

STORAGE

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QUALITY AWARDS: ENTERPRISE ARRAYS



Hitachi is back on top of the enterprise array hill

In a very close contest, Hitachi lands in the enterprise storage array winner's circle for the fifth time.

BY RICH CASTAGNA

HOME

WHILE OUR LATEST Quality Awards user satisfaction survey indicates that enterprise-array users are pleased with the storage systems they're using, it's clear they're not quite as enthusiastic as they have been in recent years.

Hitachi Data Systems' [VSP/USP series](#) of big storage iron earned top honors as our survey respondents gave it the highest overall grade for service and reliability. Hitachi isn't a stranger to the enterprise array Quality Awards winner's circle, having prevailed among some pretty tough competition four times on [previous surveys](#).

The other four finalists, in order of finish, were a familiar cast: [EMC](#), [Hewlett-Packard](#) (HP), [NetApp](#) and [IBM](#). Despite the generally lower scores compared to other years, all the product lines fared well and most of the ratings categories were very closely contested.

It's not possible to say precisely why the scores tilted lower this time, but the more modest results might indicate that users have higher expectations of their primary storage systems, especially with beefier midrange hybrid and all-flash systems so readily available. While those flashier arrays generally can't match the overall capabilities or capacities of the more [traditional enterprise arrays](#), they can outperform them handily.

Overall rankings: Hitachi narrowly edges EMC

HITACHI'S OVERALL AVERAGE score of 6.26 earned it a first-place finish by a relatively small margin over EMC (6.19). But the distance between EMC and the third- and fourth-place vendors was even narrower, with HP netting an overall 6.16 and NetApp scoring 6.14. Indeed, while the scores might have been lower than what we've seen recently, the distance between first and last was measured by a mere 0.30 points—the skinniest margin we've ever seen.

Hitachi built its leading score by coming out on top in three of the five rating categories, with wins for sales-force competence, initial product quality and product reliability. NetApp and HP divvied up the other two categories, with HP leading the group for product features and NetApp on top for technical support.

The entire group's average overall score was 6.14. You'd have to go back seven years to find a lower group tally. Last year, every product managed to score higher than 6.00 in each of the ratings categories. This time around, only two vendors—Hitachi and EMC—earned that distinction, although a couple of others came quite close.

KEY STATS

0.07

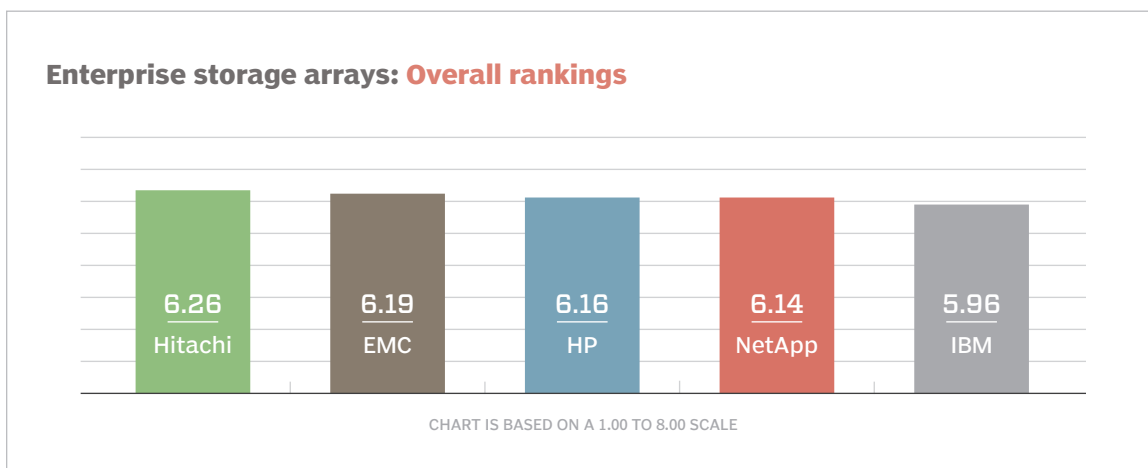
The difference between winner Hitachi's and second-place EMC's scores—carrying on a tradition of close finishes among enterprise arrays.

