



CLABBY ANALYTICS

## Case Study

### Will the Real HP Please Stand Up?

#### *Overview*

Clabby Analytics, my research firm, creates:

1. Advisory reports (for instance, what to consider when buying blade technologies);
2. Opinion/counter opinion reports (for instance, I have often challenged the wisdom of buying Itanium-based servers); and,
3. Case studies (I go on site and talk to real IT executives and users – and report my findings).

When reading my reports and opinions, I strongly encourage my readers to see out counter opinions – and then balance what I say to the opinions of other respected IT research industry analysts. I believe that by weighing what I say, and what others say, IT executives can reach their own opinions on where truth can be found.

In this opinion, I express my reasons for taking such a dim view of Hewlett-Packard (HP) over the past several years. These reasons fit into three categories:

1. HP's positioning in the IT industry as a "technology leader" ;
2. HP's product offerings; and,
3. HP product deficiencies.

I consider all of these topics in the following sections.

#### *Is HP Really a Leader in IT for the Business Marketplace?*

Some research analysts may argue that HP is a market leader when it comes to building systems and software – and in providing services – to the information technology (IT) industry. (My favorite quote is from Hoover's Online which says "HP wants to be 'it' when it comes to IT"). In fact, HP fosters this image with statements such as:

"No other company offers as complete a technology product portfolio as HP. We provide infrastructure and business offerings that span from handheld devices to some of the world's most powerful supercomputer installations".

I have two issues with this HP statement. First, I strongly believe that HP does not have a "complete" technology product portfolio (for instance, it is missing critical middleware technologies – and the company does not build its own high-end storage). Second – I consider HP's supercomputing strategy and product set to be broken (so why HP is highlighting its involvement in supercomputers is a mystery to me).

Allow me to elaborate on both points...

## Will the Real HP Please Stand Up?

### *HP Does Not Supply a Complete Infrastructure Stack*

Back in 2002, I reported:

On September 15th, 2002, HP announced its 'HP Discontinuance Plan' relevant to HP middleware product offerings. The company announced the discontinuance of HP Application Server (HP-AS), HP Application Server Resilient Edition, HP Web Services Platform, HP Core Services Framework, HP Total-e-Server, HP Process Manager and the Changengine family of products.

The crux of this announcement is as follows:

- HP essentially killed-off HP proprietary middleware development (finally!);
- The company announced plans to work more closely with software partners (like BEA - partners who build middleware products). Especially noteworthy is that HP's focus partners build Java-based infrastructure solutions. Java (more specifically J2EE) solutions provide the primary competition for HP's newly announced .NET initiative).

What this means is that in 2002, HP exited the infrastructure middleware business. And yet the company claims that no other company offers as complete a technology portfolio as it does. I note that IBM and Sun both have extensive infrastructure stacks and middleware products – so clearly HP's claim is in error.

For those not familiar with the words “infrastructure stack”, allow me to explain. When building information systems, systems designers/builders choose hardware, an operating environment, a middleware environment, a management environment, and applications and databases. Each of these environments build on the other – hence they are referred to as a “stack”. Middleware is a key component of any stack – its how programs can talk to other programs and how data can be share with disparate data. And failure to own this important element of a stack puts HP at the development whim of its middleware suppliers.

Having worked for a hardware maker earlier in my career, I know that aligning partner strategies and priorities is difficult. (In fact, we had to pay our business partners to port their products to our product line, to implement the changes that we wanted, and to offer support for our products). By taking itself completely out of the middleware business, HP has lost the ability to control its own infrastructure destiny, both up-and-down its product stack. This has, in turn, relegated HP to the role of being a systems integrator that needs to wait for its partners to deliver the functionality it may want in the timeframe the partner wants to deliver it. HP is at the whim of its partners for pricing, for development priorities, and for initiative funding.

Further, I note that hardware makers who own their own infrastructure can tweak that infrastructure to take advantage of advanced hardware functions (instead of building for generic system images), and these hardware makers can also manage developmental priorities more effectively. Given that HP is no longer in the middleware business, I see HP as “not in control” of its developmental direction (as, for instance, Sun and IBM are).

***Back to the genesis of this subsection: HP claims no other company offers as complete a technology product portfolio as HP. I beg to differ. Several companies offer more complete portfolios of infrastructure and business process offerings.***

## Will the Real HP Please Stand Up?

### *Supercomputing and the Broken Scale-up Server Cycle*

I consider HP's server strategy and product line to be broken in two places: 1) the use of Itanium-based processors; and, 2) the failure of Itanium-based servers in the supercomputing space. Allow me to explain...

### *The Itanium Disappointment*

Back in the early 1990s, HP systems engineers got the bright idea that they could build a processor technology that would blow-away the market's advanced RISC processors. Accordingly, HP (as well as Intel and some other partners) embarked on a plan to build a processor environment that could compile instructions in software, and then hand off those instructions to a processor designed specifically to rapidly execute those instructions. (Competitor RISC processors compile and execute on the chip — HP's/Intel's Itanium EPIC [explicitly parallel instruction computing] processors would only have to perform execution work). This was a great idea — but badly executed:

- Itanium was at least five years late (I could argue even ten years late) to market; and,
- This processor did not meet market expectations in terms of performance (so today, for instance, IBM's POWER-based RISC processor significantly outperforms HP with its Itanium-based processors in dozens of industry standard benchmark tests).

