



TBR

TECHNOLOGY BUSINESS RESEARCH, INC.

Corporate IT Buying Behavior & Customer Satisfaction Study: Notebooks

Third Calendar Quarter 2006

November 21, 2006

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CORPORATE NOTEBOOK VENDOR	3Q06 TBR SCORE	3Q06 TBR RANK
HP	83.4	1
Dell	82.6	2
Lenovo	82.0	2
Gateway	82.7	3
Toshiba	81.8	3
Publish Date: November 21, 2006		
Author: Julie Perron		

Executive Summary

The Great Bad Battery Debacle Overblown in TBR's View

The Kerfuffle Surrounds Certain Sony Battery Packs, Extended Across Multiple Manufacturers, Months and Millions (Nearly 10 Million Battery Packs Recalled)
Yet, TBR Fails to Observe Immediate Customer Satisfaction Fallout

The recall heard around the world.

- In the spring of 2006, several incidents of laptops overheating and burning began surfacing around the world. While Dell was first to have experienced such an incident, the company was also quick to investigate it and initiate a quick recall. Soon, it became clear that the defective Sony battery packs were an industrywide issue. By the end of September, battery pack recalls had been issued by Lenovo, Fujitsu, Hitachi, Toshiba, Panasonic and, finally, Gateway in October. Sony itself, the source of the defective battery cells, issued a voluntary battery recall on Sept. 28, followed by an official apology on Oct. 24.
- In Sony's apology letter, the company acknowledged the likely cause as microscopic metal particles making their way into the flammable liquid core of the batteries, leading to the potential for short circuiting. Sony assured customers that "improvements in production, design and inspection have been made to prevent a recurrence of any laptop overheating problems." All totaled, 9.6 million lithium-ion batteries were involved in the recall.
- In TBR' study, battery recalls could have had an effect on how customers perceive any of the following among the measured attributes – reliability, product design, replacement parts availability, delivery time, repair time, phone support, ease of doing business, value, loyalty – these are all of our covered attributes.
- **Yet, TBR sees little negative effect on customer satisfaction** through the end of October that could be explained solely by the battery recall. While the July to September positions of Dell and Lenovo did erode somewhat, the patterns we are observing in the 3Q06 study are more reflective of increasing competitive pressures in this segment overall than by the battery recall. Potential future impact to customer satisfaction? Minimal at best, and it is unclear whether future quarters will be affected in our study results. TBR expects customers may react to some of the following more than to the actual inconveniences of the recalls.
 - The smoothness with which the systems manufacturer handles the recall – Are the phone support lines tied up? How long did it take to get the replacement batteries? Were there enough replacement supplies? How many systems were involved? Overall, was it reasonably painless experience? Was the systems manufacturer forthright and proactive in its approach to resolution?

And the Responsibility of the Media in the Matter Tended to Magnify the Issue

- The early recallers initially bore the brunt of the media's wrath. As more manufacturers joined the recall over time, any systems manufacturer who handled the recall quickly and effectively was ultimately praised for its customer-centric decisions. The media, however, has been known to have a significant effect on public opinion, with a significant opportunity to affect customer perception. Yet, at this juncture, TBR concludes that the media was largely not the factor in customers' perceptions that some might have expected. In addition, much of the media's attention was averted toward Sony and away from the systems manufacturers as the story developed.
- Our study results seem to suggest the concern over the defective Sony battery packs was felt primarily by the media. With our interviews extending through the end of October, we observed nothing in customer perceptions that could be definitively traced to the battery recall. In 4Q06, we will attempt through more specific questioning to determine the effects, if any, driven by battery recalls on customer satisfaction.

HP Moves Up to Sole Possession of No. 1 Ranking; Dell and Lenovo to No. 2; Gateway Reinstates No. 3 Tie with Toshiba

HP Index Advances 0.7% to Achieve No. 1 Ranking

- HP's strengthening hardware reliability satisfaction rating moved the vendor to a new No. 1 ranking position.

Dell Index Recedes by 1.1%; Shifting to a No. 2 Ranking

- Moderately declining satisfaction was observed across phone support, hardware reliability, product design and notebook value. The loss of its value in competitive strength drove the ranking determination.

Lenovo Index Also Declines by 1.1%; Relegation to No. 2 Ranking

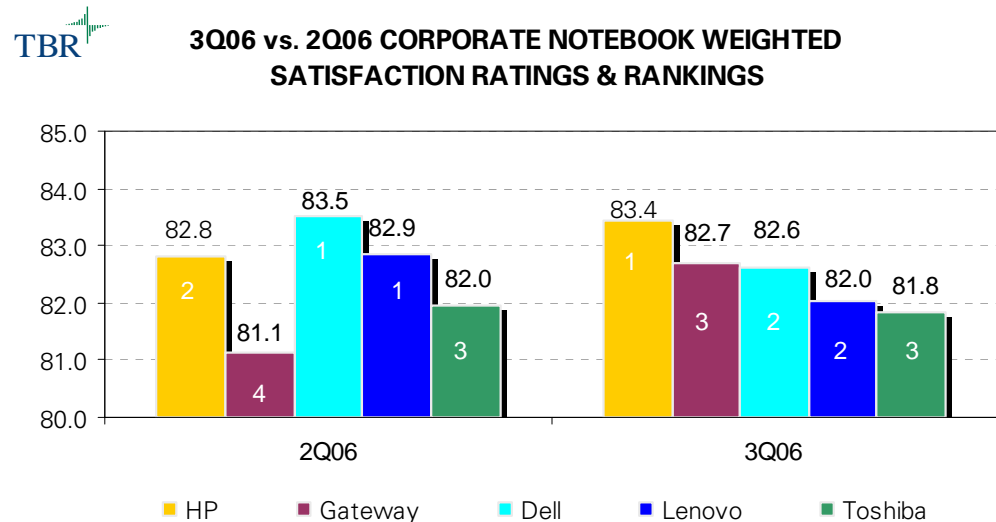
- Satisfaction declines were led by replacement parts availability and repair time. A new competitive weakness for repair time triggered the shift to a No. 2 ranking.