5

This year's scores were the lowest in all five categories going back at least seven years.

4

This is the fourth time Hitachi has won the Quality Award for enterprise arrays, breaking a tie with three-time winner NetApp.



Sales-force competence: Hitachi's sales reps stand out

USER-VENDOR RELATIONSHIPS all start with the courting ritual known as the sales process. But what happens during this getting-to-know-you phase can set the tone for an ongoing rapport. Among our gang of five enterprise storage array vendors, Hitachi received the best mark in the sales-force competence rating category, which lays out some of the most effective storage sales support techniques. It earned that 6.33 grade by posting the top scores on four of the six category statements. Hitachi's best marks came for having flexible sales reps (6.61) and reps that understand customers' businesses (6.44). It also prevailed for reps who are easy to negotiate with (6.28) and keeping customers' interests foremost (6.16).

Second-place EMC (6.20) registered the highest scores on the two remaining rating statements: a 6.54 for "The vendor's sales support team is knowledgeable" and a 6.45 on the statement "My sales rep is knowledgeable about my industry."

HP posted a category tally of 6.07, followed fairly closely by NetApp (5.94) and IBM (5.85).

From a group perspective, the best overall average for all five vendors was on the knowledgeable sales force statement, with the group posting an average of 6.37. The group's weakest showing—a 5.85—was for "My sales rep keeps my interests foremost."

KEY STATS

4

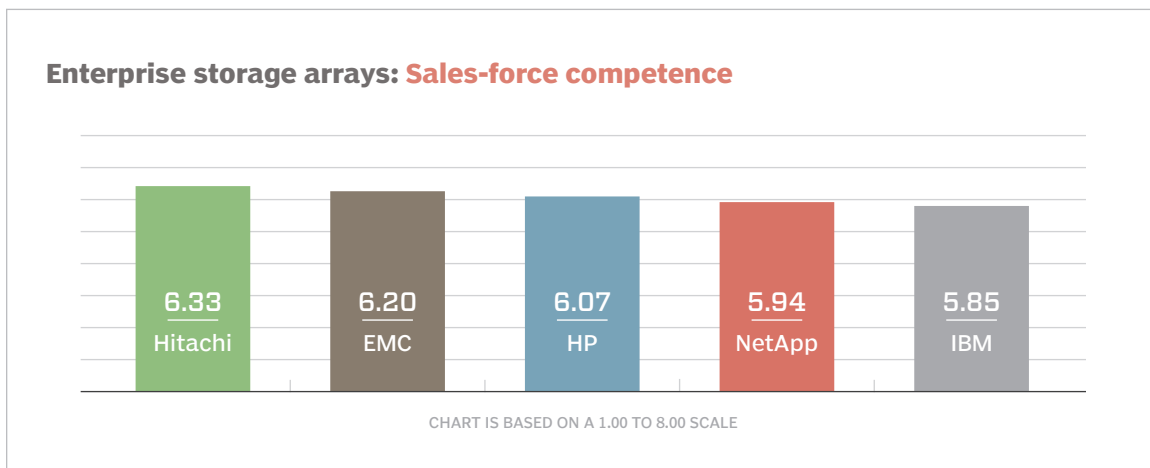
This is the fourth time Hitachi has won the sales-force competence category. In seven of 10 surveys, the overall winner also won for sales-force competence.

1

There was only one statement that had all the vendors exceeding 6.00: having knowledgeable sales support teams.

6.84

For enterprise arrays, Hitachi achieved this score for sales-force competence two years ago.



