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HP's PC Business Divestiture—Cisco Internal Perspective September 29, 2011

On August 18, 2011, HP announced its intent to sell or spin off its PC business, to kill its Tablet and Smartphone product lines and to acquire BI software maker Autonomy—all as part of a radical shift in strategy toward software and service. Since then, HP has undergone leadership changes and is struggling to provide clear direction, leaving employees, customers, analysts and its channel confused. As of today, Meg Whitman, HP's new CEO, has reaffirmed her support for this abrupt change in strategic direction, acknowledging that she thinks "the strategy is right." She stated that she is "excited" to close the Autonomy acquisition and intends to continue the strategic review of the PC business.

HP is stuck between a rock and a hard place. Exiting the PC business would have a major impact on HP's ability to generate economies of scale—impacting other products such as low-end servers—and would undermine its ability to gain competitive advantage by positioning itself as an end-to-end IT supplier. It also raises questions about HP's strategic approach to other hardware businesses such as printers and campus networking. However, keeping the PC business is even more challenging as demand for PCs declines, margins erode and businesses adopt other devices like tablet computers, for which HP has not found an answer.

We believe that divesting the PC business would create serious challenges for HP:

- Negative impact on remaining enterprise hardware business due to reduced purchasing power. Divesting PCs will negatively impact server and other hardware competitiveness and profitability due to massively reduced purchasing power that the PC unit volumes generate in memory (where HP represents 25% of all purchases) and processors (17% of x86 processors). We believe that the negative supply chain implications could generate 2-5% margin loss, which HP would have to absorb in the form of lower gross profits, price increases passed on to customers or lower margins for channel partners.
- Reduced economies of scale and leverage with partners and small and medium enterprises. Much of HP's existing strategy depends on driving significant volumes of PCs and printers through the broad VAR and distribution channel, which allowed them to build brand strength and

relationships serving small and medium businesses, public sector and education customers. We estimate that the HP PC business generates between US\$0.6-1.0B in channel funding including channel promotions, market development and distributor co-operative funds. This channel funding has created relevance with sales and technical personnel and has been leveraged by HP, as well as the channel itself, to cross-sell networking, software and other more profitable HP products. Without PCs leading the sale, we expect HP's average channel facetime to decrease by approximately 50%, average transaction size to decline by 35% and channel funding to decline, making it more difficult and expensive to reach and serve the channel partners through whom HP currently sells the majority of its technology to small enterprise and public sector customers.

• A significant uphill battle in enterprise software.

HP lacks scale in software and associated business process services, and will need significant investment and time to win against established large competitors. While HP's infrastructure management software, notably OpenView and the acquired Mercury portfolio, are necessary for an infrastructure play, HP lacks the middleware platform and business process consulting depth that allowed IBM to become a juggernaut in software and services. Acquiring Autonomy will not help HP scale up in this space as Autonomy is a business intelligence platform. We believe it will be a very long time before HP can build out these capabilities, and will likely require additional large acquisitions before HP realizes its aspiration of becoming a major player in these markets.

• Undefined strategic approach.

Under Mark Hurd, HP's success was driven by efficiencies of scale: lower expenses through supply chain efficiencies and increased volumes via cross-selling and broad market coverage (for both HP's direct sales force and its channel network). Without the PC business, there is very limited supply chain or go-to-market commonality between the remaining parts of HP (printers versus servers/ DC networking/software/services), which breaks this virtuous cycle and will require a new, still undefined strategic approach.

• Unclear future for networking.

In the past few years, HP's networking business has leveraged HP's brand name, me-too networking products and commodity product pricing to attempt to grow its networking business. However, Leo Apotheker's attempt to move HP from a commodity hardware player to a value player has created uncertainty for the networking business—the loss of purchasing power and the ability to price lower as part of a larger campus bundle will make it difficult for HP to continue its low-margin strategy and "Almost Good Enough" messaging. At the same time, HP is also unlikely to transition to a value player in networking, given the significant R&D investment required. This lack of differentiation, combined with HP's weakened brand, will make it difficult for HP to compete in networking.

