Carnegie Consulting

Strategic Solutions for Business

Building a Stronger Hewlett-Packard

Prepared For:
Hewlett-Packard Company

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Executive Summary

Hewlett-Packard is the leader in imaging and printing solutions and a major player in computer hardware and enterprise solutions. The company successfully cross markets its computer hardware to imaging and printing customers and clients seeking sophisticated end-to-end computing solutions. The consumer computer hardware market also provides a large base for Hewlett-Packard to sell lower-end imaging and printing systems. There are no direct substitutes for computer hardware and most complements exist within the industry. Entry is unlikely due to large capital fixed costs and the current hyper-competitive nature of the computer hardware industry. Microsoft and Intel hold significant supplier power in their operating system and CPU inputs. Buyer power is insignificant.

The company's strengths lie in its high quality reputation in imaging and printing solutions, notable R&D capabilities and growing enterprise solutions business. Hewlett-Packard's primary weaknesses are its underdeveloped direct distribution network, sizable exposure to the consumer PC market and inconsistent quality of product offerings in computing systems. Gaining Compaq's products to create a more complete high quality product line, building a larger enterprise solutions business, and increasing partnerships with other technology companies represent opportunities for the firm. Failure to successfully execute the merger, losing market share from merger-related instability, failure to foresee future technological trends, and reduced R&D expenditures threaten growth.

Summary of Five-Forces Analysis

Force	Threat to Profits
Internal Rivalry	High
Entry	Low
Substitutes and Complements	Low
Supplier Power	Medium to High
Buyer Power	Low

This report does not address issues relating to should the merger have been pursued, but analyzes how to make the merger work. Carnegie Consulting believes the HP-Compaq merger will create major growth potential for the new company into the enterprise solutions industry. Carnegie Consulting believes Hewlett-Packard should hire an executive or consultant from a competitor in enterprise solutions, such as IBM, who possesses experience with high-end clients to help organize the new enterprise solutions business. Different business segments should operate separate R&D programs to protect the valuable imaging and printing solutions business and to bolster technological advancement in enterprise solutions. A new advertising campaign would fuel growth in the new enterprise solutions and enhanced computing systems business.

Carnegie Consulting will continue to aid in the strategic planning for Hewlett-Packard's future and work to help ensure the successful integration of Compaq.

Company Overview

Company History

Hewlett-Packard (HP) came from humble beginnings. Bill Hewlett and Dave Packard both graduated from Stanford University in 1934 with degrees in electrical engineering. Following a two week camping and fishing trip the two became very close friends. Dave found work with General Electric and Bill went on to graduate school at MIT. They decided to start their own business after some encouragement from a Stanford professor. The firm was born in Dave Packard's garage consisting of the two entrepreneurs, $538 and a used Sears-Roebuck drill press.

The firm's first product was the HP Model 200A, an instrument used to test sound equipment. The model number was given the title 200A, "because we thought the name would make us look like we'd been around for a while" explained Dave Packard. With eight orders from Walt Disney, using the equipment to create the soundtrack for *Fantasia*, the firm made its first major sale. In 1939, the two formalized their partnership and decided upon the firm's name by flipping a coin.[i]

HP introduced its first computer in 1980 and expanded to become a major player in the computer industry throughout the decade with a full range of desktops, portable computers and powerful minicomputers. In 1984 the company produced its first two printer models, the HP ThinkJet and the HP LaserJet. The HP LaserJet soon became the company's most successful single product and the most popular desktop laser printer in the world.[ii]

On September 4th, 2001 HP announced plans to acquire Compaq in the largest merger in the history of the computer hardware industry. The deal is a stock purchase initially valued at roughly $25 billion. Today the valuation is about $20 billion due to serious market fluctuations. The combined firm would represent an $87 billion giant and seriously alter the competitive landscape of the computer hardware and IT services industries.[iii]

Today HP is a part of the S&P 500, the Dow Jones Industrials and #28 on the Fortune 500. HP holds leading positions in the computer systems, imaging and printing solutions and Information Technology (IT) services businesses. More than 86,000 employees operate HP in over 160 countries throughout the world.

Company Vision & Mission

HP aims to create technologies that work for people. This vision is derived from the belief that power does not lie in technology, but in the way that people use technology to achieve their goals. HP's mission, in the words of Bill Hewlett and Dave Packard, is to, "invent the useful and significant." Useful is defined as freeing customers to focus on what means the most and significant as not only making a profit, but making a difference.[iv]

Internal Rivalry

Industry

HP operates primarily within the Computer Hardware industry. HP lies within the standard industry classification code (SIC) 3571, electronic computers. In 2001, the consumer computer hardware industry generated about $300 billion in sales.[v]

Product

The firm markets a broad variety of products to numerous business segments. HP deals with large multi-national customers, as well as small, individual consumers. Its products primarily fit into three distinct business segments.