Initial product quality: Out of the box, enterprise vendors avoid major snags

ALL FIVE FINALISTS scored well in the initial product quality category, an indication their users were able to get up and running quickly without encountering major snags. Hitachi prevailed in this category with a 6.34 rating, but all five vendors were fairly closely bunched. Once again, Hitachi fashioned its victory by leading the pack on four of the category's six rating statements. The vendor flexed its muscles with nearly identical scores on the statements "I am satisfied with the level of professional services this product requires" (6.51) and "This product was easy to get up and running" (6.50).

HP (6.22) and NetApp (6.20) posted consistent scores across all statements to finish second and third, respectively. But the top dogs for the other two statements were EMC with a category-high 6.60 for products that install without defects, and IBM's 6.29 for products that are easy to use (just barely nudging out NetApp with its 6.28).

As a group, the best across-the-board average was a 6.39 for products that install without defects, which suggests very effective quality assurance. At the other end of the spectrum, the group's lowest average of 5.98 came on the statement "The product requires very little vendor intervention," which might suggest that a little too much user handholding is still required.

KEY STATS

1

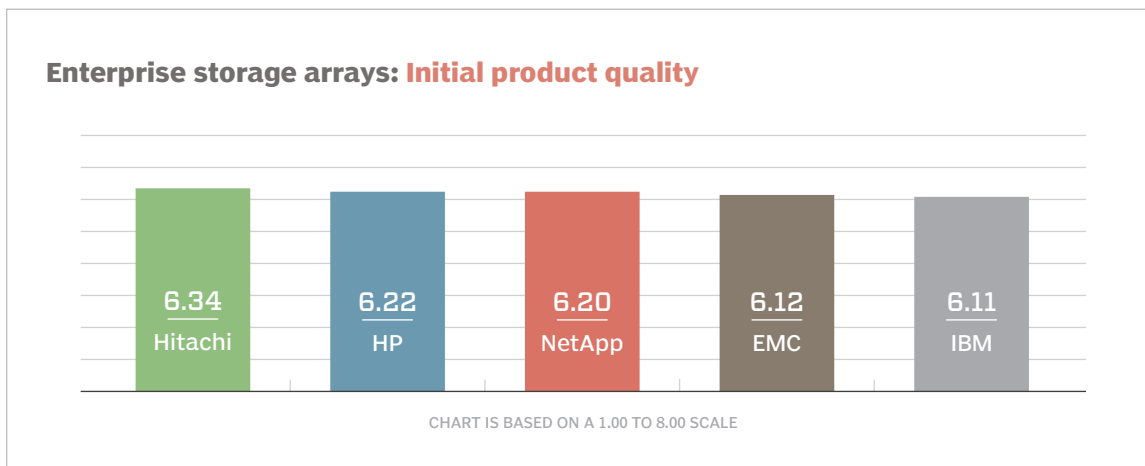
Only one vendor—NetApp—racked up 6.00+ scores for all six category statements.

5

This is the fifth time Hitachi has won the initial product quality category; it earned top honors in each of those Quality Awards surveys.

6.20

The group's overall average score for initial product quality is the lowest we've seen in seven years.



Product features: HP ekes out win, but array features approaching parity

FOR YEARS, INDUSTRY experts have been citing “feature parity” among the relatively small crop of enterprise array vendors. The results of our product features rating category provide strong evidence that parity is at hand; to call the finish in this rating category a “close race” would be an understatement. HP’s 6.22 put it at the front of the pack, but only by the narrowest of margins, with a trifling 0.02 points separating the top four finishers.

It’s about as close to a statistical dead heat among four vendors that we’ve ever seen, but HP did come out on top for three of the category’s seven statements, with second-place NetApp nabbing two and Hitachi the final pair.

HP’s best score—and the best score for the full category—was an impressive 6.60 picked up for the key statement “Overall, this product’s features meet my needs.” Its other high grades were for mirroring features (6.36) and management features (6.29).

As it often does, NetApp earned the top mark (6.42) for its snapshot features, along with a solid 6.21 for remote replication features. Hitachi led the group on the final two statements, with a 6.52 for product scalability and a 6.31 for interoperability with other vendors’ products, which was likely due to its virtualization capabilities.

