

# Hardware LEADERBOARD '06

# BEST OF THE BEST

## THE TOP HARDWARE VENDORS IN RETAIL

POS UNITS ▶ PERIPHERALS ▶ KIOSKS ▶ NETWORKING ▶ BACK OF STORE ▶ RFID

▶ HEAD-TO-HEAD  
COMPARISONS

▶ 122 RETAILERS  
805 VOTES

▶ FIRST ANNUAL  
VENDOR RANKING

Group Editor-in-Chief  
Joe Skorupa  
jskorupa@edgellmail.com

Managing Editor  
Debbie Hauss  
dhauss@edgellmail.com

Senior Editor  
Carly Lombardo-Bohach  
cbohach@edgellmail.com

Creative Director  
Colette Magliaro  
cmagliaro@edgellmail.com

Group Publisher  
Andrew Gaffney  
agaffney@edgellmail.com

Associate Publisher  
Marc Millstein  
mmillstein@edgellmail.com

Associate Publisher  
Cathy Marder  
cmarder@edgellmail.com

Sales Manager  
Sal LoSauro  
slosauro@edgellmail.com

Sales Associate  
Scott Valenz  
svalenz@edgellmail.com

Assistant to the  
Group Publisher  
Jen Johnson  
jjohnson@edgellmail.com

Director of Operations  
Dan Ligorner  
dligorner@edgellmail.com

Marketing Manager  
Suzanne Schoonmaker  
sschoonmaker@edgellmail.com

Production Director  
Patricia Wisser  
pwisser@edgellmail.com

Production Manager  
Maggie Hall  
mhall@edgellmail.com

Telephone 973-252-0100  
Fax 973-252-9020  
www.risnews.com

CEO/Chairman ... Gabriele Edgell  
President ..... Gerald C. Ryerson  
Vice President ..... John Chiego

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# By the Numbers

**Retailers deal with millions of customers per year. Hardware vendors, on the other hand, deal with hundreds of customers at most. Retailers typically sell to regular customers on a weekly or monthly basis. Hardware vendors usually sell to retailers on long, multi-year cycles.**

These are just a few of the differences between business approaches that have an impact on the retailer/vendor relationship. A complete list of differences would be too long to list

- 305** retailer reviews submitted
- 125** qualified retailer voters
- 71** vendors reviewed
- 20** vendors make final cut

here, but one thing is common to both – customer satisfaction. The key to long-term business success for every business, whether retailer or vendor, is achieving and maintaining high levels of customer satisfaction.

This is the central truth underlying the *RIS* Leaderboard concept, which has served the retail industry as a barometer of customer satisfaction among software vendors for the past five years. During this time, its reputation has grown to the point where many readers tell us it has become one of the most influential publications in the retail IT industry.

And now we are extending the Leaderboard concept to the hardware category. As an inaugural effort, we are building on the successful formula of the Software Leadeboard, with one major difference – instead of ranking the vendors in one single top-50 listing, vendors are broken into six product categories. These categories are: POS Units, Peripherals, Kiosks, Networking, Back of Store and RFID.

We greatly encourage your feedback in shaping and improving future editions. You can contact me at jskorupa@edgellmail.com. All the best,



# Expanding the Possibilities

EXTERNAL DEVICES TAKE CENTER STAGE FOR ADDING CRITICAL POS FUNCTIONALITY

**Standardization of interfaces for external devices at the POS has rapidly expanded the possibilities for retailers and shoppers alike in the checkout aisle. Today's POS units typically consist of a cluster of plug-ins or add-ons that include such items as keyboards, scanners, receipt printers, electronic payment systems, signature capture pads, check imagers and even biometric identification readers. These devices and others fall into the Hardware Leaderboard Peripherals category.**

As previously noted, only 20 hardware vendors made the 2006 Hardware Leaderboard list and these are spread out across six product categories. This is worth considering when analyzing the Peripherals category, which had 30 vendors entered and only 10 made the final cut.

With such a large pool of vendors to choose from and such fierce competition among them, it's not surprising that retailers report high levels of quality and satisfaction in this category. The average scores among the Peripherals leaders, from top to bottom, are higher than on any other list in the survey.

## MAKING A CLEAN SWEEP

Coming in on top of overall scoring, and making a clean sweep of all individual Criteria Breakdowns, is Epson. Although high scores for Epson are evident across the board, the biggest gap appears in the Overall Performance criterion, where the second place

RANK	COMPANY	SCORE
1	Epson	53.03
2	Symbol	50.29
3	PSC	49.62
4	Verifone	49.24
5	Dell	48.74
6	Intermec	47.60
7	Fujitsu	46.21
8	HP	46.61
9	Logic Controls	45.60
10	Hypercom	45.54

finisher was nearly three quarters of a point behind.