HP is most famous for its high quality imaging and printing solutions (IPS) business. IPS products fall into four categories: printer hardware, imaging, printing supplies and commercial printing. HP is the leading IPS provider for printer hardware, printing supplies and scanning devices. The IPS segment currently focuses on three primary goals; gaining market share in lower end products, ensuring a smooth transition to new printers and expanding commercial printing relationships.

Printer hardware consists of laser and inkjet printers, including monochrome and color devices and units designed for businesses and homes. New product offerings include a completely new line of Internet-enabled LaserJet printers introduced in 2001 with improved speed and reduced prices, including the LaserJet 1200, 2200, 3200 and 4100 models.

The imaging business offers all-in-one solutions by selling scanners, digital cameras, PhotoSmart printers, personal color copiers, faxes and imaging services. This segment also includes a joint venture with Eastman Kodak to develop inkjet retail photo processing to replace the current silver halide procedure.

Printing supplies provides replacement ink cartridges, toner and paper for general purpose printing and photo processing. In 2001, HP introduced a new type of premium photo paper, representing the continuous innovations of the firm's printing supplies.

In February 2002, HP officially entered the commercial printing business by acquiring Indigo N.V., a commercial and industrial printing business. HP intends to use this acquisition to leverage further advances into the commercial printing and digital press markets.

Another key segment to HP is its computing systems business. This operation comprises the core of HP's current hardware offerings and it includes commercial personal computers (PCs), home PCs, handheld PCs, workstations, UNIX servers, PC servers, storage and software products. The segment markets both personal systems, to individual users, and enterprise solutions, to large corporations needing sophisticated infrastructure.

Innovations in PC's focus on developing acceptable balances of price and performance. The firm markets both desktops and laptops to consumers under the Pavilion line. HP sells business laptops under the Omnibook brand and desktops as either the high-performance vectra series or the value e-pc brand. HP is developing a new line of laptops that provide an excellent combination of weight, size and performance. This line includes the recently released Omnibook 500, an extremely lightweight portable computer designed to meet all of today's on-the-go business needs. The company also markets the HP Jordana line of handheld PCs as a fast, powerful PC capable of running numerous applications and providing wireless Internet access.

HP offers a variety of servers ranging from the lower range V-class to the new high-end, UNIX Superdome. Aside from UNIX, the firm produces servers capable of running HP-UX, Microsoft Windows and Linux based operating systems. In 2001 the company shipped its first Superdome, marking a significant advance in the quality of its server offerings with twice the speed of previous models. HP is poised for strong future growth potential in servers with its Explicitly Parallel Instruction Computing (EPIC) technology, which provides the foundation for Intel's next-generation Itanium Processor Family (IPF) architecture.

A wide variety of software complements HP's server and PC offerings. The company develops solutions to integrate the customer's software and HP's servers, networks and systems management products. HP-UX, HP-Linux, Netaction and Openview are all HP software offerings allowing customers to operate on multiple platforms and incorporate their current software environments with HP's hardware improvements and products.

HP's third primary business segment is IT services, organized around customer support, consulting and outsourcing. HP offers a complete end-to-end solution for IT services from initial planning to strategy implementation and ongoing operational support. The goal of HP IT services is to provide reliable consulting and implementation in the fields of Internet-based IT infrastructures, storage and storage-area networks, IT management, networks and mobile communications, support services, business-continuity and recovery services, infrastructure outsourcing and Web-hosting services.

HP also operates in more peripheral businesses such as financing for its technology, including leasing. The company sells some third party products and offers education and training to provide more complete customer solutions.

Geography

42% of HP revenues come from the United States. No other country represents more than 10% of firm revenue. Europe and the Asia Pacific region account for more than three-fourths of international revenue. A majority of this revenue is provided by customers other than foreign governments. 48% of HP's net property, plants and equipment are within the United States. Ireland houses 11% of the firm's net property, plants and equipment, Singapore 10% and other countries accommodate more minor holdings. HP manages manufacturing facilities in America, Mexico, Brazil, throughout Europe, East Asia, India and Australia. HP laboratories operate in California, France, India, Israel, Japan and the United Kingdom. Global operations are run from headquarters in Palo Alto, Miami, Geneva and Hong Kong.

Rival Firms

HP competes with numerous rivals in the firm's various business segments.

Within IPS HP defines its major competitors as Xerox, Lexmark, Seiko Epson, Sony and Cannon.

In the computing systems business, HP faces different rivals for its various product offerings. IBM competes with HP as a broad computing solutions provider, EMC in storage, Dell in personal computers and servers and Sun Microsystems in servers. Currently, HP competes with Compaq in a variety of products as well.