KEY STATS

5.82

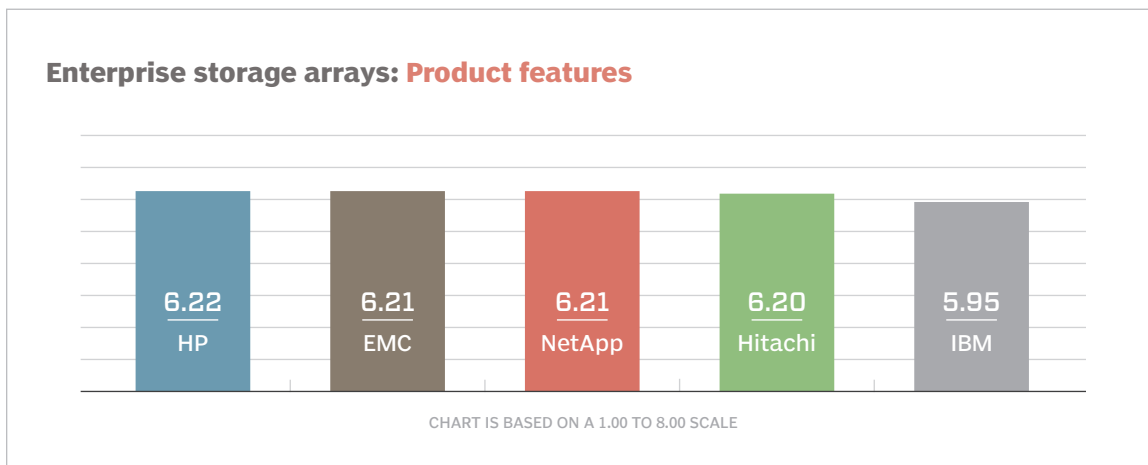
While Hitachi fared well for arrays that are interoperable with other vendors’ products, as a whole, the group notched its lowest average for that statement.

0

EMC didn’t score highest on any statement, but earned extremely consistent marks to finish in a tie for second in the category.

9 of 10

In all past enterprise storage array surveys, the overall winner also scored best for features, but not this year.



Product reliability: Hitachi's patch management bolsters reliability

THE TRUE VALUE of an enterprise array is measured over time in terms of its product reliability. All of the vendors' product lines represented in this survey earned enviable grades for their dependability. Hitachi returned to the forefront in this category, with a 6.44 that gave it a small lead over second-place EMC (6.35). But then the tally sheet tightens with HP trailing EMC by only 0.05 points and NetApp lagging HP by a similar margin. IBM rounded out the group with a still solid 6.05. These results should be good news for any company in the market for an enterprise-class array.

Hitachi and EMC each had top tallies for two statements, and HP triumphed on the final statement. Hitachi's best marks were for patches that can be applied non-disruptively (6.64) and for requiring few unplanned patches (6.52). EMC's leading scores came for products that experience very little downtime (6.55) and products that meet service-level requirements (6.45).

Third-place HP snared the final statement with a 6.26 rating for "Vendor provides comprehensive upgrade guidance." NetApp's best showing was on the "very little downtime" statement (6.46), while IBM's 6.16 for meeting service-level requirements was its highest grade.

