

Who's Ahead in the x86 Server Wars? Here's an Update...

According to recently released sales figures, server sales in the first quarter of '06 were flat or declining. The only bright spot for vendors was the x86 (Intel or AMD) server market, which saw industry leading unit and sales growth – albeit not at the same pace as last year. Slow growth in server sales means we are still in a buyer's market with most, if not all, of the leverage firmly on the side of the customer.

One of the most competitive market segments is, of course, the x86 server market. Four major vendors (IBM, HP, Dell and Sun Microsystems) with roughly equivalent technology are engaged in a daily dogfight for deals and market share. So who's winning the hearts and minds of customers in the x86 server market?

In an attempt to answer this burning question, we launched our 1Q06 x86 Server Vendor Preference Survey. The survey was designed to capture the perceptions of real world enterprise x86 customers and understand how they view both the market and specific vendors. We plan to run this survey approximately every six months in order to track changes in the market and spot trends. The rest of this article will discuss results from our inaugural survey. The results below are an overview of a much more detailed survey. Tediously exhaustive analysis and complete survey data are available at our website, www.gabrielconsultinggroup.com.

Sample Demographics

We surveyed a grand total of 212 enterprise x86 server customers, focusing primarily on data center personnel – data center managers, IT architects, system managers and the like. We don't have anything against CIOs, but they are generally in the dark about what is actually happening on the data center floor. The average survey respondent managed from 20 to 50 x86 systems. 75% of respondents worked in data centers with at least two incumbent UNIX vendors with almost 40% of total respondents reporting that they owned systems spanning three or more x86 server brands. While customers have gear from several vendors, the majority stated that a particular vendor was either a corporate standard or tended to get most of their x86 business. In this survey, roughly 30% of the respondents have standardized on IBM, 21% each on Dell and HP and the remainder (28%) on Sun.



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Scoring and Methodology

Given the imbalance in survey responses from the various server brands, it is important to make sure that the results aren't skewed by the sheer size of a particular vendor's installed base. With this in mind, all responses were compiled and then normalized to remove any skew due to sample bias. For example, we know that Sun does not own 28% of the x86 server market. But if we simply toted up the numbers and reported the outcome, the results would potentially be skewed because Sun is overrepresented in the sample (just as HP and Dell may be underrepresented). To fix this, we normalize the data so that no vendor is advantaged (or disadvantaged) by the sheer size of their installed base or their share of the survey sample. To do this, all respondents were asked to specify which x86 vendor is their particular corporate standard or the dominant vendor in their organization. The total number of responses favoring a particular brand is then compared to the number of "votes" for that vendor on a particular factor and scored. For example...

Assume the survey had 1200 responses, five hundred of whom have standardized on Dell, two hundred who are strong HP customers, three hundred who have chosen IBM as their dominant vendor and two hundred who have standardized on Sun. When asked which vendor had the best dressed salespeople, four hundred participants responded Sun, three hundred picked IBM, and three hundred said that HP salespeople were particularly natty dressers.

Best Dressed salespeople	# of votes (raw score)	Normalized Score (VPI)
Dell (500 standardizers)	400	0.80
IBM (300 standardizers)	300	1.00
HP (200 standardizers)	300	1.50
Sun (200 standardizers)	200	1.00

While the raw scores favor Dell, the normalized score (which is simply the number of "votes" divided by the number of respondents who have standardized on that brand) shows that HP is the winner of this beauty contest. HP wins because they captured a larger number of first place votes than the number of HP respondents.

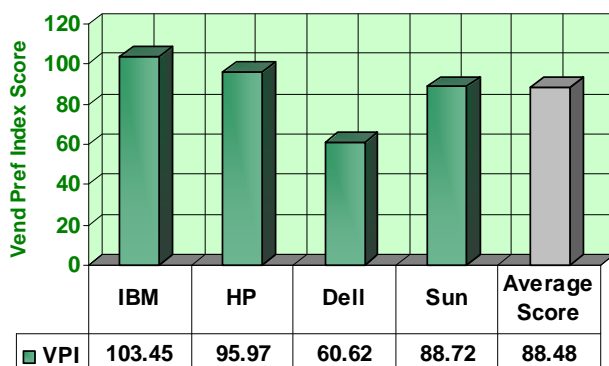
In this simple example, IBM and Sun scored at par – they were voted #1 in this category by the same number as those who selected those brands as their corporate standard. Dell underperformed with their 'voters' defecting to HP. We are referring to this normalized number as the **Vendor Preference Index (VPI)**. The VPI computation yields an easy-to-understand score for each vendor and a gauge of installed base loyalty. For quick reference, a VPI score greater than 100 means that the vendor in question was selected by a number of respondents greater than the number of respondents who have standardized on that particular brand of server. VPI scores greater than 100 are very good. A VPI score of exactly 100 means that the vendor was chosen as a leader by exactly the same number of respondents as those who have standardized on that vendor. VPIs of less than 100 are, of course, bad, and mean that the vendor in question has suffered defections (at least in terms of survey voting) from their own self-selected installed base. While there are certainly more complicated ways to compute the results of a survey such as this, we believe that this method best captures the data we are looking for, in short, how customers perceive x86 server vendors.