HP competes with numerous types of firms in the IT services business. Rivals include the service organizations of hardware suppliers such as IBM Global Service and Compaq Global Services. Independent service providers such as EDS Corporation and Computer Sciences Corporation also compete with HP. Consulting firms like Accenture, CapGemini/Ernst & Young and PricewaterhouseCoopers provide competition for HP's IT Services business.

Concentration Ratios

The top four firms in PC sales hold approximately 40% of the market share. Industry experts estimate that in the near future the top five firms could hold 70% of the market share.[vi] In servers the top four firms posses about 80% of the market share.

Differentiation from Competitors

HP uses differentiation from its competitors as a key strategy for future growth potential. Strategy differentiation was a key factor in developing the HP-Compaq merger.

HP differentiates itself from all pure-play and focused IPS competitors by providing end-to-end computing solutions and IT Enterprise capabilities along with its name brand IPS products. No other IPS player can by itself offer the full service package available from HP.

Differentiation is unique for every competitor within the computing systems business segments. For example, HP differentiates from competitors like Dell by offering more complete end-to-end solutions, a greater ability to independently innovate new technologies and possessing much stronger IT infrastructure capabilities. IBM lack's HP's market position in open systems, price/performance balance, flexible development strategy and speed to market with new products. Competitors like Sun Microsystems and EMC cannot provide HP's broad product assortment and do not posses open platforms.

HP differentiates from IT focused players like Accenture and PricewaterhouseCoopers by marketing its own product line and being able to offer completely in-house developed enterprise solutions.

Strategies

Merging with Compaq dominates HP's approach to future growth and this adaptation resonates throughout every business segment's individual development plan. HP hopes the acquisition will build an IT behemoth increasing market leadership in all segments and a unified central service provider building lasting partnerships with customers. The merger represents a strategic alternative to more pure-play competitors and an unparalleled mix of products, services and support.

The merger significantly increases HP's ability to meet the demands of enterprise customers. HP aims to offer the highest quality products in all server markets, from standard to high-end. The combined firm possesses a massive sales force with new partnerships for HP and the ability to develop relationships with companies needing the largest enterprise solutions available. HP accelerates its position in storage capabilities and in particular the rapidly expanding field of storage area networking. The merger also produces advances in general scope of product offerings available to HP's enterprise customers through the attainment of numerous, high-quality Compaq products. This issue is further explored in the opportunities section.

HP's fledging computer systems business needs the innovation of Compaq's equivalent segment. Compaq's strong development of a direct distribution model will transform HP's lagging effort. The two companies achieve significant economies of scale through a unified sales and support force. Innovation is more cost-effective in a combined firm because duplicities are eliminated.

Improvements in the other business segments significantly affect HP's IPS business. Savings in synergies and cost-cutting allows higher investment and more flexible R&D in high-margin IPS. New enterprise accounts increasingly need the more high-end IPS, increasing profit margins for the segment. The implementation of Compaq's direct distribution model in computing systems and increased enterprise activity further enlarges the IPS business and builds future growth potential.

Substitutes and Complements

Substitutes for the industry vary by product. For the PC and server, we feel there are no direct cost effective and logical substitutes. Close substitutes that produce many of the same basic operations of the PC are Palm pilots, cell phones, and wireless email systems. For business servicing and enterprise solutions, the substitute to the outsourcing method would be to produce these services within the firm. With the number of companies holding a basic IT staff and outsourcing significant tasks, the substitute has reached economies of scope. For the IPS products, the substitute would be to go entirely paperless—a process that still requires the scanning equipment provided by the industry. We feel that the computer hardware industry has developed due to its cost effective structure and that no current components of other industries exist as viable alternatives.

Most complements to the industry such as computer disks, memory chips, monitors, printers and IT staffing exist within the industry. The HP-Compaq merger brings together many of these complements. Paper is an important complement to the IPS business. While direct costs of paper do not influence IPS decisions, moral implications may force firms to operate on a lower paper quantity and utilize other storage methods such as optical scanning. Electricity costs are important specifically in the server business and drives manufacturers to produce more efficient machines. The blackouts that effected California last year may force firms to switch to more efficient machines that are less costly to keep online when electricity shortages force firms to purchase on spot market. IT staffing plays an important role as complement to the industry. Beyond the enterprise solutions offered to businesses by the industry, the IT staff in a firm is a necessary component to the hardware. The staff handles the basic, everyday tasks of monitoring and implementing the business' computer system. As the computer hardware industry develops new products, the ability for the IT staff to integrate and understand the new products lowers the upgrade and implementation costs for the firm.

Palm Pilots, cell phones, and wireless email devices also serve as complements to many of HP's products. Each of these products allows employees of a firm to operate away from their computer workstations. The value of these complements is dependent on the type of business.