KEY STATS

1 of 25

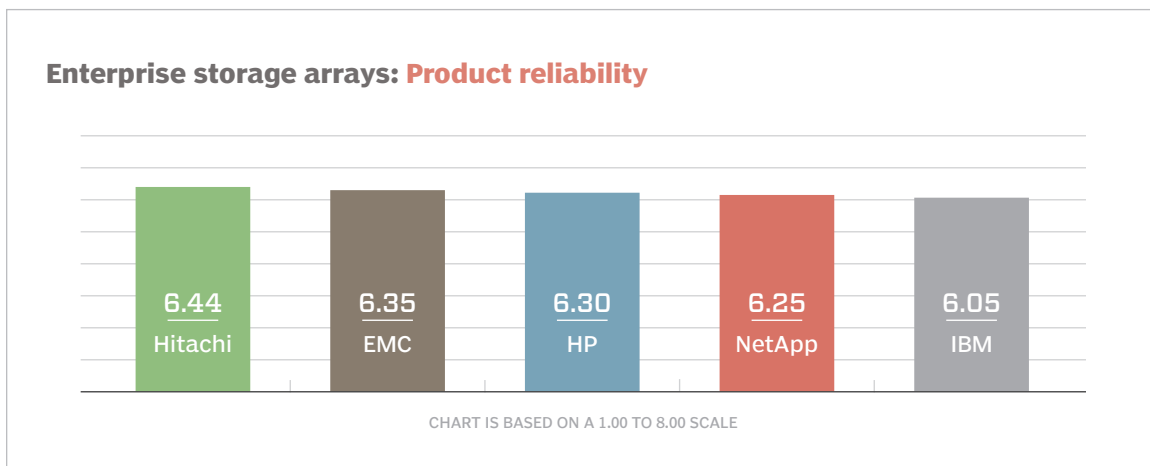
Out of 25 statement scores for all five vendors in this category, only one was below 6.00 (a 5.96).

7.00

The highest product reliability category score ever for enterprise arrays was earned by Hitachi two years ago.

6.41

The best average score for all five finalists in this category was for products that experience very little downtime.



Technical support: NetApp's support teams deliver as promised

RESPONSIVE, TIMELY TECHNICAL support can help outweigh a multitude of other product or service shortcomings. Users tend to have high expectations when it comes to support and can be critical judges of how quickly and well that support is delivered. As in past surveys, the scores in the technical support rating category are lower than in other categories. But NetApp managed to muster a very respectable 6.09 category score by outdistancing the competition on four of the eight rating statements.

NetApp's best marks came for delivering support as contractually specified (6.64), having knowledgeable third-party partners (6.16), and providing adequate documentation and other supporting materials (6.06).

EMC (6.05) and Hitachi (6.01) came in second and third, divvying up the remaining four statements. EMC's leading marks came for having knowledgeable support personnel (6.30) and for "Support issues rarely require escalation" (5.94). Hitachi set the pace for resolving problems in a timely manner (6.18) and for taking ownership of problems (6.11).

HP and IBM's best results came on the same statement, with HP notching a 6.36 and IBM earning a 6.21 for delivering support as contractually specified.

KEY STATS

5.71

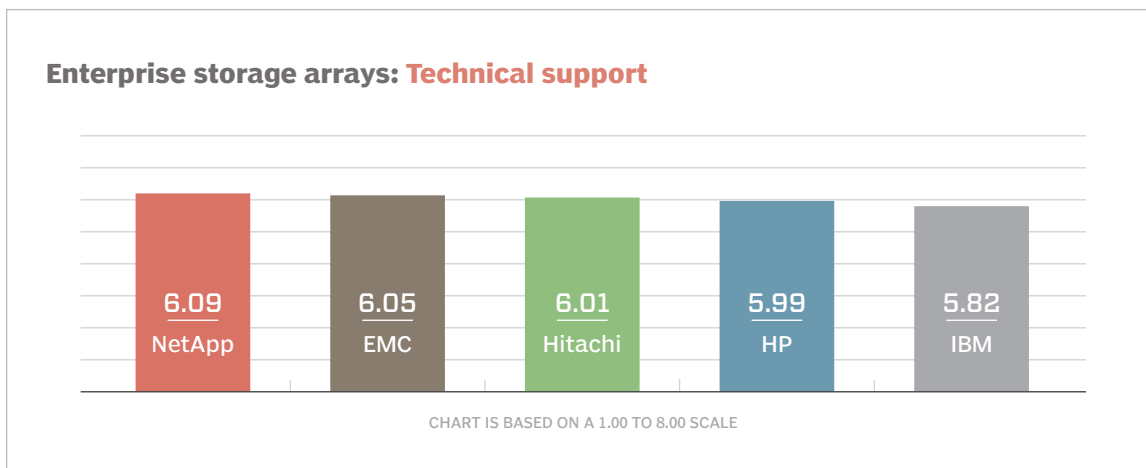
Vendor training is disappointing. The group's lowest average statement score was for "The vendor provides adequate training."