Finishing in a tight pack to round out the top five are Symbol, PSC, Verifone and Dell. Overall scores for these vendors are high enough to produce one or more first places in most other Criteria Breakdowns in the survey, so these vendors are clearly satisfying their retail customers.

It's worth noting that the Hardware Leaderboard is unique among best-of-the-best lists in that no vendor in the retail IT vertical is left out for any reason and no vendor influences the final result. ■

PERIPHERALS CRITERIA BREAKDOWN							
COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Epson	9.05	9.13	8.44	8.32	9.02	9.07	53.03
Symbol	8.75	8.88	7.94	7.57	8.82	8.33	50.29
PSC	8.17	8.37	8.37	8.17	8.37	8.17	49.62
Verifone	8.29	8.50	7.87	8.18	8.50	7.90	49.24
Dell	8.05	7.91	8.05	8.05	8.34	8.34	48.74

# In-Store Touchpoints

KIOSKS BOTH DELIVER AND GATHER IMPORTANT CUSTOMER INFORMATION

**More retailers are rolling out customer-facing and/or associate-facing kiosks every year, although it's fair to say that not every retailer and retail format is an ideal candidate for this technology. Retailers in the high-end, luxury products market prefer a high-touch, high-service approach that goes against the grain of do-it-yourself devices.**

But that still leaves the vast majority of retailers who are prime candidates to use kiosks to create another touchpoint in the store to more deeply engage customers and improve the shopping experience. In compliance with industry

**Kiosks are devices for delivering information to customers and collecting data about them.**

conventions, we define kiosks as being self-contained fixed and handheld access points that perform well-defined functions primarily for customers but also for associates. They are devices for both delivering information to customers and collecting data about them.

Kiosks are supplied to retailers by a dozen or so

RANK	COMPANY	SCORE
1	Fujitsu	52.48
2	Symbol	48.00
3	IBM	47.51
4	HP	43.27
5	Dell	42.00

manufacturers, and topping this year's list is Fujitsu, which appears at the head of the pack by a comfortable margin in total score. In the process, like Epson in the Peripherals category, Fujitsu swept the board in each of the criteria breakdowns.

A closer race in customer satisfaction occurred in the number two and three slots, where Symbol edged IBM. However, when analyzing the Criteria Breakdowns, we see that each vendor had its own particular strengths. Symbol came out on top in Technology Innovation and Price/Value, while IBM was ahead in Product Features, Support/Service, Product Reliability and Overall Performance.

Rounding out the Top 5 list in this category are HP and Dell. In terms of Criteria Breakdowns, Dell came out ahead of HP in terms of Overall Performance, while HP bested Dell in all the other criteria.

The other vendors in this product category finished well behind these retail technology leaders.■

## KIOSKS CRITERIA BREAKDOWN

COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Fujitsu	8.83	8.83	8.83	8.33	8.83	8.83	52.48
Symbol	8.00	8.40	7.60	8.00	8.00	8.00	48.00
IBM	8.21	7.67	7.94	7.27	8.21	8.21	47.51
HP	7.42	7.17	7.67	6.92	7.17	6.92	43.27
Dell	6.84	7.06	6.92	6.84	6.84	7.50	42.00

# The Backbone of Retailing

NETWORK INFRASTRUCTURE IN STORES AND AT HEADQUARTERS GROWS FASTER AND FATTER

Scoring among this year's Top 5 vendors in the Networking category offers the opportunity for some fascinating analysis into how customer satisfaction levels are met by some of the world's leading IT companies. First and second place on the list are clearly within the study's margin of error and, therefore, should be considered a virtual tie. But the most fascinating data may be in how this plays out in the Criteria Breakdowns, where the third-place finisher crashes the party and steals some of the limelight.

As noted, the leaders in the Networking product category, which are Cisco and HP, finish in a statistical dead heat, just four one hundredths of a point apart. HP registers remarkable consistency by coming in second in every criterion. Cisco, on the other hand,

**First and second places are clearly within the study's margin of error and should be considered a virtual tie.**

emerges on top in four of the six criteria — Product Features, Technology Innovation, Product Reliability and Overall Performance, a grouping that indicates strong retailer satisfaction in a wide array of key product areas.