Bottom Line

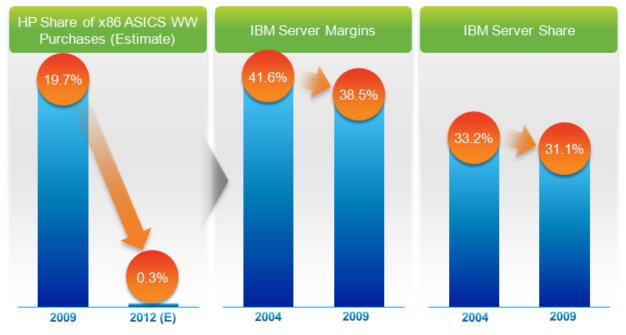
While spinning off the PC business creates a number of challenges for HP, they are unlikely to reverse the decision, as the PC market is forecasted to decline and face margin pressure due to the rise of tablets and

increased commoditization. In commodity infrastructure (especially low-end servers), we expect "post-PC" HP to come under competitive pressure from low-cost manufacturers (for example, Dell and various Chinese companies). At the high end, focused technology and architectural leaders like Cisco and EMC will continue to out-invest HP by a wide margin to deliver product innovation. The negative profit impact associated with its move away from the PC business increases pressure on HP's already strained R&D spending, which today represents less than 2.5% of sales (down from 6% in 2001). HP is unlikely to be able to accelerate its innovation engine quickly and will probably be more focused on software and services as its differentiators. At the same time, in business application software and services, HP will have a hard time winning share against established players in custom and packaged applications (for example, IBM, Oracle, and SAP) outside specific product and vertical niches where it has some presence today, including HP Medical Archive Solutions, HP Project and Portfolio Management Center.

Background: The IBM Playbook

IBM announced its intention to sell its PC division to Lenovo in December 2004 for US\$1.75B. At that time, PCs represented 11% of IBM's total sales and 0% of its profit. In the following years, IBM successfully built its position in services and software but its infrastructure business struggled. Over the next five years, server market share declined 2% and profits in its server, storage and networking business lost approximately three percentage points (Figure 1). At least a portion of these results were attributable to IBM's loss of purchasing power after divesting the PC business.

HP's Loss of Purchasing Power Likely to Lead to Margin and Share Erosion Similar to IBM's Post-PC



Source: IBM 10-Ks, IDC WW Server Tracker, Gartner WW Computing Platforms, SMO Analysis

Figure 1: HP Purchasing Power and IBM Margins and Server Share

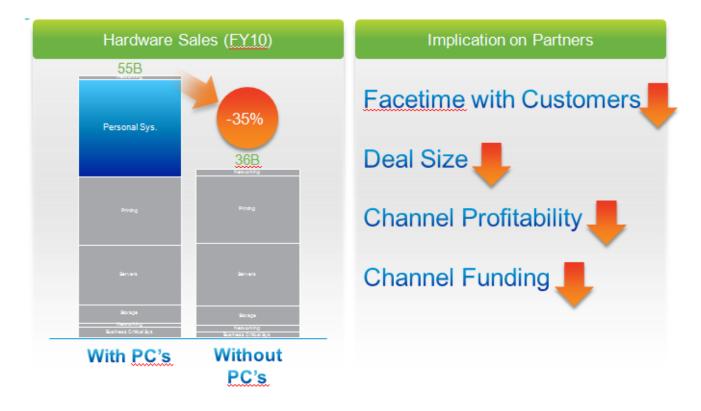
HP's Loss of Purchasing Power

Compared to IBM, the impact of divesting the PC business will be significantly greater on HP's business. PCs constitute 32% of HP's revenues and 13% of its profits. The loss of purchasing power can be illustrated by looking at HP's expected share of worldwide x86 ASICS, which we estimate will fall from 20% to less than 1% (Figure 1). This will generate cost and margin challenges in HP's server business when competing against full-line players like Dell. It is also likely to put pressure on other parts of the business, notably lowend servers that depend heavily on the PC supply chain and parts of the Procurve/H3C networking business.

Loss of Scale and Scope in SMBs and With Channel Partners

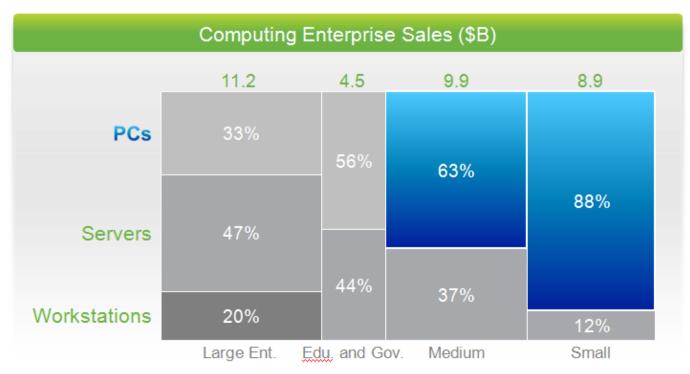
Today HP offers a compelling value proposition to its partners by allowing them to cover a large portion of business customers' technology needs as a one-stop shop, reducing their partners' cost of sales as a percentage of revenues. This is particularly true in SMBs where a broad product suite, spearheaded by PCs, enables broad channel coverage. Based on our estimates, the PC move is expected to reduce the size of the "bundle" sold to SMBs/campus enterprises by 35 – 50% (Figures 2 and 3). PCs are often the reason for the channel partner to have a conversation with the customer, and we estimate channel facetime with the customer will decline significantly. Given HP's large dependence on partners for distribution, this reverses many of the advantages HP has held as a broadline supplier.