Toshiba Index Remains Constant Showing a Mix of Trade-offs

- Satisfaction gains were observed across phone support and repair time; satisfaction declined relative to delivery time.

Gateway's Performance Most Energized; Index Advances by 1.9%

- Satisfaction gains were observed across the board, most notably relative to phone support, repair time, ease of doing business, product design and notebook value.



SOURCE: TBR.

Competitive Strength & Weakness Determinations

Show HP With Cleanest Performance

Determinations Based on Two-pronged Results: Statistical Significance Tests (3 Tests) and GAP Analyses (2 Tests)

TBR ⁺ Notebook PC Vendor Strengths and Weaknesses Summary					
	DELL	GATEWAY	HP	LENOVO	TOSHIBA
Delivery Time/Product Availability	○	○	○	○	○
Phone Support	○	○	○	○	○
Replacement Parts Availability	○	○	○	○	○
Time to Repair	○	○	○	⊙	○
Overall Hardware Quality/Reliability	○	⌚	●	●	○
Product Design/Features	○	⌚	○	●	○
Overall Value	○	○	○	○	⌚
Ease of Doing Business	○	●*	○	○	○
Numeric Value	0	-1	2	2	-1
Weighted Satisfaction Index	82.6	82.7	83.4	82	81.8
Rank	2	3	1	2	3

Key: ⊙ Weakness; ● Strength; ○ Neutral. ⌚ Warning area for weakness, but insufficient data to substantiate at this time.
* The determination was marginal.
SOURCE: TBR.

- HP presented with one full competitive strength for the all-important reliability measure; no weaknesses.
- Dell dropped back from one competitive strength for notebook value in 2Q06 to a fully neutral slate in 3Q06.
- Lenovo retained its hardware reliability and product design competitive strengths, yet its position was compromised by a new competitive weakness for repair time.
- Toshiba remained with one competitive warning for notebook value.
- Gateway's 2Q06 competitive weaknesses for hardware reliability and product design were softened to warnings. The vendor recovered from a 2Q06 value weakness and gained a marginal competitive strength for ease of doing business.








Competitive Strength & Weakness Determinations Confirm No. 1 and No. 2 Ranking Positions

Dell vs. Lenovo vs. HP Competitive Strength/Weakness Analysis by Weight								
HP CUSTOMER PRIORITIES	WEIGHT*	FINDING	LENOVO CUSTOMER PRIORITIES	WEIGHT*	FINDING	DELL CUSTOMER PRIORITIES	WEIGHT*	FINDING
Hardware Quality	4.78	■	Hardware Quality	4.85	■	Hardware Quality	4.75	
Overall Value	4.41		Overall Value	4.48		Overall Value	4.51	
Replacement Parts Availability	4.31		Replacement Parts Availability	4.37		Replacement Parts Availability	4.27	
Delivery/Availability	4.25		Deliver/Availability	4.32		Ease of Doing Business	4.27	
Time to Repair	4.18		Product Design	4.21	■	Delivery/Availability	4.26	
Ease of Doing Business	4.18		Ease of Doing Business	4.21		Time to Repair	4.17	
Product Design	4.12		Time to Repair	4.20	■	Product Design	3.99	
Phone Support	3.60		Phone Support	3.87		Phone Support	3.83	
HP RANKING #1			LENOVO RANKING #2			DELL RANKING #2		
■ Competitive Strength		■ Competitive Warning			■ Competitive Weakness			

SOURCE: TBR.

- HP achieved one full competitive strength and no weaknesses. Note that its competitive strength was earned in the top-weighted category contributing to customer satisfaction. HP also achieved the highest weighted satisfaction index, at 83.4, a 1% advantage over Dell's index and a 1.6% advantage over Lenovo's.
- Lenovo retained its previous competitive strengths for hardware quality and product design. In 2Q06, Lenovo was free of any weaknesses; however, the emergence of a full competitive weakness for repair time in 3Q06 has relegated the vendor to a No. 2 status. No competitor with a weakness (unless all competitors have weaknesses) can retain a No. 1 ranking position.
- Dell lost its 2Q06 competitive strength for notebook value. Without it, a fully neutral slate of performances has relegated Dell to a No. 2 ranking position .

Competitive Strength & Weakness Determinations Confirm No. 3 Ranking Positions

TBR  Toshiba vs. Gateway Competitive Strength/Weakness Analysis by Weight					
TOSHIBA CUSTOMER PRIORITIES	WEIGHT*	FINDING	GATEWAY CUSTOMER PRIORITIES	WEIGHT*	FINDING
Hardware Quality	4.79		Hardware Quality	4.70	
Delivery/Availability	4.40		Replacement Parts Availability	4.49	
Replacement Parts Availability	4.40		Overall Value	4.45	
Overall Value	4.34		Time to Repair	4.43	
Ease of Doing Business	4.32		Delivery/Availability	4.32	
Product Design	4.26		Ease of Doing Business	4.30	
Time to Repair	4.19		Product Design	4.14	
Phone Support	3.77		Phone Support	3.92	
TOSHIBA RANKING #3			GATEWAY RANKING #3		
 Marginal Competitive Strength  Competitive Warning					
*Mean importance rating.					
SOURCE: TBR.					