RANK	COMPANY	SCORE
1	Cisco	52.39
2	HP	52.35
3	Dell	51.64
4	Sun	49.20
5	Fujitsu	47.00

Surprisingly, Dell, which finished less than a point from the leaders in total score, came out on top in two of the Criteria Breakdowns — Support/Service and Price/Value, which speaks volumes about its reputation among end users.

Sun is a major player in this product category and its total score is not only near the top here, but it represents a level of customer satisfaction that would place it even higher on most of the other category lists in the Hardware Leaderboard.

The appearance by Fujitsu is somewhat surprising, if only because the company does not focus strongly on Networking in the retail industry. But more importantly, to make this list Fujitsu beat out a number of heavy hitters in this category and within the IT world. Considering how well Fujitsu did in the other product categories throughout the Hardware Leaderboard the showing here might not be so surprising after all. ■

NETWORKING CRITERIA BREAKDOWN							
COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Cisco	9.16	9.37	8.47	7.28	9.21	8.90	52.39
HP	8.80	9.11	8.65	8.49	8.65	8.65	52.35
Dell	8.32	8.23	8.95	9.05	8.41	8.68	51.64
Sun	8.00	8.40	7.60	8.00	8.80	8.40	49.20
Fujitsu	8.33	7.67	7.67	7.67	8.00	7.67	47.00

# Behind the Scenes

TAKING CARE OF THE BACK END OF THE RETAIL BUSINESS

While the Back of Store category could potentially include a wide array of IT products, we confined the customer satisfaction rankings to just printers, scanners, desktop computers and personal digital assistants (PDAs). Typical functions handled by these devices include receiving at the loading dock, inventory auditing, barcode and price tagging, and the majority of behind-the-scenes responsibilities carried out by the store manager and associates.

Leading the way in this category is computer giant Dell, a horizontally focused vendor that changed directions three years ago by entering the retail vertical with industry-specific products. Dell nearly scored a clean sweep by coming out on top in Product Features, Technology Innovation, Price/Value, Product Reliability and Overall Performance.

**Nearly 30 companies were placed in consideration, but only five made the final cut.**

Fujitsu finished on top in the key area of Support/Service, which is a combination of two sets of high-quality commitments: 1. maintaining help desks, contact centers, online portals, remote management

RANK	COMPANY	SCORE
1	Dell	50.63
2	Fujitsu	48.33
3	HP	47.37
4	Zebra	44.56
5	Symbol	43.62

tools and other support initiatives; and 2. offering help with ongoing maintenance, on-site and remote repairs, installations and upgrades. In addition to this win, Fujitsu finished in a statistical tie in the Product Features category with Dell.

Rounding out the Top 5 are HP, Zebra and Symbol, each of which deserves recognition for their achievement in satisfying customers to an industry-leading level. As noted in other sections of the Hardware Leaderboard, all vendors making one of the best-of-the-best lists are truly winners in their own right, having beaten out a host of competitors who didn't make the cut.

In this category, nearly 30 companies were placed in consideration, but only five made the final cut, which makes the companies named on this list members of an exclusive fraternity. The system is devised to reflect the collective judgments of a deep pool of qualified retailers who cast their votes anonymously, and while it's possible to disagree with their conclusions, it's impossible to invalidate the process itself.■

BACK OF STORE CRITERIA BREAKDOWN							
COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Dell	8.44	8.38	7.94	8.81	8.56	8.50	50.63
Fujitsu	8.33	8.00	8.00	7.67	8.33	8.00	48.33
HP	8.10	8.05	7.73	7.53	7.98	7.98	47.37
Zebra	7.71	7.71	7.43	6.57	7.71	7.43	44.56
Symbol	7.63	7.91	6.91	6.34	7.63	7.20	43.62

# Radio Frequency Identification

ESTABLISHING A BENCHMARK FOR TRACKING FUTURE TRENDS IN AN EMERGING TECHNOLOGY

With so few retailers actively involved in radio frequency identification (RFID) projects, it's not surprising that our vendor and voter data pools were smaller than other product categories in the Hardware Leaderboard. But with such giants as Wal-Mart, Target, Tesco, Metro and the U.S. Department of Defense, among others, pressing suppliers to deploy RFID in the supply chain, there's every reason to believe the technology is ultimately destined to enter mainstream adoption.

Precisely when this will occur is open to debate, but progress is being made every day and the emergent status of RFID is precisely the point of measuring the pulse of the industry now and obtaining a benchmark against which future trends can be measured.

**Setting realistic expectations is a critical component in achieving high customer satisfaction levels.**

Interestingly, all three of the vendors that received the minimum number of valid votes in this category emerged as winners in their own right in at least one of the six Criteria Breakdowns.

