IDC MarketScape

IDC MarketScape: Worldwide Virtual Client Computing 2019–2020 Vendor Assessment

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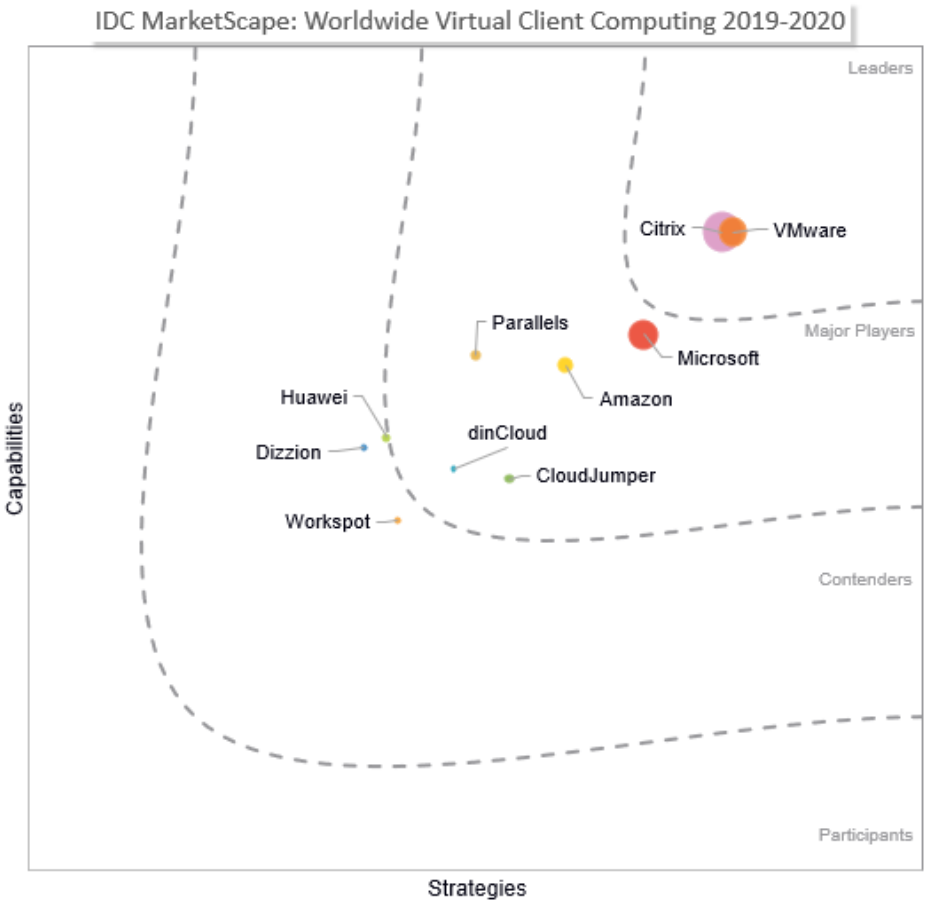
THIS IDC MARKETSCAPE EXCERPT FEATURES VMWARE

IDC MARKETSCAPE FIGURE

FIGURE 1

IDC MarketScape Worldwide Virtual Client Computing Vendor Assessment



Source: IDC, 2020

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

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IN THIS EXCERPT

The content for this excerpt was taken directly from IDC MarketScape: Worldwide Virtual Client Computing 2019–2020 Vendor Assessment (Doc # US45752419). 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

Virtual client computing (VCC) includes software and systems designed to abstract applications and desktops away from the client device, allowing for additional layers of control and security. These systems may simply present another operating system on the device itself; draw on resources from a private cloud, a hosted environment, or the public cloud; or use a combination of these features along with the emerging concepts of edge computing and adaptive design to create complex digital workspaces.

For decades, the VCC market has revolved around a core set of compatibility, mobility, and security use cases and been tied to expensive/lengthy infrastructure purchase cycles. This has recently changed, first with the advent of public cloud sourcing for infrastructure resources and with an evolution in the capability to create integrated "digital workspaces."

The advent of public cloud infrastructure resources for virtual applications or desktops (aka desktop as a service [DaaS]) in theory allows for rapid provisioning and deprovisioning of compute resources. The operational reality has proven less utopian, although vendors have worked hard over the past few years to boost their hybrid cloud management capabilities in this space.

Digital workspaces are an emerging area in which the vendor expands the desktop workspace in a variety of ways, usually in conjunction with its existing virtualization technology. This expansion is generally around either task aggregation or work observation, with a focus on different approaches to enhancing individual awareness of and simplification of tasks to be completed. The workspace may also include edge computing, IoT devices, and artificial intelligence (AI) for aggregation, execution, or organization of information/tasks.

It remains to be seen if the digital workspace will be most logically thought of as a separate market from VCC or if VCC capabilities are central enough to the digital workspace capability that workspace is an extension of the VCC market. IDC will continue to research and publish on this topic over 2020.

IDC MARKETSCAPE VENDOR INCLUSION CRITERIA

The vendor inclusion list for this document was selected to accurately depict the vendors that include desktop virtualization (and usually application virtualization) and extend that functionality through or services in a variety of ways which merit inclusion on a buyer's selection list. Vendors were further investigated to ensure that their offerings qualified and were relevant to the current environment and had won recent deals. Further, participant companies were asked which other vendors they most often compete against in deals.

