SUMMARY

Demand Situation for Computer Hardware Vendors in the US
IBM-HP-Dell

In the race to command the US Computer Hardware marketplace, this report calls out today's winners and losers and, if the current trends continue, it foretells an inevitable future.

> **It has been said that one sign of insanity is for an individual to persistently repeat behaviors, all the while expecting different outcomes. Maybe this is true for corporations as well.**

Over the past two years the venerable IBM, a reinforced HP, and the relentless Dell have waged war in the greatly consolidated US Computer Hardware marketplace. During these 24 months, **Dell has gained 20% in overall Demand Strength, while IBM has gained 9% and HP (Compaq) has lost 16%.**

Because IBM, HP, and Dell now supply the majority of computer hardware purchased by business, government, and educational institutions in the US, the competition between these firms defines the market dynamics in each category in which they compete. The revenue success and highly correlated stock price achieved by each firm reflects the company's ability to garner attraction, convert this attraction to sales, create customer loyalty, and improve the crucial metric called **Demand Strength**.

This report summarizes the current Demand Situation and highlights the changes that have occurred over the past two years in nine categories in which the three firms compete. The key findings herein are taken from a comprehensive body of market research conducted quarterly by Techtel and include assessments drawn from Techtel Company Opinion Tracking, Demand Chain Summaries, and Product Brand Strength and Vendor Business Problem Association research.

Among its many findings, this report provides fact-based analysis that concludes:

- Dell commands the US professional PC market and is building momentum in other categories.
- HP is losing ground to Dell and IBM in many computer hardware categories.
- IBM is associated more often with solving business problems than is either HP or Dell.
- The IT Outsourcing category is a rising star for HP.
- HP's command of the printer market underscores the challenge facing Dell in this new Dell venture.

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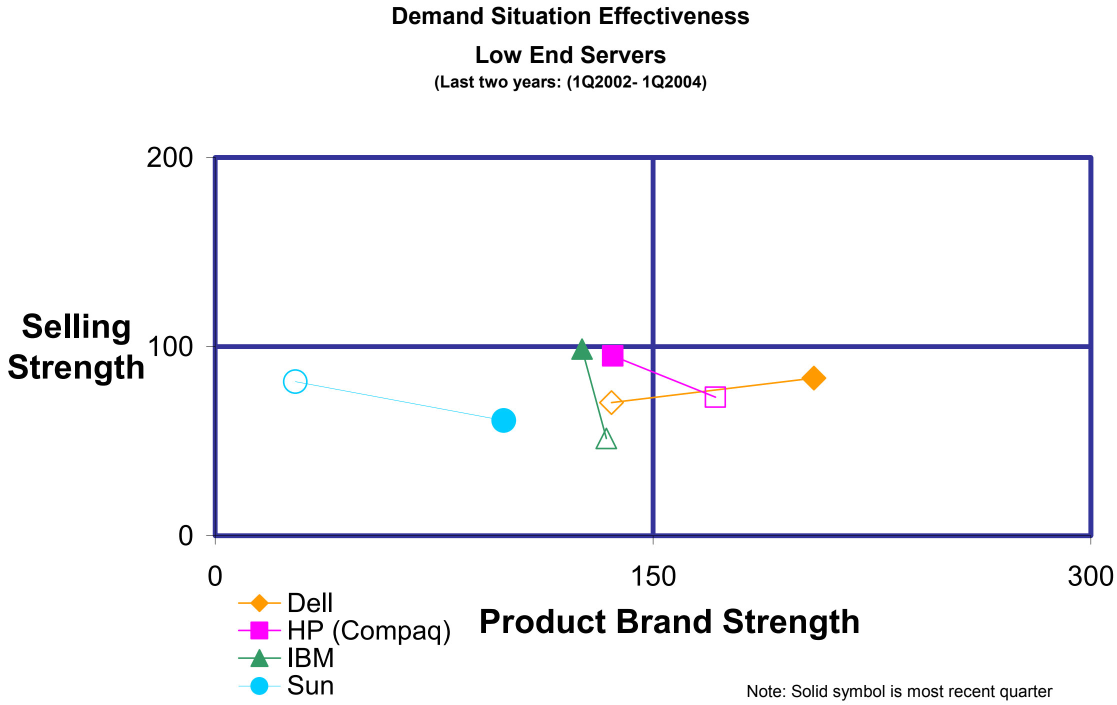
Section III – The US Professional Server and Disk Storage Market

Low-End and Mid-Range Servers and Disk Storage

The imminent "commodization" of servers has been debated for the past few years and, if Dell's entrance into this market signaled such an occurrence, then buyers have certainly embraced commodization in the low-end and, increasingly, mid-range server markets.

Figure 6. Demand Situation for Low-End Servers (<$100K) (IBM, HP, Dell, Sun) (US Professional Market)



At present, the low-end server market (Figure 6) is a closer race for IBM, HP, and Dell than is the PC market. However, if past PC market achievements are a sign of "lessons learned," both IBM and HP need to change tactics to compete with Dell. During the past two years, IBM has done well to increase Selling Strength and is tied with HP for runner-up Product Brand Strength. However, both HP and IBM are losing their grip on the low-end US server market due to declining buyer attraction.

Though Sun Microsystems' market woes and impending layoffs have captured investors' attention, Techtel demand-side research shows Sun with significantly improving attraction strength. Sun's ability to close sales on their renewed Product Brand Strength will be the key to a possible turnaround in 2004.

About the Charts

This report consists of Demand Situation Effectiveness charts taken from Techtel's at-a-glance Demand Summary Series reports, which are published quarterly for select IT categories and include most category competitors.

The Demand Situation Effectiveness chart is truly the definitive measurement of market success, as this chart instantly displays the strength of a vendor's product solution in the eyes of IT Professionals along one axis. The vendor's ability to close business with these buyers is presented along the other axis.

This chart pinpoints each category vendor's achievements in attracting customers (Product Brand Strength) and closing buyers (Selling Strength) and serves as the starting point in analyzing a vendor's Demand Chain Management effectiveness.

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Techtel Methodology Summary

Techtel Corporation publishes a variety of market demand and company opinion reports each quarter. This research is based on quarterly surveys of Techtel's long-standing research panel of information technology professionals. The IT Market Opinion™ survey employs a proprietary design developed by Techtel and used to measure market demand for IT products and services since 1984.

Each quarter Techtel receives an average of 650 responses from our 1800-member research panel of US businesspersons with buying influence or purchase authority for IT and communications products and services. Respondents represent their companies in answering questions about various vendor products and/or services, which are organized into more than 30 categories. From the results of these surveys, we establish consistent measures of demand, demand-sales conversion, and degree of customer loyalty.

All statistics are weighted for demographic consistency based on number of employees, management level, IT/non-IT department status, and panel participation history.

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