The Windows operating system is the most important complement to the PC. It standardizes the PC industry and allows computers to communicate with a common language reducing transactions costs. Windows importance is seen in its influence on the final price of the PC. The second most important complement to the PC is the Internet. The Internet allows the PC to become a portal for communication with an unlimited number of other computers. The ability to share information and files through email and web space enables users to transfer information more efficiently than through prior means such as postal mail.

Entry

HP is active in so many business segments that it is unlikely another company could come to rival it comprehensively. However, there is a threat of entry in some of the individual businesses.

In imaging and printing, the possibility of another computer maker entering the fray is present. Dell has demonstrated tremendous power in the PC market, and it is possible they will enter the higher margin printing business, cross-selling their own printers with their very popular computers. A camera maker or other image company could also enter the IPS business. The potential for an image entrant increases as imaging needs move further towards digital format. It is not likely that a startup company will enter this space.

The computing business may be the most vulnerable of all to competition, but entry is not as significant a threat. There are significant capital requirements to enter the computing business, so a startup threat is not likely. Profit margins in this segment are suffering across the board (save for Dell Computer), so it is not an attractive business. The merger will make HP the second largest PC maker in the world. Combining this fact with the observation that the PC business has probably matured, we conclude that entry is not a significant threat in this segment.

The IT services business is perhaps the most vulnerable to entry because HP does not have the demonstrated edge of IBM, its primary competitor in this space. The barriers to entry are not as great in this segment as they are in the other businesses, and the potential profit margins are alluring. In addition to IBM, HP competes with companies like Accenture, and we feel that it is possible that other consulting firms will make a stronger showing in the IT consulting business, particularly when (if) IT spending makes a strong comeback in the coming decade. HP could still enjoy an advantage over such firms when it comes to implementation of IT solutions, but it remains to be seen whether this is significant.

Buyer and Supplier Power

There exists significant supplier power in the computer industry. In the PC market there are two primary players that extract rents from the producers. Intel, the producer of the CPU (central processing unit), and Microsoft, the producer of the OS (operating system), supply the two most important parts of nearly 130 million PCs a year.[vii] The other parts, including the motherboard, hard drive, floppy drives, and modems, are produced by a number of suppliers and, if they are not vertically integrated into the firm, have little supplier power. The combination of Intel and Microsoft's Windows, commonly dubbed Wintel,[viii] will power new PC sales through waves of upgrading. The release of the Pentium IV processor along with Windows XP in 2001 will likely drive PC sales in the current year.

The dependence on newest Wintel combination is also seen in the price. In 1997, Intel released the 233 MHz Pentium II retail priced at $636. Within six months the price on the same processor had dropped by 58%.[ix] This process of upgrading outdates old models of computers by reducing shelf life forcing PC manufacturers to only supply the latest computers and move all inventory before new Intel and Windows products are released. Dell, the leading PC manufacturer, through their made-to-order system has essentially cut out the inventory pressures associated with Wintel's upgrades.

The Wintel combination extracts rents in a number of different ways. Intel passes on marketing costs to computer manufacturers by forcing them to broadcast Intel logo on their machines and in their own computer advertisements. Windows acts in a similar manner but also forces computer manufacturers to program the OS's desktop in specific ways. For example, Windows forced manufacturers to make its Internet Explorer the default Internet browser over the Netscape Navigator as well as bundle in its other products such as the Microsoft Office package. But the Wintel combination also helps the industry in other ways by picking up the Research and Development tab. In 2000, Intel and Microsoft spent about 13.4% of their combined sales compared to the industry average of 2% to 5%. High levels of R&D by the Wintel combination assure computer hardware manufacturers a steady stream of new and loyal customers.

In the server and printing industry the manufacturer generally produces components in house. The operating system varies across different types of servers. Both UNIX and Microsoft are fighting for dominant market position in the overall server OS market with UNIX leading the way. The IPS industry works much the same way.

The buyer power in the consumer computer hardware industry is small. With the development of the direct sales method by Dell, customers can get exactly what they want out of a PC or system of PCs without costs to the manufacturer. Other manufacturers use indirect distribution channels such as retail outlets. The retail outlets, no matter the size, do not possess significant buying power. A large commercial customer could potentially gain some buyer power. Large businesses requiring high end enterprise solutions in particular could gain power because HP is attempting to grow this business.