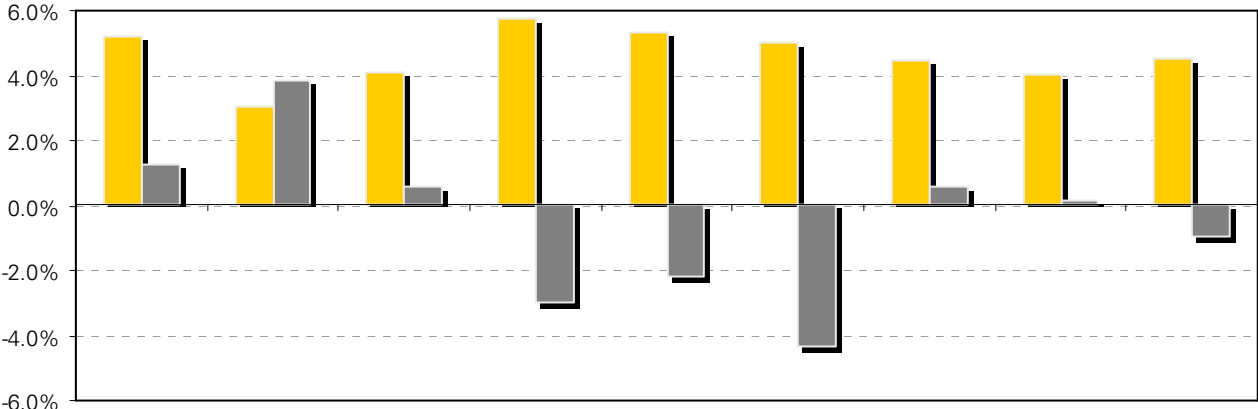
- One percentage point separates the index positions of Gateway and Toshiba.
- The marginal competitive strength for Gateway in the area of ease of doing business ameliorates the potential effects of its warning areas and results in a draw between its own performance and that of Toshiba, which had one competitive warning.

HP's Year of Unshakable Progress Leads to No. 1

3Q06 Represents the Fourth Consecutive Reporting Period of Steadily Rising Satisfaction Positions

- HP had not been a No. 1 ranked corporate notebook player since long before the HP/Compaq merger. During that time, the Compaq brand had achieved a No. 1 ranking only once.
 - For most of the history of this study, HP's scores were solid, in the sense there were rarely any competitive weaknesses. The last weakness observed was in 4Q04 for notebook value. Since then, it has been a clean slate of neutral ratings for this competitor.
 - TBR has repeatedly pointed out that we will need to see a competitive strength of HP's own in order to ever find the vendor moving up from its standard No. 2 or No. 3 rankings to a No. 1 position.
 - In 3Q06, a competitive strength for hardware reliability, combined with the highest weighted satisfaction rating, brought HP not only to a No. 1 ranking position, but also to sole ownership of the position.
- During the past year, HP's satisfaction positions have gained momentum at a much faster pace than the competition across most areas. In the graph to the right, we compare the average shift in mean satisfaction from 3Q05 to 3Q06 for HP against the pacesetters Dell and Lenovo.

3Q05 to 3Q06 PERCENT CHANGE IN SATISFACTION POSITIONS, HP versus DELL/LENOVO



Category	HP (%)	Dell/Lenovo Average (%)
Hardware Reliability	5.2	1.2
Product Design	3.1	3.8
Delivery Time	4.1	0.5
Replacement Parts Availability	5.8	-3.2
Phone Support	5.4	-2.2
Repair Time	5.1	-4.5
Notebook Value	4.5	0.5
Ease of Doing Business	4.0	0.1
Overall Satisfaction	4.5	-1.2

Legend: ■ HP (yellow), ■ Dell/Lenovo Average (grey)
 - Across nearly every category, HP has gained significant strength, while Dell and Lenovo have either remained stagnant or lost strength.

SOURCE: TBR.

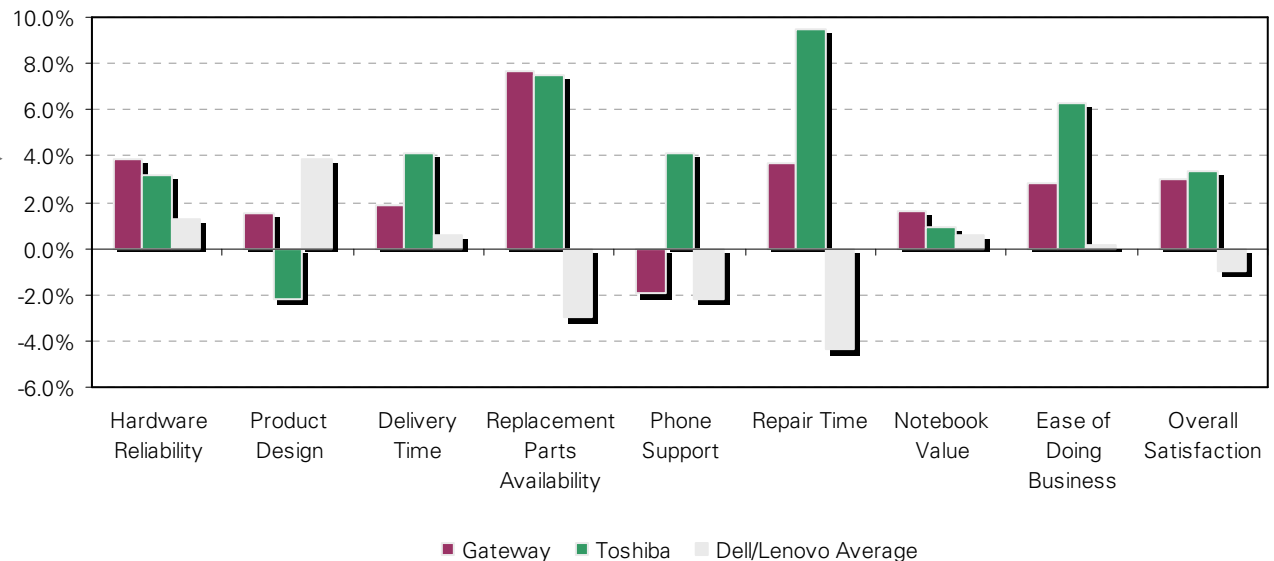
The Second-tier Players Continue to Gain Favor