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x86 Vendor Face-Off : Technology Criteria

The survey is divided into three major sections. The first 'Vendor Face-Off' section asks all respondents to pick the vendor who they believe is the leader on a number of technical and product factors. The second section asks how the vendors rate on a wide variety of business

Average VPI Scores - Technology Criteria



criteria. The third and last section explores customer attitudes towards their own specific x86 server vendor and attempts to gauge their loyalty to that vendor. This report outlines the first two sections of the survey, while subsequent GCG research reports will discuss and analyze the vendor-specific data.

The Vendor Face-Off portion of the survey is divided into two parts, Technology Criteria and Vendor/Customer Support Criteria. We will begin with an examination of

results from the Technology Criteria section of the survey.

The chart at left shows the average of all technology criteria scores. IBM leads competitors with an average VPI score of 103.45, followed by HP & Sun, with Dell bringing up the rear with a score of 60.62. This is a general pattern that runs throughout the survey, IBM and HP with narrow wins against each other, Sun in a solid third, and Dell significantly lagging the others.

In general, IBM scored well on technology, performance and service categories. They also topped other competitors on questions such as "They keep their promises" and "Accuracy and adherence to road-maps." HP collected key wins in availability, reliability and manageability categories, plus customers rated their Windows and Linux expertise as best in class.

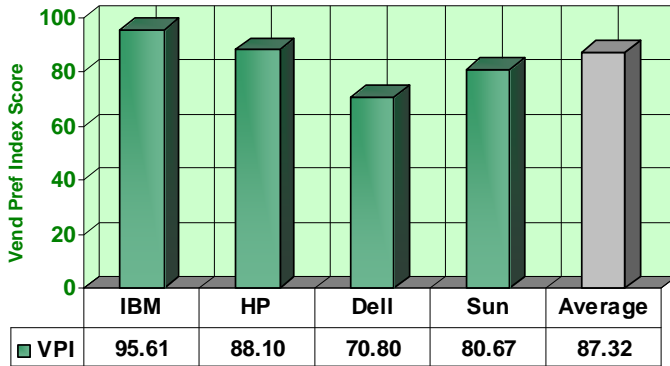
While we aren't particularly surprised to see IBM and HP at the top of the rankings, we were mildly shocked by how poorly Dell was rated on technology issues and in the survey in general. While Dell is a very successful x86 PC and server vendor, they did not fare well with our enterprise data center participants. Detailed results in the next pages of this report give some explanation as to the specific factors contributing to Dell's poor showing.

Sun's performance in the survey also bears comment here. We weren't sure how well (or poorly) Sun's x86 servers would be rated in our survey, Sun has only been in this market for a couple of years and we weren't sure we would get enough Sun specific responses to allow for inclusion in the results. We were wrong on both counts – we had plenty of Sun x86 respondents and Sun's performance in the survey garnered them a solid 3rd place – topping putative market leader Dell. Sun seems to have capitalized on their massive UNIX installed base to establish a solid beachhead in the x86 market with their Opteron-based systems.

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Vendor Face-Off: Vendor/Support Criteria

Average VPI Scores - Vendor/Support Criteria



This section of the survey asks respondents to rate their vendors on criteria associated with how well they support customers in terms of services and sales, along with some additional questions concerning vendor commitment to x86 servers and ability to successfully compete in the market.

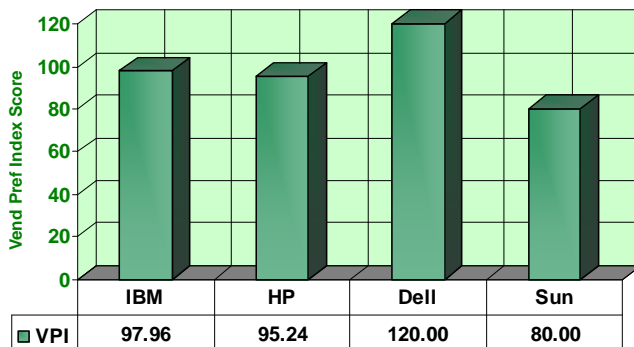
The average scores for this section of the survey are captured on the chart at left. IBM has the highest average score, followed by HP. Both Sun and Dell were rated below average on this

set of criteria. As noted above, IBM tended to win on issues relating to services, including maintenance, professional/architectural services and value per service dollar. HP dominated with their Windows/Linux expertise categories and was also judged the vendor most able and willing to drive x86 server innovation. Sun was rated a respectable #3 in most of this section while Dell tended to trail.