ADVICE FOR TECHNOLOGY BUYERS

Virtual client computing is a mature market with well-known capabilities; this made the traditional process of selecting a vendor relatively straightforward. However, the changes to public cloud provisioning and digital workspaces have created two distinct profiles, which emerged during customer interviews:

- **Profile one: Desktop-as-a-service customer.** The DaaS customers look to take advantage of well-established features of application and desktop virtualization without investing heavily in hyperconverged infrastructure. They will have an on-premise solution along with some number of desktops provisioned in one or more of the public cloud providers. Their primary concerns are operational: Can the service be managed in a hybrid cloud environment, at what operational cost, and at what speed? This profile is particularly common when the company's work is contained in a small handful of applications, including productivity applications like Office 365.
- **Profile two: Emerging workspace customer.** The workspace customer is faced with a work environment that has reached a level of complexity that can no longer be sustained. The workspace customer needs a solution that allows work to be organized and automated across multiple systems of action and record, without direct intervention from the end user either individually or as a team. This workspace needs to extend to and encompass any device (edge, mobile, traditional PC, tablet, etc.) the end users may interact with.

These profiles form the ends of a continuum of potential profiles; the exact location of a given company along that continuum indicates to what extent the strategies and capabilities of a specific vendor will match with the company's current needs.

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.

VMware

According to IDC analysis and buyer perception, VMware is positioned in the Leaders category in the 2019–2020 IDC MarketScape for worldwide virtual client computing.

Strengths

VMware's breadth and depth of virtual client computing technologies is in keeping with the company's role as a leader and general services provider in the market. Its focus on device management and virtualization is particularly well suited for large, complex environments with a modern hybrid infrastructure stack consisting of dedicated devices, private cloud services, and an array of public clouds.

VMware's acquisition of Carbon Black, a security software firm specializing in machine learning–based security solutions, gives the company a unique differentiator in this space. This provides an immediate benefit to the customer, along with supporting their core strength in managing modern hybrid infrastructure stacks. It also increases in value over time in an environment where VMware is already the software-defined datacenter platform of choice. IDC expects that VMware will continue with its acquisitions in the future, purchasing companies that provide unique value when integrated with both its VCC and its broader platform.

VMware's customers specifically mentioned the value gained by leveraging the VMware Horizon solution as a component of the company's overall software-defined datacenter platform. Unifying physical device management (including PCs, Chromebooks, and phones), digital workspace creation/operations, and client workspace security into the overall platform is an attractive proposition for customers that are already invested in it.

Challenges

VMware's workspace concept uses a combination of an aggregated workspace (Intelligent Hub) augmented by application disaggregation through Mobile Flows and an intelligent agent to coordinate activities. The agent needs to be integrated into a wide range of already existing and emerging agents to provide a coherent experience over time. It also creates potential conflicts between the VMware workspace and the workspaces created by productivity, process automation, and conflicts, which the enterprise will have to navigate carefully to avoid workspace conflicts.

Customers consistently report that VMware's feature set comes at a correspondingly high price, making it difficult for small and medium-sized businesses to afford the investment. This is actually in keeping with VMware's position as a general services provider in a mature market; it is however something to consider moving forward.

Finally, VMware is still merging the disparate code bases it acquired over the years in this space. Even satisfied customers indicate that there are notable differences in the capabilities and performance of the Horizon products across operating environments (on-premise and in various clouds), which can lead to operational challenges. VMware has a road map to consolidate its code base, but it will take several years to complete.

Consider VMware When

VMware is especially well suited to situations where the customer already has an existing investment in VMware's other technologies and/or needs to take control of a chaotic device environment. VMware's agent-based strategy allows the company to interact with an already established digital workspace initiative, something which will become more prevalent in the next few years.

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

IDC defines the virtual client computing (VCC) functional market as a client computing model that leverages a range of brokering software and display protocols to enable server-based client computing and improve upon the limitations associated with the traditional distributed desktop environment. The VCC market includes products that enable the configuration and management of centralized virtual desktop, virtual user session, and other forms of client virtualization, to include type 2 hypervisor, containerized, and cloud-based solutions for delivering virtualized desktops and applications. Management software specifically targeted at the configuration, control, and operations of VCC solutions is included in this market.

LEARN MORE

Related Research

- *IDC FutureScape: Worldwide Future of Work 2020 Predictions* (IDC #US44752319, October 2019)
- *IDC TechScape: Worldwide Virtual Client Computing, 2018* (IDC #US44416918, November 2018)

Synopsis

This IDC study presents a vendor assessment of the virtual client computing (VCC) market through the IDC MarketScape model. The virtual client computing market has recently begun to change as new requirements for digital workspaces cause organizations to radically rethink their approach to the employee experience. These changes include the integration of virtualization solutions into wider device and hybrid cloud management solutions, the disaggregation of virtualized applications, and the inclusion of artificial intelligence/machine learning into the work environment.

"Solutions in the virtual client computing market have markedly improved over the past few years, pushed by innovations in the workplace and the advent of key behavioral indicators," said Shannon Kalvar, research manager, IDC's IT Service Management and Client Virtualization. "Vendors are now offering a wide range of solutions to meet the needs of customers where they are, as they evolve, rather than shoehorning requirements into a handful of solutions."

About IDC

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