Both Toshiba and Gateway Have Been Building Strength by Recovering from Past Weaknesses

- For Toshiba, it has been a remarkable story of recovery. A competitor once chronically saddled with competitive weaknesses for notebook support and replacement parts availability has finally reached parity with the industry standard within these categories.
 - Gateway is currently in the midst of its recovery. Past full competitive weaknesses for hardware reliability and design have been softened to mere warnings; a once substantial competitive weakness for notebook value has been entirely corrected.
 - Yet, TBR issues the same challenge to Toshiba and Gateway that we previously issued to HP: we will need to see some competitive strengths of their own in order to move either vendor up to a No. 1 ranking position. For now, these competitors need to focus on completing their transformations by removing all competitive warnings. Both companies have not yet reached the level where we might see a full slate of neutral performances.
- During the past year, the satisfaction positions of both Toshiba and Gateway have gained momentum at a much faster pace than the competition across many areas. In the graph to the right, we compare the average shift in mean satisfaction from 3Q05 to 3Q06 for Toshiba and Gateway against the pacesetters Dell and Lenovo.
 - The areas of replacement parts availability and repair time, in particular, show the momentum working to the second-tier players' favor over the traditional market leaders.




3Q05 to 3Q06 PERCENT CHANGE IN SATISFACTION POSITIONS,
GATEWAY & TOSHIBA versus DELL/LENOVO



SOURCE: TBR.

Corporate Notebook Customer Satisfaction Competition Intensifies

- In this increasingly competitive marketplace, systems manufacturers are being subjected to significantly rising expectations from customers, particularly relative to hardware reliability and design, technical support and value.
- While the positions of recent sector leaders Dell and Lenovo have stalled, competitors' positions are advancing, thus creating a far more competitive landscape than we have observed in the past.
- Yet, the ostensibly close nature of this competition is deconstructed as we examine the many performance differences across the individual measured attributes.

 Performance Differentiators in 3Q06 Reporting Period			
CATEGORY	WINNER(S)	LOSER(S)	COMMENTS
Hardware Reliability	Lenovo	Gateway	
	HP		HP joins Lenovo for the first time. Gateway improves with TBR shifting determination from a full weakness to a warning.
Product Design	Lenovo	Gateway	Gateway improves with TBR shifting determination from a full weakness to a warning.
Notebook Value	None	Toshiba	Dell steps back from previous competitive strength.
Repair Time	None	Lenovo	Lenovo's position weakens, leading to a shift from a neutral performance to a full competitive weakness. In 2Q05 and 3Q05, this had been cited as a competitive strength for Lenovo.
Ease of Doing Business	Gateway	None	Gateway earns a marginal competitive strength; has previously been an area of strength for this vendor.

SOURCE: TBR.

Note: Titles marked in **bold** are new determinations in 3Q06.

While Dell's Positions Have Not Necessarily Weakened, Competitors' Broadly Improving Positions Have Had Significant Consequences

- Dell's current satisfaction positions remain ahead of those of a year ago. Dell is now at or above its high points of the year across every category, with the exception of phone support.
- The moderate 0.6% decline within Dell's weighted satisfaction index position in 3Q06 was driven by declining satisfaction relative to phone support, along with some modest dips relative to satisfaction with hardware reliability, product design and notebook value.
- Due to a very modest decline in position for notebook value against some competitors' advancing positions (notably Gateway and HP), Dell lost hold of its value competitive strength.
- Consequently, Dell comes in with an entirely neutral slate of performances – no strengths, no weaknesses.
- Dell shifts from a No. 1 to a No. 2 ranking position due to its neutral set of performances against one competitor, HP, which held a new competitive strength for hardware reliability.

HP Finally Achieves the Requirement for a No. 1 Ranking Position Determination

- Historically, HP has played as the pacesetter in this competition, repeatedly coming in with an entirely neutral set of performances.
- The required competitive strength for the No. 1 spot arrives in 3Q06, where HP gains a full competitive strength for the coveted hardware reliability category.
- HP's rise to the top has been one of tempered, sustainable progress with four consecutive reporting periods of improving positions, leading to a net WSI gain of 1.2% for the year.
- HP's satisfaction positions have ridden a wave of progressive levels of improvement throughout the year, with its most impressive gains established across hardware reliability and repair time.
- HP was the only competitor with no clear areas targeted for needed improvements based on both of TBR's tests.

The Majority of Lenovo's Positions Remain Stable; However, an Emerging Issue with Notebook Support Relegates the Vendor to No. 2

- Lenovo's current satisfaction positions remain at or above their high points of the year across all categories except for those relating to notebook support and supply chain logistics (repair time and replacement parts availability).
- Both of these areas experienced significantly declining satisfaction levels in 3Q06, with Lenovo's repair time rating coming in at a notable deficit to each of its competitors, leading to a competitive weakness determination.
- Lenovo retained the full value of its hardware reliability and product design competitive strengths, now becoming an expectation in these study results.
- Hardware reliability has prevailed as a definitive Lenovo strength for the past eight consecutive reporting periods.
- Due to pricing pressures, Lenovo has been losing accounts to a far greater extent than any other brand (many switched to Dell). Yet, Lenovo continues to attract more new accounts than it loses.

Toshiba Continues to Earn the Distinction of Most Improved Corporate Notebook Vendor

- During four consecutive reporting periods (3Q05 to 2Q06), Toshiba experienced significant satisfaction gains, which were capped off in 3Q06 with a stable position. The net gain of Toshiba's WSI position registers at 1.2% for the year.
- Toshiba's current performance was mixed: leading areas of improving satisfaction included repair time and phone support, while delivery time led the decliners.
- With most of Toshiba's current positions at their highest levels of the year, the most impressive gains have been established in the previously and chronically weak area of notebook support. Toshiba has successfully reinvented itself in the area of customer support.
- Only Toshiba's notebook value position lacks the momentum characterized by its remaining performances. Its value rating continues to come in at a significant deficit to three out of four of its competitors (all but Lenovo).
- A preview of the upcoming 4Q06 results show Toshiba's position strengthening against a field of more stagnant competitors (primarily Lenovo and Dell).