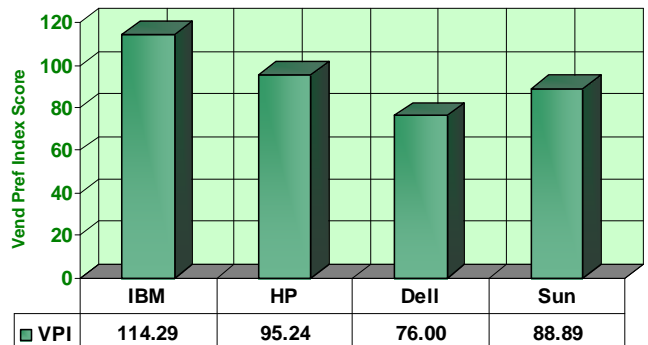
Futures and Value

The final questions in this section of the survey deal with customer perceptions concerning the current and future health of the major x86 server vendors, plus a last question about the comparative value each vendor provides.

Sales Momentum



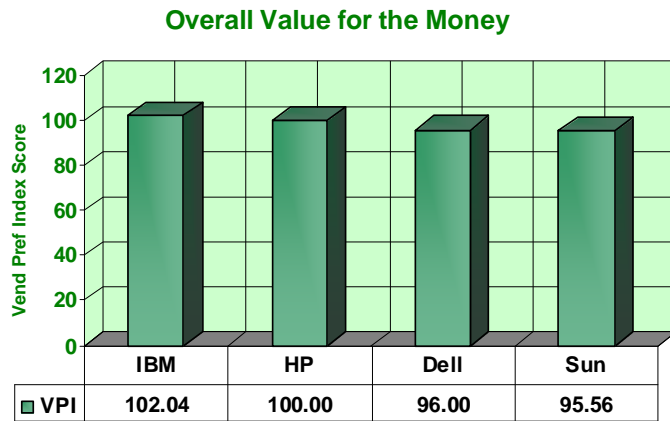
Long Term Viability in x86 Server Market



The results from the two questions above present an interesting paradox. On one hand, our survey respondents believe that Dell has more sales momentum than any of their competitors. But, throughout the survey they have generally blasted Dell for coming up short on technology and customer service. They also believe that Dell is less viable in the enterprise x86 server

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market than IBM, HP and Sun. What customers seem to be saying is “we aren't that wild about Dell, but everyone else is”, which, to us, means Dell is doing a great job of marketing.



In another somewhat paradoxical result, customers believe they are getting decent value from all of the major vendors. What's strange about this is that throughout the survey, IBM and HP consistently top Sun and particularly Dell on almost every technical or support criteria. Given this, we might reasonably expect customers to assert that they are getting more value per dollar from IBM or HP. However, this is not the case. IBM and HP do lead Sun/Dell in value for the dollar, but by a margin

that is much lower than what we've seen on almost every other survey question. This result leads us to another question that we'll ask in the next survey: how much variance do you see in pricing from the major vendors? It will be interesting to see what enterprise customers have to say about vendor pricing – are the final 'street price' numbers pretty close to the same or do they vary widely? If there is considerable variance between what survey leaders IBM and HP charge vs. prices from Sun and Dell, then the results above make sense in a “you get what you pay for” context.

So What Have We Learned?

At a high level, the survey tells us that the largest vendors, IBM and HP, are held in highest esteem by both their own installed base and even by customers who have standardized on other brands. IBM's wins were primarily in the performance, technology, service and delivering on their promises categories. HP won on key availability, serviceability and manageability categories and also on their ability/desire to drive x86 server innovation. The differences between IBM and HP were fairly narrow in most categories with the companies virtually tied on several survey questions.

Sun Microsystems posted a better than expected showing in this survey – third overall and third in almost every category. While some may feel that anything other than an outright win is a loss, we believe Sun's results deserve a bit of applause. They have only been in this market for a couple of years and are competing against far larger and most established vendors. Also, coming in third means they managed to beat Dell, which is certainly a feather in their cap (if anyone is still putting feathers in caps.)

Dell had the worst showing in the survey, finishing last in most categories – usually by a significantly large margin. This is despite being one of the largest x86 vendors overall and devoting a lot of resource to their marketing and sales efforts. While Dell has gained a lot of mindshare in the press and with analysts, it seems that enterprise customers (including much

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of their own installed base) are less than impressed with Dell's enterprise offerings and customer support.

We hope that our survey has helped shed some light on how the major x86 server vendors are faring against each other in the war for data center hearts and minds. We will be releasing future reports that delve into the third section of the survey, where customers are asked their perceptions about their corporate standard x86 vendor. We will be running this survey again in approximately six months to track changes in this dynamic and important market. Again, if you are looking for mind-numbingly detailed results and analysis, it can be obtained at our website, www.gabrielconsultinggroup.com.

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