

HP + Compaq = ?

A Walk-Through of a Merger Valuation

HP's Major Concerns

- Need to attack the Enterprise market more aggressively
 - Primary engine for value creation: \$800BN market in 2000 growing at 12% from 2000 to 2004
- Need to adapt more quickly the direct selling model (*a la Dell*) in their PC business
- Need to continue to invest in Imaging & Printing business

How the PC Industry Revolutionized

- Direct-selling: shifting the power of the value chain
- Dell's ability to turnover inventory at a much faster rate dramatically changed the cost-structure necessary to survive in the PC-making industry

The numbers tell the same story:

(\$BN)	Dell	HWP	CPQ
Sales(ttm)	31.2	44.2	33.6
EBITDA(ttm)	1.8	2.7	0.6
Net Income(ttm)	1.3	0.7	-0.6
Operating Margin	5.7%	2.9%	-2.3%
Profit Margin	4.0%	1.6%	-1.7%
ROC(ttm)	9.3%	2.2%	-2.4%
ROE(ttm)	24.4%	5.1%	-4.8%

Source: Yahoo! Finance

Background on Mergers

Key Questions

- Can the bidder-firm achieve objectives without merger?
 - Strategic alliances vs. mergers
- Will synergy ever be achieved?
 - Empirical studies by McKinsey & Co. say “rarely”
- Did the bidder overpay?
 - Any value created can easily be wiped out

A Dangerous Game

- McKinsey & Co.’s study of 58 acquisition programs between 1972 and 1983
 - Did return on amount invested exceed cost of capital?
 - Did acquisition help parent company outperform competition?

Failed both tests	48%
Failed at least one	10%

Source: *Investment Valuation, 2nd Edition*

Need More Evidence?

- McKinsey & Co. studied 115 mergers in the UK and US in the 1990s
 - 60% earned returns on capital less than the cost of capital
 - 23% earned excess returns
- KPMG examined 700 of the most expensive deals between 1996 and 1998
 - 17% created value
 - 30% were value-neutral
 - 53% destroyed value

Source: *Investment Valuation, 2nd Edition*

Valuating a Merger: All About Synergy

Synergies Explained (Briefly)

Value generated from:

- Diversification: lowering the discount rate
- Operating synergy: increasing margins and growth
- Financial synergy: increasing the cash balance

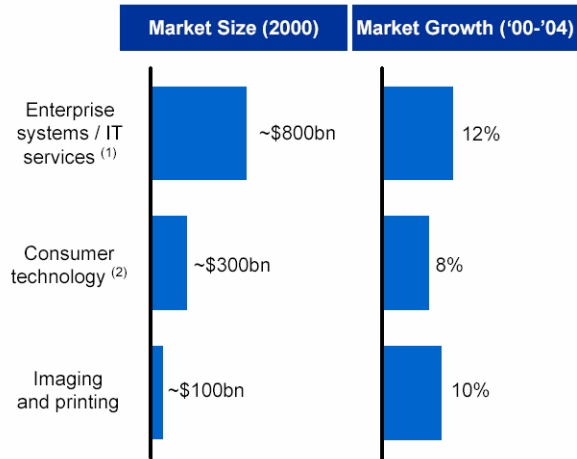
$$V(AB) > V(A) + V(B)$$

Or

$$V(AB) = V(A) + V(B) + V(S)$$

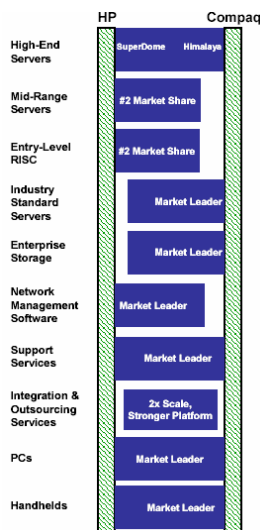
State of the Industry

Hewlett-Packard's Playing Markets



Source: McKinsey & Co.

HP + Compaq: PCs? Not Really...