Current Momentum Favors Gateway; Past Competitive Weaknesses Softening

- In 3Q06, Gateway's satisfaction positions broadly improved, led by phone support, ease of doing business, notebook value, repair time, product design and hardware reliability.
- Gateway's hardware reliability rating finally showed some possibly sustainable improvement, showing a net gain of 4% for the past two reporting periods. Unfortunately, its position remains significantly lower than the industry average.
- Gateway's full competitive weakness determinations in 2Q06 for hardware reliability and design were upgraded to mere warnings.
- Gateway recovered fully from its 2Q06 notebook value weakness and earned a new (marginal) competitive strength for ease of doing business.
- Gateway's current satisfaction positions are at or above their high points of the year with its most impressive gains established across the areas of parts availability, repair time and hardware reliability.
- Along with Toshiba, Gateway's positions are strengthening into the first half of the upcoming 4Q06 reporting period.

TBR's Watch List Differs From the Competitive Strength & Weakness Analysis

Differences

- The analysis is both backward-looking and forward-looking.
- Items placed on the watch list are often not necessarily areas where the vendor has underperformed the marketplace or a specific competitor.
- Included are areas where a vendor may have recently excelled, yet the competitive field has shifted during the current reporting period.

TBR takes the following factors into consideration in determining items on the Watch List:

- Results of the Improvements GAP Analysis based on a vendor's expectation fulfillment for a category against its overall expectation fulfillment across all measured attributes.
- Competitive positioning based on results of statistical significance tests.
- Results of the Standard GAP Analysis for the vendor against positions of its competitors.
- Decline in satisfaction in the past two reporting periods and in the past two calendar quarters.
- Loss of competitive strength.
- Items are removed from the watch list when a vendor has recovered its competitive position from recent reporting periods.

TBR Watch List Identifies New or Reissued Focus Areas for Dell

(see notes page for explanation of rationale codes)

Citation	Rationale						Notes
DELL	A	B	C	D	E	F	
REINSTATED: Notebook Value	Average. Significantly higher than Toshiba at 95% confidence level but Gateway and HP achieved similar results.	Average	GAP rating of -8% strays further away from the "comfort zone". Comparable to industry average, but behind HP's -5%.	Declined 1.7% while competitors' positions were stable and Gateway's increased by 3%.	Declined by a significant 4% while Gateway and HP improving.	Competitive strengths of 1Q06 and 2Q06 rescinded in 3Q06.	Dell's No. 1 ranking position in 2Q06 was entirely dependent on its notebook value competitive strength. With the loss of this advantage in 3Q06, Dell came in with a neutral slate of performances, hence its drop to a No. 2 ranking position. This would be the obvious place for Dell to attempt to pick up competitive strength moving forward, in order to restore its No. 1 ranking. HP in particular has become a formidable opponent on the value front.
REINSTATED: Phone Support	On the low end, but not significantly lower than average.	Primary	GAP rating of 0% against an industry average of +4%. Most competitors are exceeding their customers' expectations.	Declined by 2.7%, the area exhibiting the greatest level of decline for Dell in 3Q06. Positions of HP and Lenovo were stable.	Declined an additional 5%.	N/A	TBR has reinstated phone support as a focus area for Dell. The company meets expectations, though competitors exceed them.
NEW - Product Design	Close to below average. Significantly lower than Lenovo at 95% confidence level.	Average	GAP rating of +2% against industry average of 0%, due to relatively low expectations.	Declined moderately, by 1.4%, yet positions of HP and Lenovo were stable.	Declined moderately, by 1%.	N/A	Product design may seem to belong to the domain of Lenovo in this competition. Dell has been working diligently to improve its positioning with its entirely reworked new generation of Latitudes. New engineering hires may help bring future product features forward. Dell is not in danger of being placed with a competitive weakness, however, it is an area to consider in this intensely competitive marketplace.

Removed From Watch List:

- **Repair Time.** This Watch List item was issued to all five competitors in 2Q06. TBR is removing it from Dell's list due to stabilization of position and a healthy GAP rating. Note, however, that Dell was awarded competitive strengths from 3Q05 to 1Q06 for this category and has yet to reclaim its position of dominance. Relying exclusively on Lenovo's newly weakening position will not be sufficient, particularly since other competitors' positions are comparable to those of Dell.
- **Delivery Time.** This item was reinstated in 2Q06 due to Dell's neutral competitive position in both 1Q06 and 2Q06. While Dell remains a neutral player, it may simply be that the competitive field has changed relative to supply chain development. The items included in the Watch List for 3Q06 (above) are more immediate areas of concentration that we think are appropriate for Dell at this time.

HP is Simply Placed on the Defensive (see notes page for explanation of rationale codes)

Citation	Rationale						Notes
HP	A	B	C	D	E	F	Notes
DEFENSIVE: Repair Time	Came in at the higher end; significantly higher than Lenovo at 95% confidence level, however, Gateway and Toshiba achieved similar results.	Average	GAP rating of -1.6% against an industry average of -5%; best in class.	Satisfaction increased by 2.6%, the area exhibiting the greatest level of improvement for HP in 3Q06.	Declining moderately, by 1.5%, yet comparatively stable.	N/A	This remains on the Watch List as a defensive item only, due to very high customer expectations and the high level of competitiveness in the marketplace.
DEFENSIVE: Notebook Value	Equal to Dell; significantly higher than Toshiba at 95% confidence level, an honor shared with both Dell and Gateway.	Average	GAP rating of -5.8% against industry average of -8%. Best in class.	Improved moderately, at 0.75%, while Dell's position declined.	Increased by 2.1% with position well above that of Dell.	N/A	Dell will not sit still and HP needs to be cognizant of increasing pricing pressures.