Strengths, Weaknesses, Opportunities and Threats

Strengths

HP currently possesses the leading IPS on the market. The firm enjoys significant brand recognition and a wide variety of product offerings holding high quality reputations. Both high-end and industry standard products are successfully marketed to a large customer base. HP sets industry standards on innovation, price and performance of IPS. HP also possesses a strong R&D program for IPS and hopes to lead this market in the foreseeable future. Increasing enterprise solutions also fuel growth for IPS, particularly in the high-end products. Although 2001 represented depressed growth in IPS, the firm hopes to ensure future development through expanding enterprise markets, continuous demand for HP printing supplies and strategic partnerships with commercial printers. 25% of IPS products are sold with HP PCs and HP's IPS products occupy 10% of the world's retail shelf space.[x]

The computing systems business oscillates between the third and fourth largest provider of PCs to the world. The company is developing new product lines consistent with consumer and business demand in this field. HP also introduced a strong high-end server able to effectively compete with current rivals. The superdome represents a major achievement in HP's campaign to gain market share in high-end servers. The company also holds the second largest midrange and third largest entry-level server positions. HP possesses a clearly defined strategy to integrate to Intel's Itanium chip and displays direction in future server development. HP also runs the fourth largest workstations business. The company is able to offer a broader array of products by continuously developing workstation improvements and incorporating workstations into its greater solutions package. HP's notable R&D capabilities also provide ample possibilities for future growth initiatives in both servers and workstations. The computing systems position is further strengthened by a robust intellectual property portfolio and strong high-end storage products. The firm holds good market position for future growth in nearly all of its consumer technology products.

Strong high-end servers, storage and R&D provide large growth potential in the enterprise service and IT business. HP already holds a growing presence in system integrating hardware and software. The company is able to provide complete end-to-end business solutions through its own diverse computer product offerings. HP is currently the largest consumer IT company in the world. A sales force of over 7,000 currently focuses on building and expanding existing enterprise relationships.

Weaknesses

The merger weakens HP's operations in a few ways. Many of the company's most talented executives focus on the restructuring plan and are not working on firm operations. HP is thus at a disadvantage to its competitors because the firm must restructure and compete simultaneously. Also, the restructuring plan calls for a very large number of employees, 15,000 from the combined firm, to be laid off. This action adversely affects company moral and productivity.

Currently, HP's computing systems business segment displays numerous weaknesses. The company is unable to compete effectively with low-cost providers, such as Dell, due to an underdeveloped direct distribution network. Competitors are able to provide comparable products in both the consumer and corporate markets at lower costs because of their more efficient distribution process. Dell sells 70% of its US commercial volume and operates with 70 inventory turns through direct distribution channels. HP derives 15% of its US commercial sales via direct distribution and turns inventory at a lacking 25 times.[xi] These figures represent the failure of HP to adopt the low cost distribution structure of competitors and a major structural barrier to growth. HP's PC business has sizable exposure to the consumer PC market and has suffered subsequently, losing considerable market share. Although the Superdome represents a remarkable advancement in HP's server capabilities, industry experts rate IBM's Regatta and Sun Microsystems's Sun Fire 15K as superior price/performance combinations.[xii] The company is also failing to provide adequate competition in the mid-range and entry-level server markets and is slowing being carved out of these businesses. The mid-range and Window's server businesses in particular are unprofitable and sub-scale for HP.

HP's enterprise solutions are inherently challenged by the company's inconsistent quality of product offerings. By not being able to provide high quality products over all segments, from low to high-end, the company inhibits its ability to provide first-class total business solutions. Without significant advancement and an increase in product flexibility, HP must make large investments in numerous operating system platforms, system integration capabilities and new independent software vendors. Otherwise HP will not be able to offer a high-quality and broad variety of end-to-end total business solutions and stands to lose market share to rivals.

Weaknesses in IPS stem from decreasing potential in enterprise and computing systems businesses. In the absence of a strong enterprise business segment, the firm cannot effectively market high-end systems and will lose market share in its highest margin businesses. Also, deteriorating computing and enterprise operations draw cash away from the valuable R&D that fuels HP leadership in IPS.

