# DataCore ONE brings new appliances and analytical insights to its high-performance SDS platform

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## Introduction

As an early advocate of the software-defined storage model, DataCore has leveraged its patented Adaptive Parallel I/O technology to bring top-level storage performance to scale-out SDS. DataCore's SANsymphony SDS platform is already validated for primary and secondary storage applications on x86 systems from more than 30 top-tier vendors, and as part of its unifying DataCore ONE announcement, it has unveiled a new pair of DataCore HCI-Flex appliances for customers that prefer the convenience of pre-integrated HCI systems. Also announced is a new cloud-based analytics platform (DataCore Insights Services) for single pane of management, as well as a new subscription-based pricing model.

### 451 TAKE

Since a leadership shift in early 2018, DataCore has looked to transform parts of the company, and sharpen its focus on the evolving HCI and persistent container storage market. We agree that there's a growing number of customers embracing the simplified HCI model for a widening range of roles within their deployment strategies, and DataCore's high-performance and data protection capabilities could make it a serious contender for high-end, HCI-based storage applications. Of organizations deploying HCI, 79% say its role is to simplify infrastructure acquisition, management and maintenance, but we've also seen growth for a wide range of secondary storage applications, and for supporting emerging technologies such as containers (36% currently claim HCI serves this purpose in their organization). Edge and remote office/branch office usage is a considerable opportunity where IoT and other remote production require more infrastructure at the edge to accommodate data processing.

Today, most HCI vendors are also chasing the edge opportunity, and DataCore will need to make a case for its cost/performance model, which makes the new, flexible pricing important for enterprises that are starting to expect their on-premises infrastructure to share the flexible consumption model of public cloud services. 451 Research sees capex cost and storage growth as primary pain points for enterprise storage infrastructure, and the DataCore ONE approach offers a unified model for primary and secondary storage that looks to balance price, performance and system management with the scale-out simplicity of modular, HCI-based storage.

## Context

Software-defined storage (SDS) vendor DataCore was founded in 1998 and is headquartered in Fort Lauderdale, Florida. DataCore has almost 300 employees across 12 countries with multiple offices across the EU and the APAC region. Despite being US-based, the majority of revenue is currently coming from outside the US with most sales taking place in the EU, with the rest balanced between the US and APAC.

DataCore claims it has been profitable for the past 10 years, so is not seeking any funding at this time. The company brought in new leadership in April 2018 with CEO Dave Zabrowski (previously founder and CEO of cloud consumption analytics provider Cloud Cruiser, which was acquired by Hewlett Packard Enterprise) and CMO Gerardo Dada (previously VP of product marketing and strategy at SolarWinds). Former CEO George Teixeira now serves as executive chairman.

## Strategy

The sales strategy for DataCore is 100% channel-driven with no direct sales. The company maintains a host of partnerships, and its platform is compatible with x86 systems from a wide range of vendors, but it also offers validated designs in conjunction with partners Lenovo, Intel and Western Digital. Lenovo has been a principal partner for DataCore, packaging its software with Lenovo servers. Although the DataCore platform has its own continuous data protection functionality, it is also certified by partners Veeam and Commvault to serve as a repository for snapshots.

As part of this recent announcement, DataCore is introducing a new subscription pricing model. One of the factors that appeals to customers about the public cloud is the flexible consumption and pricing models associated with it, namely shifting infrastructure to opex spending. Data from our Voice of the Enterprise: Storage, Workloads and Key Projects - Quarterly Charts and Figures shows flexible consumption is important to 78% of customers, and deemed very important to more than one-third of respondents. Flexible consumption is also deemed very important by 43% of respondents that are currently executing on their digital transformation strategies, showing that it has a greater draw for enterprises that are further along in modernization efforts.

## Products

DataCore ONE looks to simplify the transition from classic three-tier, SAN-based storage platforms to HCI with flexible software and licensing options, and DataCore's SANsymphony software environment can be deployed on virtualized, bare metal and containerized environments. In addition to its high-performance block services, the platform also supports cross-array auto-tiering, which helps unify the diverse collection of primary, secondary and cloud storage now popular in datacenters. Earlier this year, the company released a Container Storage Interface (CSI) driver for Kubernetes clusters, and a Docker certified Docker Volume Plugin that enables the use of persistent storage in conjunction with containerized stateful applications.

Most recently, the company unveiled a pair of branded HCI appliances, which adds the convenience of pre-integration, simplified scalability and ease of deployment that has become the hallmark of HCI systems. DataCore's newly announced HCI-Flex appliance is available in 1U and 2U models, and both appliances support a flexible mix of flash and/or disk, as well as the choice of VMware or Hyper-V for hypervisors. The 1U model can accommodate 3-6TB storage and 64-128GB memory, and capacity for the 2U model is 15TB-25TB storage and 192GB-384GB memory. Storage capacity and performance can be scaled out through the connection of additional external storage arrays, and it's worth noting that DataCore offers full data protection with a minimum of only two nodes. Pricing is said to be $24,950 to $40,895 for the 1U model, and $68,745to $79,950 for the 2U.

As part of the DataCore ONE initiative, the company also announced DataCore Insight Services (DIS) for its subscribers, a cloud-based analytics platform that provides a central control plane for operations management and observation. This platform collects data from storage deployed by customers using an opt-in 'phone home' model to provide predictive analytics. While this may present issues for customers that can't or won't allow internet access to their storage utilization telemetry, it's easy for a company to opt out, at the cost of missing out on free DIS insights. In our data, we see that the majority of organizations (75%) recently surveyed believe that artificial intelligence and machine learning will simplify IT infrastructure management, although only 11% 'strongly agree' that they would pay a premium for such AI-enhanced features.

## Competition

Within the HCI market, DataCore will have to contend with offerings from larger vendors including Cisco (Hyperflex), Dell EMC (VxRail), Hitachi Vantara (UPC HC), Hewlett Packard Enterprise (SimpliVity), NetApp (NetApp HCI), Nutanix and VMware (vSAN). Nutanix remains a prominent force in the HCI market – it now has over 12,000 customers, and has continued to sharpen its focus on enabling multi-cloud infrastructure deployments.

The HCI competitive landscape is rounded out by Cloudistics, Datrium, Diamanti, HiveIO, Kaleao, Pivot3, Red Hat, Robin.io and Scale Computing. Some vendors are also targeting the intersection of HCI and containers. Diamanti offers a bare-metal HCI platform for Kubernetes and Robin.io, which also offers a hyperconverged product for Kubernetes. Nutanix's Kubernetes service Karbon is its entrant into providing infrastructure for containers.

In terms of SDS vendors, DataCore will encounter the likes of Asigra, FalconStor, Hedvig, LINBIT, MayaData, Nexenta (acquired by DDN earlier this year), Portworx, Qumulo, StorageOS, Storidge and Virtuozzo. Many of the aforementioned players also target the container storage market.

## SWOT Analysis

| STRENGTHS | WEAKNESSES |
|---|---|
| DataCore Parallel IO technology puts it at the top of the performance list for SDS, which makes for a strong combination when you include its continuous data protection and auto-tiering capabilities. | DataCore currently focuses on providing block-level virtualization and presenting both block and file services, while many of the SDS competition is offering an integrated combination of block, file and object services. |
| **OPPORTUNITIES** | **THREATS** |
| With much of DataCore's revenue coming from the EU, the US market represents untapped potential. In addition, as more IoT-based analytics applications move toward the edge, DataCore's performance and compact HA capabilities can give it an edge over other HCI storage systems. | The HCI storage market is extremely crowded, and nearly all SDS vendors are targeting the same growth opportunities of edge and ROBO deployments. |