Intangible Issues

- Differentiation.** HP continues to be less identified as most differentiated than either Dell or Lenovo when respondents are specifically asked for examples of brand differentiation. HP's recent product refreshes (April through June) with an emphasis on durability and wireless connectivity enhancements, compounded with its strong marketing push through its new and different ad campaign, should help to better position HP for product and service differentiation. We should expect that HP's new No. 1 ranking position in 3Q06, bolstered by a competitive strength for hardware reliability, should in time, if it is sustained, translate into a clearer picture of HP's differentiation message to its customers.

Upholding HP's New Reliability Advantage:

- HP's newly established competitive strength for hardware reliability, propelling the vendor to a sole No. 1 ranking position in 3Q06, must be protected at all costs. This has been a particularly impressive accomplishment, forcing Lenovo to share the distinction once held singularly by Lenovo (for the previous seven consecutive reporting periods).

Lenovo's Watch List Expanded to Include Two Reinstatements

(see notes page for explanation of rationale codes)

LENOVO	A	B	C	D	E	F	Notes
Repair Time	Significantly below industry average at 95% confidence level; also ran significantly behind HP, Gateway and Toshiba independently.	Primary	GAP rating of 8% versus industry average of -5%. Along with Gateway, Lenovo's GAP position was the widest.	Declined by 2.3%, the second biggest decline area for Lenovo in 3Q06. Competition improving.	Declined an additional 2.7% while the competition remains stable.	Lenovo had earned competitive strengths in 2Q05 and 3Q05 and has been unable to subsequently repeat these performances.	This remains on the Watch List due to very high customer expectations and high level of competitiveness in the marketplace as competitors' positions have improved (repair time was on the Watch List for all five competitors in 2Q06). Lenovo's position is declining significantly.
Notebook Value	Average, however HP and Dell significantly outperformed Toshiba while Lenovo did not.	Average	GAP rating of -10% versus industry average of -9%. Lenovo had the widest GAP rating due to high expectations.	Declined by a modest 0.8% yet HP's position improved.	Declined by a modest 0.85% while competition is improving.	Out of the woods for the seventh consecutive reporting period.	HP is performing extremely well and, while Dell's competitive strength determination was rescinded, we expect there will be more movement on this vendor's part to re-establish its dominance.
REINSTATED - Delivery Time	Beginning to trail industry average gain. Significantly underperformed Dell at 90% confidence level.	Average	GAP rating of -7% versus industry average of -4%. Along with Toshiba, Lenovo is at the high end - not effectively meeting	No change, however, HP's position improved moderately.	Declining by 2.7% while positions of HP and Dell are more stable.	Weakness determination remains at bay for third consecutive reporting period, however, position is beginning to	Delivery time is an area where Lenovo (and the IBM PC company before it) has historically been challenged. While Lenovo remains essentially in recovery mode, there have been indications of a weakening of its supply chain operations.
REINSTATED - Parts Availability	Also beginning to trail industry average. Underperformed Gateway and HP at 90% confidence level.	Average	GAP rating of -8.5% against industry average of -6%. Lenovo's GAP rating was the widest of the competition.	Declined by 2.6%, the area experiencing the greatest magnitude decline for Lenovo in 3Q06. Competitors' positions stable.	Declining an additional 1.2%.	N/A	This item has been reinstated for Lenovo due to past challenges and currently weakening positions. This also relates to the supply chain issue.

Intangible Issues

- Sustainability.** Most notably, Lenovo has maintained its impressive competitive strength for the all-important hardware reliability category, and reasserted its dominance relative to how customers perceive its design elements. These competitive wins will need to be defended in a marketplace where the focus has shifted to durability and feature enhancement (security and connectivity features). For the first time, Lenovo has been forced in 3Q06 to share its hardware reliability competitive strength with HP, resulting in a loss of its No. 1 ranking position.

Toshiba's Watch List Reduced to Just Two – Value & Delivery Time

(see notes page for explanation of rationale codes)

TOSHIBA	A	B	C	D	E	F	Notes
Notebook Value	Significantly below industry average at 95% confidence level; significantly outperformed by Dell, Gateway and HP at 95% confidence.	Primary	GAP rating of -9% against industry average of -8%. Toshiba's GAP rating was the widest, next to Lenovo.	Declined by 1.3% against more stable competitors' positions.	Declined an additional 1.1% while non-Dell competitors' positions remaining stable.	A competitive weakness has been in effect for the past four consecutive reporting periods. The determinations had been lifted in 3Q05 and 4Q05.	This is one area where Toshiba has been unable to recover from past challenges. Pricing competition will only increase, and now it comes from places other than Dell (HP and Gateway).
NEW: Delivery Time	Average	Average	GAP position of -6.5% lies at the extreme end along with Lenovo.	Declined by 2.2% and the only area showing significantly declining satisfaction for Toshiba in an otherwise positive reporting period.	Declining an additional 3%, yet all vendors' positions also declining.	N/A	This has been added to the Watch List due to its new presence as a potential area of weakness for Toshiba. New channel strength should adjust to this due to Toshiba's new partner programs.

Intangible Issues

- Continued Momentum.** Toshiba has made substantial progress in the past several reporting periods, transforming from a chronically weak competitor, particularly in the area of notebook support, to an average performer. Yet, the marketplace continues to move forward, thus increasing the pressure on Toshiba to maintain comparable performances. While this has been accomplished fully as of 3Q06, Toshiba now needs to consider notebook support items as defensive measures moving forward.
- Differentiation.** Along with Gateway, Toshiba was the brand least identified as differentiated in the corporate notebook space. With the marketplace focusing on both enhanced design elements and features, as well as support services, Toshiba must work to convince its customers it has changed, or rather, returned to its roots. Much time has passed since Toshiba earned its initial reputation in the marketplace for quality and design. Additionally, with the marketplace going through some significant changes during the past six months, Toshiba's burden is becoming even greater.