3

This is the third time NetApp has won the enterprise array technical support rating category.

5.99

The finalists' overall average for technical support is the lowest we've seen in seven years.



Would you buy this product again?

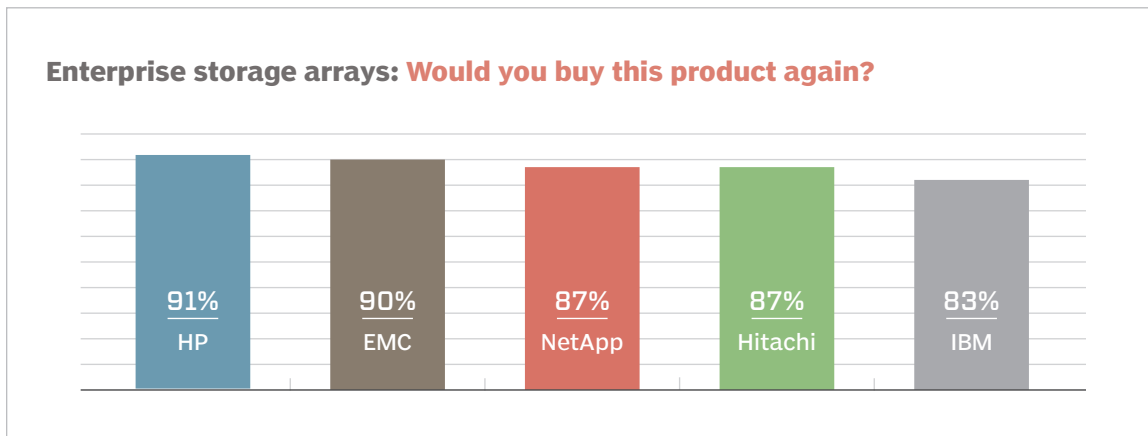
ON EACH Quality Awards survey, in addition to the five groups of category rating statements, we also pose a general question, asking if users would buy the same product again given what they know now. The results are often surprising, and can run against the grain of the category scores. But with close races in each of the rating categories in this survey, the results of the “buy again” question are not so surprising this time around, with all of the vendors receiving positive endorsements from their users. —**RICH CASTAGNA**

PRODUCTS IN THE SURVEY

The following products were included in the 10th Quality Awards for enterprise storage arrays survey; the number of responses for finalists is shown in parentheses.

- EMC VMAX or VMAXe (145)
- Fujitsu Eternus DX8400/ DX8700 or DX200 S3/ DX500 S3/DX600 S3*
- Hewlett-Packard (HP) XP Series or HP 3PAR StoreServ 7000/HP 3PAR StoreServ 10000 (129)
- Hitachi Data Systems VSP/VSP G1000/USP/USP V Series (46)
- IBM DS8000 Series or XIV Storage System (81)
- NEC D8 Series*
- NetApp FAS6000/V6000 or FAS8000 Series (97)

*Too few responses to qualify as a finalist



ABOUT THE QUALITY AWARDS

The *Storage* magazine and SearchStorage Quality Awards are designed to identify and recognize products that have proven their quality and reliability in actual use. The results are derived from a survey of qualified readers who assess products in five main categories: sales-force competence, initial product quality, product features, product reliability and technical support. Our methodology incorporates statistically valid polling that eliminates market share as a factor. Our objective is to identify the most reliable products on the market regardless of vendor name, reputation or size. Products were rated on a scale of 1.00 to 8.00, where 8.00 is the best score. A total of 305 respondents provided 505 product evaluations.