Opportunities

The Compaq merger holds immense potential to fill the necessary product gaps in HP's line and provide a more complete enterprise and IT business. The combined entity possesses the number one market share in NT servers and storage, the number two market share in UNIX servers, the number three market share in IT services and a leader in PC sales (exact position depends on the amount of revenue lost in this segment because of the merger). More importantly than increased market share, Compaq represents a good strategic fit for HP's product needs. Compaq dominates the entry-level server market with its rack-mounted Standard Intel Architecture Servers (SIAS). Compaq also operates a leading Window's NT server group capable of replacing the fledging HP counterpart. Coupled with HP's high-end Superdome and the introduction of Intel's Itanium chip in 1993 (capable of running UNIX, HP could now offer incredibly diverse, high-quality server solutions), HP will possess a well-rounded server business.[xiii] Similarly, Compaq's storage business fits well in HP's product line. Compaq is the number one storage provider in terms of revenue and the leading supplier of storage area networks, the fastest growing segment. The new firm's ability to provide cutting edge storage solutions further strengthens the HP business package. HP possesses leading software in storage area management and a strong high-end storage business.[xiv] The combination would similarly create a more diversified product mix with industry leading hardware and software combinations. The PC business is very controversial, yet an integral part of developing future operations. Providing enterprise solutions necessitates the ability to supply high quality access systems, e.g. PCs and handheld devices. Compaq's direct distribution network could create a sales network capable of competing with low cost rivals, such as Dell, in the consumer and commercial markets. Dell's successful strategy can be replicable because it mainly relies on low product pricing and does not effectively differentiate its PCs. If the Compaq distribution system can be grafted onto HP then the company would save from the higher margins from bypassed indirect sales and decreased inventory costs, due to higher turnover rates. HP currently earns very high operating margins for the PC industry, around 3 to 4% (Dell's operating margins are only slightly higher due to low-end server sales and services). Combining the HP manufacturing model with Compaq's distribution network would thus create a successful and highly competitive PC business plan. This strategy mix could also be used in the workstations business to create similar results.

By creating a high quality computing products line with a diverse level of offerings at low costs, HP establishes a platform for significant expansion in enterprise solutions. The new firm can offer complete end-to-end solutions for large corporations and small business, for cutting-edge technological and everyday business infrastructure, for the commercial market and the individual consumer. The new HP also possesses a 15,000 man strong sales force to market the firm to new clients. Furthermore, the company is the number one partner to Intel, Microsoft, SAP, Oracle, BEA, Siebel, Accenture, PricewaterhouseCoopers and a variety of other corporations capable of disseminating HP's services to their clients.[xv]

IPS could benefit significantly from expanded enterprise business relationships increasing both the volume and the quality of future contracts. This strategy focuses on developing continuous double-digit growth in top-line IPS, some of HP's highest margin products. Furthermore, these contracts will generate ample cash to fund aggressive IPS R&D ensuring the future quality reputation of the HP brand and market leadership in IPS.

Threats

HP faces dangerous threats, especially risks related to the Compaq merger. One major risk the company faces is a failure to successfully execute the merger. Management could fail in this undertaking in a number of ways. If the right product mix is not established then HP's offering will appear cluttered and there will be unnecessary duplicity. The firm must pursue cost-cutting with intelligent ruthlessness in order to adequately realize the potential savings gains of the merger. If the firm cuts too little, then HP will carry unnecessary expenditures. HP must also ensure it does not fire effective people or sales employees crucial to business relationships. Both over and undershooting cost cutting measures carries significant risk for the firm. The restructuring could also affect HP's successful technical culture. Currently, the best technical employees can obtain high level positions outside of management keeping more talented people active in R&D. If the merger harms this culture HP could lose its technical completive advantage.

HP could also suffer a loss of business stemming from the merger. Clients may choose competitors if HP is viewed as unstable during the reorganization. The firm may fail to react quickly to future market trends if it is overly focused on integration and not giving adequate attention to the core business, as was the case in the Compaq-DEC merger. A loss of business will have resoundingly negative effects on profit growth and diminish HP's relative position in the market. This threat is particularly potent in the IT business where clients seek a firm that can provide a long-term relationship. Customers will prefer to do business with HP's competitors if HP is in any way viewed as unstable.

Another threat for HP is the failure to foresee changing future trends. For example, the inability of HP to measure the progress of the server market will significantly harm future prospects for its enterprise solutions business. Similarly, a change in the competitive landscape would have negative ramifications for HP. The firm is relying upon the continuation of certain trends, e.g. the success of the direct distribution model and the importance of end-to-end solutions for commercial sales. A significant change in consumer or commercial demand would render certain HP strategies ineffective.