Source: HP

Enterprise Hardware Market

- Five main players
 - IBM
 - Sun
 - Dell
 - HP
 - Compaq

- Three main platforms
 - UNIX (8% growth through 2005)
 - Linux (38% growth through 2005)
 - NT (15% growth through 2005)

Source: IDC



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Enterprise Storage Market

- IDC expects 6.1% growth through 2005
 - Implementation and integration due to popularity of storage area networks (SANs)
 - \$13BN through 2005
 - Japan, Europe and Asia/Pacific fastest growing
 - United States still primary revenue source

Source: IDC



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Network Management Market

- Annual growth of 20% over the next four years...
- Reaching \$21 billion by 2005
- 100+ vendors will probably lead to consolidation

Source: Bear Stearns

HP + Compaq

Reasons for Merger

- Both HP and Compaq suffer similar risks of “standing still”
 - Ability to respond effectively to changing customer requirements inhibited by small product mix
 - Current operating model is competitively **disadvantaged**; cost structure is too high
 - Growth in Imaging and Printing inhibited by lower investment base and small enterprise opportunities
- HP Business/Industry is dynamic
- Merger will enhance business segments as individual and **complimentary operations**

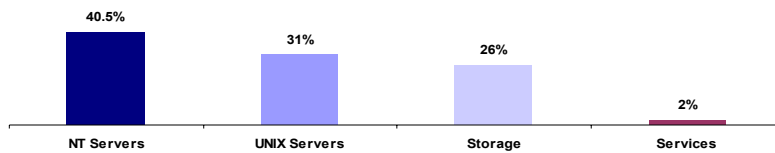
Strategic Synergies

- ENTERPRISE
 - Combines leadership in separate market segments
 - Will create “End-to-End Solutions” platform and **better service customers**
- ACCESS (PCs)
 - Maturing/Consolidating Industry
 - Provide flexibility and innovation to meet customer demand
 - **Increase profitability by cutting costs**
 - Employ hybrid distribution capabilities
- IMAGING & PRINTING (IPS)
 - Increase investment base to capture higher growth
 - Highly complimentary R&D capabilities (~4bil in 2001)
 - Increase enterprise-related account opportunities

Example: Enterprise

- Servers
 - CPQ (Himalaya) fault-tolerance technology and growth in standard servers + HWP's strength (SuperDome) in mid-high end UNIX servers
- Storage
 - CPQ's Leading position + HWP's leadership in High-End and Integration
- Operating Margins for Enterprise Systems
 - 9.2% (up from HP's comparable -3.2% in 2001)

CY2000 Market Share Projections for Combined Firm



Top 10 Challenges

1. Challenges of integrating global operations
2. International nature of business
3. Execution of distribution model
4. Development and transition of new Product Mix
5. Exposure to increased competitive pressures

Top 10 Challenges (cont.)

6. Weak economy may inhibit merger at critical stage
7. Current and future weakening of credit rating
8. Customer / Market Uncertainties
9. Regulatory approval / restrictions
10. Fixed Ratio of 0.635

Scenario Analysis: HP's Case

Carly's Big Party Plans

- 5.0% sales erosion
- 8.1% EBIT margin (resulting from \$2.5BN cost savings)
- 7.0% net income margin
- 10.7% ROC
- **Post-merger share price: \$24.85**

Synergy Calculations

HWP Intrinsic Firm Value	36,695,889
CPQ Intrinsic Firm Value	10,682,654
Value of HWP + CPQ without Synergy	47,378,542
Value of HWP + CPQ with Synergy	82,564,626
Vale of Synergy	35,186,083
Price Paid by HWP	25,000,000
Increase in Value from Merger	10,186,083

Scenario Analysis: Walter Hewlett's Case

The Walter Hewlett Files

- The son of the co-founder of HP opposes the merger
- Suggests focusing on HP's Imaging & Printing business
 - Focus on increasing firm value through the development of Imaging & Printing business
- Believes management's assumptions are unrealistic

Why Walter Disapproves

- 15.0% sales erosion
- 5.2% EBIT margin
- 4.7% net income margin
- 7.2% ROC
- Post-merger share price: \$15.49

Synergy Calculations

HWP Intrinsic Firm Value	36,695,889
CPQ Intrinsic Firm Value	10,682,654
Value of HWP + CPQ without Synergy	47,378,542
Value of HWP + CPQ with Synergy	54,295,049
Value of Synergy	6,916,507
Price Paid by HWP	25,000,000
Increase in Value from Merger	(18,083,493)

Execution Issues

Qualitative Issues to Note

- Competition
 - As HP and Compaq smooth out their merger, the industry – and their competitors – move on to bigger and better things
- Blending in
 - The merged company needs to be a “hybrid enterprise”
- Convincing customers
 - Customers want a clear “migration path,” especial with regards to discontinued offerings
- Meshing cultures
 - HP: “deliberative, thorough decision-making”
 - Compaq: “fast decision-making and marketing”

Source: *New York Times*, March 25, 2002

Will the Merger Work?