To add insult to injury, HP decided that it would be a great idea to obsolete all of its RISC processor lines — and to base all of its server lines on this single, 64-bit, EPIC architecture. Accordingly, HP's customers are being asked to abandon their investments in HP's AlphaServer- and PA-RISC-based servers and adopt EPIC architecture if they want to continue running their advanced HP/UX and NonStop environments on HP high-end servers.

***Given this situation, I fail to understand how HP can claim that no other company offers as complete a product portfolio as HP. What this situation means is that HP's high-end, scale-up Itanium-based processors offer far less computing power than expected by many in this industry — and to me, it means that HP's scale-up server strategy and product line is broken.***

### *The HP Supercomputing Disappointment*

HP's broken scale-up strategy also manifests itself in supercomputing. In the supercomputing industry, companies that build high-end servers usually let advanced features and functions that they build for supercomputing environments “trickle down” or “cascade” into enterprise systems architectures, then into the midrange, and ultimately to the low end. Now, look at HP's situation. Once a leader in supercomputing with its PA-RISC-based entries, HP's Itanium-based (EPIC) processors show poorly in the Top500 supercomputer listing (only two IA-64 based systems were in the Top500 list — at positions 165 and 427 respectively). To me (and I think most industry analysts would agree), this shows that HP is not investing properly in advanced EPIC-based systems designs — and this bodes extremely poorly for the competitive future of HP's IA-64-based EPIC (Integrity) lines of processors.

## Will the Real HP Please Stand Up?

Another way to read the Top500 list is to look at HP's overall supercomputer market penetration rate. HP has a whopping 42% of this market — with 208 sites using *Intel-based x86 architectures*. With this many installations, it is clear HP is investing: in commodity x86 architectures. And this also tells you a lot about what HP really is in the server market: it is an x86 server company — or, to be even more precise, HP is an x86 *blade* maker.

*When several of us analysts listen to many of HP's marketing pitches, some of us like to joke that HP's new marketing approach is : "blade is the answer — now what's the question?"*

The way that I now look at HP in the server business is that HP is no longer a credible high-end, scale-up systems vendor (given its lack of investment in EPIC-based servers as evidenced by the Top500 supercomputer list — and the limited market acceptance of its EPIC architecture). The company's move to EPIC architecture has been an immense failure.

### ***Will the Real HP Please Stand Up?***

HP's own marketing materials ([http://www.hp.com/hpinfo/newsroom/HP\\_in\\_brief\\_010309.pdf](http://www.hp.com/hpinfo/newsroom/HP_in_brief_010309.pdf)) acknowledge that some people think of HP as a printer company (note: over 20 percent of HP's revenue [\$26 billion] comes from its printer division); others think of HP as a PC company (and in the PC marketplace, its primary competitors are Lenovo and Dell); and still others think of HP as a data center company. HP goes on to argue that it is clearly a printer company, that it is indeed a PC company, and that it ships almost 1/3 of all servers sold worldwide. HP also boasts that it makes telephone calls possible for over 100 million mobile users on a global basis; and helps 50 million customers share over 4 billion photos on-line.

When researching HP, the picture that emerges from HP's own description of itself is that it is a maker of consumer technologies (cameras, personal computers, and other devices); a maker of x86 computer systems (personal computers and servers); a maker of management software; and a provider of IT professional services:

- In the consumer business, HP now competes with a wide variety of consumer product makers;
- In the systems business, HP now competes directly with Dell and Lenovo directly — and on occasion with IBM and Sun in blades/x86 engagements. Given its scale-up systems situation, however, I no longer consider HP as a rival Sun and IBM in enterprise class systems (despite the existence of its Itanium-based Superdome); and,
- HP's acquisition of EDS makes HP a logical competitor of IBM as well as a competitor of its partners (such as Accenture, et al). It is my belief, however, that HP has jeopardized its professional services channel by buying EDS — so I'm not convinced that buying EDS was a really good decision for HP).

## **Will the Real HP Please Stand Up?**

From a positioning perspective, what this means is that HP is now aligned to compete head-to-head in lower margin, commodity-based consumer and computing businesses. Gone are the days when HP was a strong, scale-up rival of IBM and Sun in the computer systems business.

---

**Clabby Analytics**  
**<http://www.clabbyanalytics.com>**  
**Telephone: 001 (207) 846-0498**

© 2009 Clabby Analytics  
All rights reserved  
March, 2009

*Clabby Analytics is an independent technology research and analysis organization that specializes in information infrastructure and business process integration/management. Other research and analysis conducted by Clabby Analytics can be found at: [www.clabbyanalytics.com](http://www.clabbyanalytics.com).*