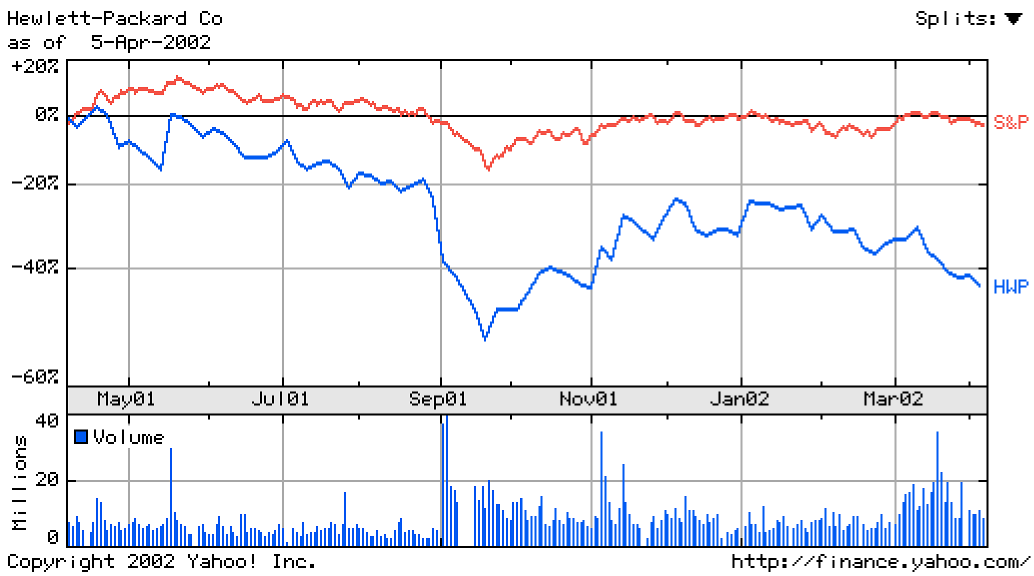
Currently, one-third of HP's revenues derive from PC and access device sales. In recent years the markets for these products was hyper-competitive and even the best firms possess extremely small profit margins. A further increase in competition or decrease in demand would represent a strategic impediment to HP. The firm must retain its relatively high operating margins and drive growth in computing systems market share if profits are to grow in the long-term. A failure to do so would restrain overall growth and future business opportunities.

A decrease in profits could lead to a reduction in R&D expenditure. Such a reduction will decrease the notably high quality of HP's products and the firm's overall significant brand value. This threat is potentially costly to the high-margin IPS business where firms are often willing to pay a premium for HP's services. A reduction in the perceived brand quality of HP IPS will reduce the high margins of this business.

Financial Outlook

HP is in a very comfortable financial position right now, with approximately $7 billion in cash on the books. The Compaq acquisition was an equity swap, so HP suffered no significant drop in cash as a result. HP has a current ratio of 1.68 for the most recent quarter, well above the desired minimum value of 1.00, and their quick ratio is 0.97, again a comfortable value.

The market value of HP stock has fluctuated throughout the past year, but most fluctuations have mirrored market fluctuations. The most noteworthy movement in the chart below is right about September 2001. The market reacted negatively to the announcement of the merger with Compaq, and the market sell off following September 11th further affected the stock. The beta is calculated to be 1.47. Currently, the total equity capitalization of HP is $33.0 billion, and the stock trades in the $16.00 range.



HP carries a comfortable amount of debt on their books, approximately $6 billion. Their Debt/Equity ratio is 0.42, and their cash-debt coverage ratio stands at 0.137, which is not impressive, but with the aforementioned current and quick ratios, this number should not be of concern.

For the most recent quarter, HP announced earnings of $0.24 per share ($478 million before extraordinary item), and EBITDA of $0.47 per share ($950 million). This gives a current P/E ratio of 47.57 (ttm).

The merger is expected to have a fairly profound positive effect on HP financials. The most compelling synergies come in the form of improved margins across the board in most of the HP businesses. Increased margins lead to an expected improvement of the EBIT profit margin from 4.5% to 8.6%. This improvement comes on an expected $2.5 billion in annual synergies. Some talk has been made that the company will see negative revenue growth primarily in the PC business. However, this loss is not expected to greatly effect EBIT when compared to the cost savings (revenue loss will amount to $500 million per annum, mostly due to a decrease in administrative and IT expenses and a reduction in cost of goods sold).

Strategic Analysis: Building a Stronger Hewlett-Packard

Summary

HP stands in a fairly solid position. The company is surrounded with growth potential if it can make the merger work. In a recent study of high-tech mergers performed by McKinsey, it was found that high-tech mergers are usually successful if the merging firms can "develop clear strategic goals for the company as a whole; they undertake only those transactions that can advance those goals; and they know how to get transactions done quickly, efficiently, and with the least possible stress to their acquisitions or themselves. Finally, they weave these transactional capabilities into their operational fabric."[xvi] HP clearly fits most, if not all, of these prerequisites. The combination of HP and Compaq is the culmination of two and a half years of strategic planning by the HP board.[xvii] The merger will create a company able to fulfill the business needs of commercial clients seeking enterprise solutions, as well as strengthening current positions in the consumer markets. The merger is being undertaken by a separate steering committee, executives who are not trying to run the firm and the merger in tandem. Also, these managers are experienced in making execution work, HP with Agilent Technologies and Compaq with DEC. In fact, many of the people on Compaq's integration committee come from the second DEC integration team credited with turning failing integration efforts around. At the surface, HP appears to be failing to pull off the merger quickly and with little stress. However, many of these setbacks are superficial. The proxy fight will not prevent what matters the most, the efficient integration of the two firms. The HP and Compaq integration committees are up to speed with their preparation and claim to possess a plan for swift execution once HP completes the acquisition.

