities
- Automated infrastructure and virtualization configuration automation and workload migration to enable elastic infrastructure resource pooling and sharing across multiple workloads and user groups
- Orchestration solutions to allow integrated provisioning, migration, and control of complex cloud workloads and enable cloud infrastructure and services on a coordinated basis
- The ability to track cloud resource consumption to support life-cycle management, capacity planning, and (optionally) chargeback/showback

In addition, as cloud environments become more mature, many organizations will include additional, more sophisticated capabilities including:

- Performance monitoring and analytics for workloads and infrastructure used to enable and deliver public and private cloud services and optimize resource capacity
- Cloud service brokering, governance, and service-level management
- Root cause analysis and problem remediation software to optimize ongoing SLAs and end-user experiences
- Automated workload management to support complex data and process flows across cloud infrastructure
- API-based integrations

IT environments that are highly virtualized, but do not include the ability to dynamically scale and share resources and provision resources on a self-serve, consumption-aware basis, do not qualify for this study, since end-user self-service and consumption-based metering are critical elements of any cloud environment.

Systems management software capabilities delivered via the SaaS model are only included to the extent that they are used to enable management of cloud environments, as described in previous sections. The fact that systems management software is sold via a SaaS public cloud service model does not necessarily mean it is included in the estimates for this market, since many systems management SaaS solutions are used to manage and monitor resources that operate in noncloud environments and architectures.

RELATED RESEARCH

- *IDC Innovators: Multicloud Management, 2017* (IDC #US41375217, April 2017)
- *IDC MaturityScape: Multicloud Management 1.0* (IDC #US42132917, March 2017)
- *IDC's Forecast Scenario Assumptions for the ICT Markets and Historical Market Values and Exchange Rates, Version 1, 2017* (IDC #US42418817, March 2017)
- *Worldwide Cloud Systems Management Software Forecast, 2017-2021* (IDC #US41374417, February 2017)
- *Capacity Optimization Ranks as Top Cloud Management ITOA Priority* (IDC #US41373517, February 2017)
- *Effective Multicloud Management Strategies Support Digital Transformation and Business/IT Collaboration* (IDC #US41672016, August 2016)
- *Worldwide Cloud Systems Management Software Market Shares, 2015: Year of Continued Expansion* (IDC #US41374317, June 2016)

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.

Global Headquarters

5 Speen Street
Framingham, MA 01701
USA
508.872.8200
Twitter: @IDC
idc-community.com
www.idc.com