Removed from the Watch List: Phone Support and Repair Time. In both cases, Toshiba's satisfaction positions increased substantially in 3Q06, to the extent that chronic weaknesses of the past have been successfully addressed. Toshiba has reached parity status with the competition on both fronts.

Gateway's Watch List Reduced Considerably Due to Strong Improvement

(see notes page for explanation of rationale codes)

Citation	Rationale						Notes
GATEWAY	A	B	C	D	E	F	Notes
Repair Time	On the high end of the competitive range; significantly outperformed Lenovo at the 95% confidence level, shared by HP and Toshiba.	Below average	GAP rating of -8.2% against industry average of -5%. Gateway's GAP rating, along with Lenovo, was among the widest.	Improved by 2.7% for an improving status alongside Toshiba and HP.	Increased an additional 0.6%, improving alongside Toshiba and HP.	N/A	This remains on the Watch List due to very high customer expectations and high level of competitiveness in the marketplace.
Hardware Reliability	Significantly below the industry average at 95% confidence level. Significantly underperformed HP and Lenovo.	Secondary	GAP rating of -14% against industry average of -13%. Gateway's GAP rating remains the widest (alongside Toshiba).	Improved by 2% and on a course of improvement, but not yet where it needs to be.	Improving an additional 3.4% showing strongest level of improvement next to Toshiba.	Cited as a solid weakness from 3Q05 through 2Q06. Reduced to a mere warning in 3Q06.	Gateway clearly needs to address this perceptual issue above all others, as its deficit position has compromised its ranking position for the duration of the vendor's coverage in the study. However, it does appear this condition may be on its way out. Gateway is closer than it has ever been to reaching parity with the competition. We will need to see a continuation of this new trend.
Product Design	Significantly below industry average at 95% confidence level; scored significantly below Lenovo at 95% confidence and HP at 90% confidence.	Below average	GAP rating of -2.4% against industry average of 0%. Gateway and Toshiba were the only competitors to exhibit negative GAP ratings.	Increased by 2.6% against competitors' positions as either flat or declining.	Increased by a significant 7%.	A new competitive weakness was issued in 2Q06 and remains in effect in 3Q06.	It would seem that Gateway has been innovative in its product design efforts, having the unique success of communicating the value advantage of convertible notebook PCs to its customer base. A new ultraportable model was introduced in the spring of 2006. Nonetheless, the competition has been working effortlessly on improving their own customers' perceptions of design elements, hence the greater challenge to Gateway.

Gateway's Watch List Reduced Considerably Due to Strong Improvement

(see notes page for explanation of rationale codes)

Intangible Issues

- **Momentum.** Gateway is now officially well on the way to a full recovery from past competitive weaknesses. In 3Q06, Gateway was the most improved competitor. Three full competitive weakness determinations in 2Q06 (hardware reliability, product design, notebook value) were reduced to two warnings (reliability and design) and a neutral determination (notebook value). To drastically change its ranking assignment, it is imperative that Gateway see the removal of its remaining two warnings. Thus far, the vendor appears to be moving in that direction on both counts, with satisfaction having increased substantially in both 3Q06 and in the first half of the upcoming 4Q06 reporting period.
- **Differentiation.** Along with Toshiba, Gateway was the brand least identified as exhibiting differentiating properties.

Removed From Watch List:

- **Phone Support.** Gateway's satisfaction position improved a substantial 3.8% in 3Q06, the largest gain in position observed for any player in this category.
- **Notebook Value.** Gateway's satisfaction position advanced by 2.8% in 3Q06 while Dell's position declined by 1.6%. It would seem that Gateway applied some significant price cuts during the quarter, having the effect of improving satisfaction all around. The lift had a considerably positive effect on Gateway's overall satisfaction and customer loyalty positions as well.

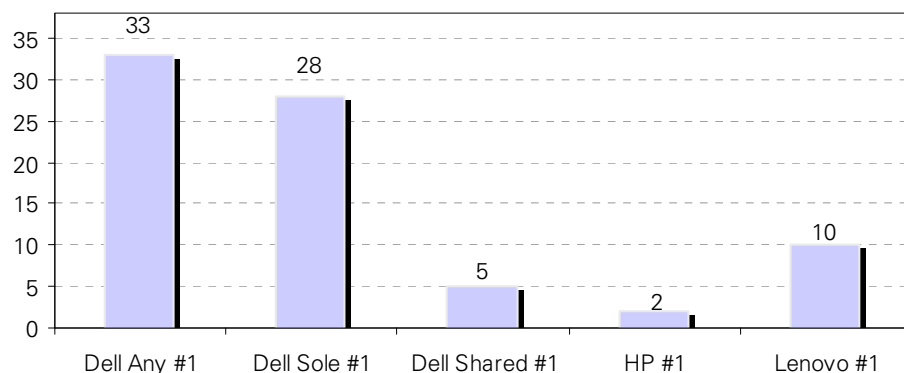
Dell Continues to Hold the Record for Number of Wins, Yet New Winners Enter the Mix in the Past Year

- Since its emergence in 2Q98 as a No. 1 ranked player, Dell held that position firmly through 2Q06.
- Among its record No. 1 ranking positions for 33 reporting periods, 28 of those were sole No. 1 rankings for Dell.
- In a total of five of those reporting periods, Dell shared the position with Lenovo (formerly IBM).
- Half of Lenovo's wins were pre-2Q98.

TBR Number One Ranking Determinations - Past Seven Reporting Periods							
	1Q05	2Q05	3Q05	4Q05	1Q06	2Q06	3Q06
Dell	■	■	■	■	■	■	
HP							■
Lenovo		■	■			■	

SOURCE: TBR.