Moving Forward

HP needs to differentiate itself effectively from competitors in order to capture a strong market position in the enterprise solutions business. The firm needs to offer a complete set of enterprise solutions and IT outsourcing and provide a competent staff of consultants able to craft the technology to meet customer needs. Significant time and effort needs to be exerted to develop this workforce. Carnegie Consulting recommends HP hire a senior consultant or executive from a competitor with an established presence with high-end clients, such as IBM, to help form this new segment. Once the enterprise solutions business matures another acquisition may be logical. Although the firm will possess significant resources in this field following the merger, it still lacks the size of IBM's sales and consulting forces. HP considered acquiring the IT unit of PricewaterhouseCoopers, though the idea was abandoned. Perhaps after establishing a more formidable presence in the field, such an acquisition could prove an excellent way to gain both experienced consultants and new clients.

Furthermore, we recommend HP develop a separate R&D program focused on developing enterprise solution technology and integrating current technologies into the available infrastructure. Carnegie Consulting believes current technologies are not being fully utilized. For example, HP's handheld access devices are nowhere near their potential. If access devices could be further developed, especially in tandem with the storage area networks, the devices could prove far more useful. If HP could offer an enterprise package with handhelds able to wirelessly access a client's mainframe and download, edit and send files, then it could further differentiate itself from competitors as a high-end solutions provider. IPS could also be significantly tailored to meet the demands of enterprise solutions clients. Printers able of providing commercial grade prints, usually outsourced to companies such as Kinko's, should be designed for relatively easy use to provide firms more complete business solutions that save money by eliminating the need to outsource their imaging and printing needs.

A major key to ensuring a positive financial reaction to the merger is preventing revenue decline. The company currently estimates a firm wide revenue decline of no more than 5%. Analysts see meeting this goal as the key component to the merger's financial success. Effectively integrating the company and informing the public of the successful integration can prevent a major loss in revenue. In order to ensure clients are aware of effective integration, Carnegie Consulting recommends the firm pursue a highly aggressive advertising campaign. This campaign should focus on highlighting all of the firm's strengths in computing systems, enterprise solutions and IPS. In computing systems, HP must emphasize its ability to mimic Dell's popular direct distribution model, as well as HP's competitive prices and superior name brand products. This effort would certainly have significant effects in diverting both consumer and commercial computer hardware market share to HP. HP must emphasize its unmatched quality name brand products in IPS. The company particularly needs to inform businesses of new capabilities, such as photo lab quality printers and low cost color printers. Finally, a major effort should be undertaken to unveil the new enterprise solutions capabilities. HP needs to establish a larger presence in the market and must inform potential clients of their complete end-to-end enterprise solutions package. A failure to adequately establish their authority in enterprise solutions will have negative effects for other business segments.

Implementation

Carnegie Consulting can be instrumental in ensuring effective implementation of the above plans. Our extensive knowledge of HP firm operations and the merger's technical points provides Carnegie Consulting with a unique opportunity to supply meaningful integration advising. Furthermore, our consultants could prove instrumental in aiding in the creation of both a new R&D program structured on the needs of corporate clients, as well as effective advertising to highlight HP's distinct position of possessing high quality computing, IPS and enterprise businesses.

Carnegie Consulting will continue to aid in strategic planning for HP's future and work to ensure the successful integration of Compaq. This partnership will strengthen HP's position and strategy as the firm transforms into a significantly stronger multifaceted business and an enterprise powerhouse.

[i] From the company website: www.hp.com
[ii] Ibid.
[iii] "Current Environment: Computers: Hardware" Standards & Poor's, December 13, 2001.
[iv] From the company website: www.hp.com
[v] International Data Corporation.
[vi] "Current Environment: Computers: Hardware" Standards & Poor's, December 13, 2001.
[vii] "Current Environment: Computers: Hardware" Standards & Poor's, December 13, 2001.
[viii] Ibid.
[ix] Ibid.
[x] "Hewlett-Packard Company: Highlights from meeting with Carly Fiorina" Deutsche Banc Alex. Brown, March 4, 2002.
[xi] "Hewlett-Packard: ISS Recommends Merger – Fireside Chat with Carly" Morgan Stanley, March 6, 2002.
[xii] "Current Environment: Computers: Hardware" Standards & Poor's, December 13, 2001.
[xiii] Ibid.
[xiv] "Hewlett-Packard Company: Highlights from Meeting with Carly Fiorina" Deutsche Banc Alex. Brown, March 4, 2002.
[xv] Ibid.
[xvi] "Learning from High-Tech Deals" The McKinsey Quarterly, 2002 Number 1.
[xvii] "Hewlett-Packard Company: Highlights from meeting with Carly Fiorina" Deutsche Banc Alex. Brown, March 4, 2002.