The net effect is a less compelling value proposition for HP's SMB customers and channel partners and greater opportunities for low-cost, commodity-based competitors and best-of-breed competitors.



Source: HP 10-Ks, IDC, Morgan Stanley, Ticonderoga Securities, SMO Analysis

Figure 2: HP Pre- and Post-Divestiture Sales



HP Enterprise Sales CY2010

Source: Gartner WW Computing Platforms, literature research, SMO Analysis

Lack of Critical Mass in Software and Business Services

Recent acquisitions notwithstanding, HP is a marginal software player in the Enterprise. While server hardware and services tend to be strongly linked, the same cannot be said for software for standardized hardware such as HP's.

HP has 7% share in Network Management software, the only place in the software stack where it is a top five vendor. The Autonomy acquisition aims at building a new category, Meaning Based Computing (MBC). by providing analytical capabilities on unstructured information (for example, aggregating and analyzing email, instant messaging, documents, audio and video files) which can be levered by other business applications. Although Autonomy is the leader in this niche, Microsoft and IBM capture most of the Content Applications software category. The Autonomy business is unlikely to gain a significant boost from being part of HP outside of a few key verticals.

This is particularly important in a scale-drive industry such as software. Figure 4 shows the correlation between Relative Market Share (RMS) and Return on Sales (ROS) in the main enterprise software categories. Increasing RMS to reach critical software mass is an uphill battle for HP and it will require meaningful financial and managerial resources moving forward, primarily in term of additional acquisitions, but also in organic efforts to build software offerings.

Figure 3: HP Sales by Customer Segment

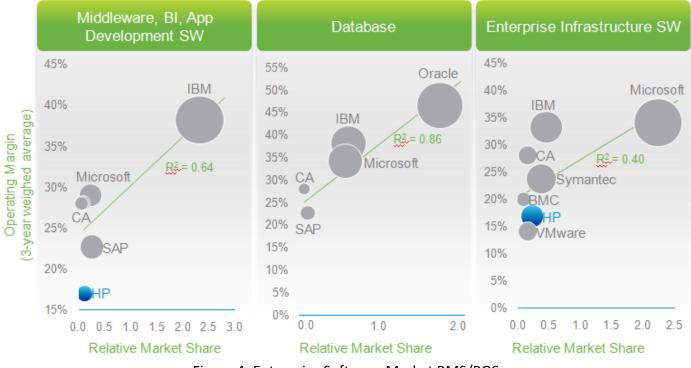


Figure 4: Enterprise Software Market RMS/ROS

HP Printer Business Has no Strategic Fit With DC Infrastructure and Services Businesses

HP is a highly diversified technology vendor with revenues divided roughly 60/40 between Data Center and campus purchases. Printers, networking and PCs share many of the same customers/buying centers in the enterprise campus. DC infrastructure and software share the datacenter buyer (Figure 5). These two business grouping are connected by the high degree of supply chain sharing between PCs and servers. By removing PCs, HP has effectively become a conglomerate of unlinked businesses—a direct reversal of the integrated strategy established under Mark Hurd.

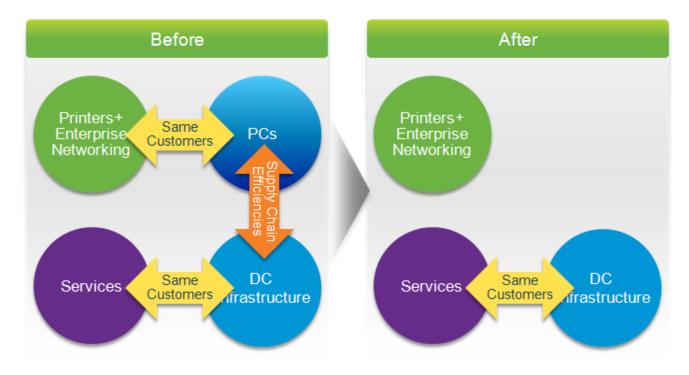


Figure 5: HP Businesses Connections

Summary

HP's August PC announcement marks a dramatic reversal of the company's integrated strategy established under Mark Hurd and creates uncertainty around its future direction. The spin-out of the PC business will have a major impact on HP's ability to generate cost efficiencies through scale and its ability to leverage its product portfolio with customers and channel partners. At the same time HP faces significant challenges in developing a profitable enterprise software business. This, combined with the spinoff of the PC business and associated corporate restructuring, is likely to divert management from day-to-day execution in the business and create an uncertain environment for HP's employees, customers and channel partners.