Symbol, manufacturer of RFID readers, tags and antennas, is the clear winner in this product category,

RANK	COMPANY	SCORE
1	Symbol	50.80
2	Texas Instruments (T.I.)	47.00
3	Zebra	46.80

either coming in first or tying at the top in every one of the Criteria Breakdowns.

Texas Instruments (T.I.) and Zebra finished in a virtual tie for second place on the RFID category list. T.I., maker of RFID transponders, readers and antennas, also tied with category leader Symbol in the Price/Value criteria. Zebra, maker of RFID printers and encoders, tied for the top slot in Product Reliability.

As the vendors that appear in the first *RIS* Hardware Leaderboard clearly understand, setting realistic expectations is a critical component in achieving high customer satisfaction levels. Unfortunately for RFID, it is at the top of the Gartner hype cycle and fast plunging into the trough of disillusionment.

The hype was caused, in part, by exuberant backers of the technology, chiefly Wal-Mart, setting mandated deadlines for supplier deployment. Although compliance with mandates was said to be voluntary, the truth is that Wal-Mart was strong-arming suppliers into early adoption of an immature technology.

But far from signaling a death knell, this is essentially following the natural evolution of emerging technologies. In coming years, as RFID matures and enters the slope of enlightenment, as named by Gartner, more vendors will appear in this category and end-user satisfaction scores will rise. ■

## RFID CRITERIA BREAKDOWN

COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Symbol	8.80	9.20	8.40	8.00	8.00	8.40	50.80
T.I.	8.00	8.00	7.50	8.00	7.50	8.00	47.00
Zebra	8.00	8.00	8.00	6.80	8.00	8.00	46.80

# Point of Service

DELIVERING EXCELLENCE IN RETAILING'S DEFINING TECHNOLOGY – DIGITAL CHECKOUT

Based on the pioneering format of the *RIS Software Leaderboard*, now in its fifth year, the inaugural *RIS Hardware Leaderboard* brings the litmus test of customer satisfaction to a number of core technologies and vendors in retailing. Chief among these is the category of POS Units, for which we have included the following POS technologies: complete units, base units, screens, self-checkout units, mobile units and handheld units.

As retailing's defining technology, POS Units have had a long history and the category is populated by a large number of vendors. As a result, this list is one of two that has achieved sufficient qualified votes by retailers to expand into a Top 10 list. The other Top 10 List in the Hardware Leaderboard is Peripherals.

For all categories in the Hardware Leaderboard, a Top 10 or Top 5 overall chart appears on the upper half of the page and a Top 5 Criteria Breakdown of the overall voting appears on the bottom half. In the latter chart, a maximum of 10 points were awarded by voters for the following criteria: Product Features, Technology Innovation, Support/Service, Price/Value, Product Reliability and Overall Performance, which includes ease of use, speed and similar criteria.

## INTERPRETING THE DATA

There are two large truths that run throughout the Hardware Leaderboard: The first is that it represents satisfaction levels of end-users in retailing, similar to

RANK	COMPANY	SCORE
1	Ultimate Technology	48.86
2	DigiPoS Systems	48.80
3	HP	47.87
4	Dell	47.80
5	IBM	46.77
6	Fujitsu	46.76
7	Wincor Nixdorf	46.58
8	Micro Industries	44.80
9	NCR	42.68
10	Elo TouchSystem	42.02

what J.D. Powers and Associates does for cars, and the second is that every vendor mentioned in these pages is a winner in its own right. While 71 total vendors received votes, only the top 20 made the final cut.

Is smaller better? Not in all categories, but in POS Units the smaller vendors performed extremely well against the giants, especially in the area of Support/Service. High levels of support and service are hallmarks of well-run smaller companies and the data bears this out. However, as noted, congratulations are due to all companies who made this year's best-of-the-best POS Units list. ■

## POS UNITS CRITERIA BREAKDOWN

COMPANY	PRODUCT FEATURES	TECHNOLOGY INNOVATION	SUPPORT/SERVICE	PRICE/VALUE	PRODUCT RELIABILITY	OVERALL PERFORMANCE	SCORE
Ultimate Technology	8.00	7.71	8.57	8.29	8.29	8.00	48.86
DigiPoS	8.80	8.80	8.00	7.60	7.20	8.40	48.80
HP	8.39	8.03	7.28	7.94	8.06	8.17	47.87
Dell	8.13	7.82	7.61	8.24	7.92	8.08	47.80
IBM	7.96	7.68	7.99	6.58	8.50	8.06	46.77

# Hardware LEADERBOARD '06

