

SHAKING UP THE STORAGE MARKET

INFINIDAT'S DISRUPTIVE
INNOVATION APPROACH
REDUCES THE COST
OF FLASH STORAGE.



CONTROL PANEL OF AN INFINIBOX F6280 SYSTEM,
CONFIGURED WITH 8 PETABYTES OF CAPACITY AND
SERVING 913,000 IOS PER SECOND.

FLASH STORAGE HAS EMERGED AS A KEY TECHNOLOGY TO HELP BUSINESSES enhance performance, optimize efficiency, and support analytics projects. It's also prohibitively expensive at scale.

Fast-growing storage company INFINIDAT is changing that by leveraging machine-learning technology to significantly reduce the cost of petabyte-scale flash storage, making it affordable to many.

The company is breaking new ground with a disruptive innovation approach to storage. INFINIDAT uses software and math to extract extremely high performance out of lower-cost hardware, says Brian Carmody, the company's chief technology officer, "whereas traditional systems rely on frequent upgrades to the latest and most expensive generation of media for performance improvement."

INFINIDAT's chief executive officer, Moshe Yanai, invented the Symmetrix platform, which is said to have launched the modern data-storage industry, while at EMC Corporation. Additionally, much of INFINIDAT's development team came from EMC Symmetrix engineering.

"The disruptive innovation in our software is a patented machine-learning algorithm called Neural Cache, which learns a customer's workload, maintains a memory of every piece of data written into the system, and finds hidden connections in the access patterns. It makes tens of thousands of real-time data placement decisions per second about which pieces of data will be accessed by applications in the near future," Carmody says. It then stages that data into fast RAM and flash cache, while leaving 97% of "cold" data on low-cost, hyperscale disk drives.

The end result is a system that significantly outperforms hardware-based all-flash arrays, is more reliable and scalable, yet is less than one-third of the cost, Carmody says.

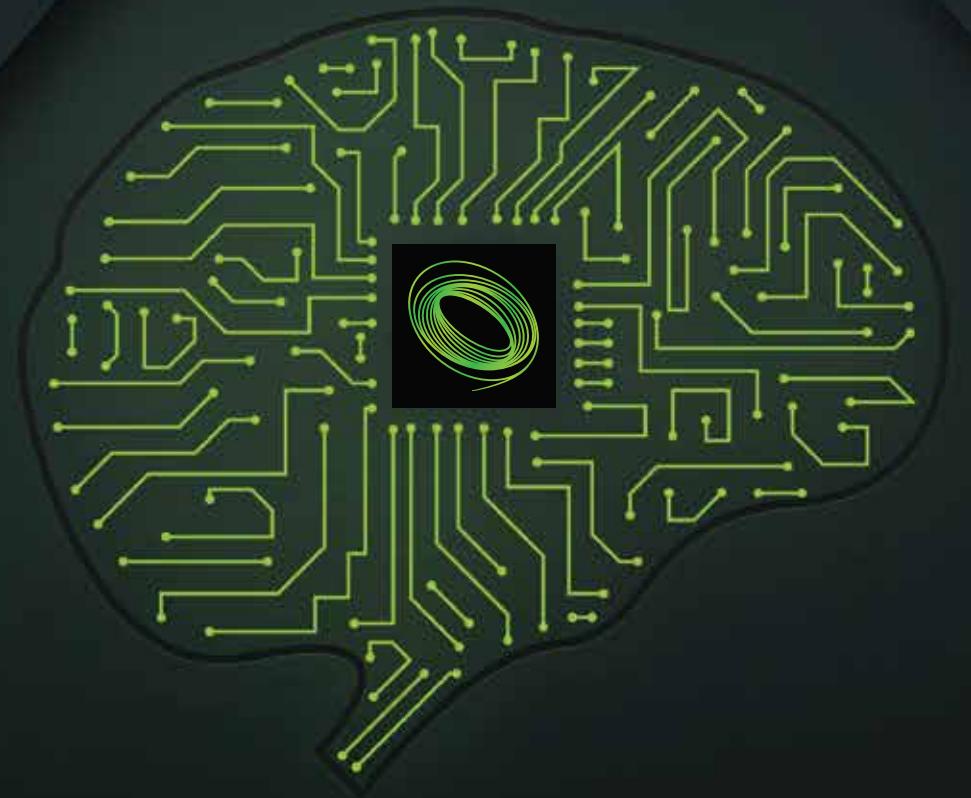
The approach must be working. INFINIDAT is setting industry records for growth. The company had its first installation in 2013, and since then, three exabytes of storage have been deployed by customers, including some of the world's largest banks, telecommunications companies, and cloud providers.

As research firm IDC pointed out in a November 2017 report, INFINIDAT is "quickly becoming a formidable competitor ... growing revenue significantly faster than any segment of the market."

One of the biggest challenges organizations face today is controlling IT budgets while supporting exponential data growth, Carmody says. He notes that IDC predicts global data will increase to 160 zettabytes by 2025, with the majority generated by businesses.

"The cost of storing all that data on enterprise all-flash arrays—at today's street prices—would be higher than the combined gross national product of all the countries in the world," Carmody says. "Clearly we need a new way of looking at the problem."

Demands for storage will likely accelerate as the Internet of Things generates even greater volumes of data. Disruptive innovation like that from INFINIDAT is needed "because the astronomical cost of enterprise storage is holding back innovation at companies in every industry," Carmody says. — **BOB VIOLINO**



THE NEXT REVOLUTION IN STORAGE IS POWERED BY MACHINE LEARNING

ENTERPRISE STORAGE THAT SCALES, LEARNS AND EVOLVES.

INFINIDAT
STORING THE FUTURE