TBR CORPORATE NOTEBOOK VENDOR RANKING POSITION WINS
(Based on 39-reporting period history, 1Q97 through 3Q06)



SOURCE: TBR.

- Throughout six of the past seven reporting periods, during which time Lenovo achieved three No. 1 rankings, Dell held firm to its No. 1 ranking position and tied with Lenovo three times.
- Since 1Q05, Lenovo has earned a No. 1 ranking position three times, representing three-fifths of its wins since 1Q01.
- HP emerged for the first time since the earlier days of Compaq as a No. 1 ranked player in 3Q06.
- Dell's 3Q06 No. 2 ranking is the first time it has not held the No. 1 ranking position determination since 1Q98.


Historically, Only Dell and Lenovo Have Exhibited Repeated Competitive Strengths

TBR Highlights of Corporate Notebook Vendors' Historical Competitive Performances					
VENDOR	ATTRIBUTE	COMPETITIVE STRENGTH	COMPETITIVE WEAKNESS OR WARNING	RECORD	COMMENTS
Dell	Delivery time	■		24 of 34 reporting periods	Constant since 1Q02, however, marketplace shifting as Dell's advantage was softened to a marginal determination in 2Q05; withdrawn entirely in 3Q05 and 4Q05. Returned briefly in 1Q06.
	Overall value	■		32 of 34 reporting periods	Dell lost competitive advantage for first time in 3Q05 and remained lost in 4Q05. Returned in 1Q06 & 2Q06, while disappearing in 3Q06.
	Parts availability	■		15 of 28 reporting periods	Lenovo joins Dell with competitive advantages in 2Q05 and 3Q05. All neutral players since 1Q06.
	Repair time	■		10 of 34 reporting periods	Dell's competitive strength reemerged for the first time in 3Q05 after a six-reporting-period absence. Remained in evidence for three consecutive reporting periods (3Q05 through 1Q06). Not in evidence since.
	Hardware quality	■		10 of 34 reporting periods	None since 4Q03
Gateway	Hardware quality		■	5 of 5 reporting periods	Since the time of its inclusion in this study in 3Q05, Gateway has been cited with competitive weaknesses for hardware quality. Its position is improving however, having been adjusted to a warning in 3Q06.
HP	Overall value		■	17 of 34 reporting periods	Neutral for past six consecutive reporting periods.
	Hardware quality		■	10 of 34 reporting periods	Generally 1Q01 and before following a full recovery. In 3Q06, HP transformed an historical weakness to a full competitive strength.
Lenovo	Delivery time		■	27 of 34 reporting periods	Absent from 3Q04 through 3Q05; reemerged in 4Q05 and 1Q06; lifted in 2Q06 & 3Q06.
	Overall value		■	17 of 34 reporting periods	Was constant for two years, from 1Q02 to 4Q03. Not seen since 4Q04.
	Hardware quality	■		12 of 34 reporting periods	Consistent for past eight reporting periods; becoming an expectation.
	Repair time	■	■	2 of 34 reporting periods as a weakness	All three areas of support emerged as new competitive strengths in 2Q05 and 3Q05. Such strengths were no longer evident beginning in 4Q05. In 3Q06, Lenovo's previous repair time competitive strength reversed to a competitive weakness.
	Phone support	■		2 of 34 reporting periods	All three areas of support emerged as new competitive strengths in 2Q05 and 3Q05. Such strengths were no longer evident beginning in 4Q05.
	Parts availability	■		2 of 28 reporting periods	All three areas of support emerged as new competitive strengths in 2Q05 and 3Q05. Such strengths were no longer evident beginning in 4Q05.
Toshiba	Overall value		■	28 of 34 reporting periods	Consistent 2Q04 to 2Q05. Removed in 3Q05 and remained neutral into 4Q05. Returned as warning in 2006.
	Parts availability		■	22 of 28 reporting periods	Evident from 3Q02 through 1Q06. Recovered in 2Q06. Remains at bay in 3Q06.
	Repair time		■	24 of 34 reporting periods	Constant since 1Q02. Removed fully throughout 2006.
	Phone support		■	25 of 34 reporting periods	Constant from 4Q04 to 3Q05. Recovered in 4Q05 and remains so throughout 2006.
	Hardware quality		■	14 of 34 reporting periods	Evident in five of the six reporting periods from 1Q04 through 2Q05; recovered 3Q05 through 3Q06.

■ TBR awarded this vendor a competitive strength for this attribute in the respective quarter.
 ■ TBR cited this vendor with a competitive weakness or warning for this attribute in the respective quarter.

SOURCE: TBR.

Among the More Recent Reporting Periods, Competition Has Increased

TBR  Recent Historical Accumulation of Key Competitive Differences

	1Q05	2Q05	3Q05	4Q05	1Q06	2Q06	3Q06
Dell Delivery Time	■	■			■		
Dell Value	■	■			■	■	
Dell Parts Availability	■	■	■	■			
Dell Repair Time			■	■	■		
Dell Quality							
Lenovo Quality	■	■	■	■	■	■	■
Lenovo Repair Time		■	■				■
Lenovo Phone Support		■	■				
Lenovo Delivery Time				■	■		
Lenovo Value							
HP Value							
HP Quality							■
Toshiba Value	■	■			■	■	■
Toshiba Parts Availability	■	■	■	■	■		
Toshiba Repair Time	■	■	■	■			
Toshiba Phone Support	■	■	■				
Toshiba Quality	■	■					
Gateway Quality	N/A	N/A	■	■	■	■	■

■ TBR awarded this vendor a competitive strength for this attribute in the respective quarter.
 ■ TBR cited this vendor with a competitive weakness or warning for this attribute in the respective quarter.

SOURCE: TBR.

Dell competitive strengths somewhat diminished.

Lenovo competitive strengths emerging while weaknesses diminishing.

A new competitor, HP, emerges with a strength.

Weaknesses thinning out.