

IBM Power Platforms: Divergent or Merging?

If you were asked to name a prominent midrange system from IBM that employs advanced PowerPC technology and is suitable for a wide range of application areas, you might immediately answer RS/6000. Or you might immediately answer AS/400. In both cases, you would be correct.

Today, both midrange IBM platforms include models built around the RISC-based PowerPC chips. Both offer interoperability in mixed environments. And both can be configured to run software ranging from an accounting package in a doctor's office to database applications over the Internet. Clearly, both of these midrange platforms also represent opportunities for IBM resellers. [Dickens Data Systems](#), for example, is currently marketing both systems.

So if you were asked to say what makes the two platforms different today, that would take some explaining. And if you were asked to forecast how the platforms might evolve in the future--whether they will continue to exist as separate product lines or might conceivably merge--well, that might take a crystal ball.

The RS/6000 and AS/400 have very different histories, which help explain their different strengths and positions in today's market. The RS/6000 is the product of RISC technology and UNIX, and was originally designed for the scientific and engineering markets. While today it supports all manner of business applications and networking, it is still strongest in high-end, number-crunching applications, whether it be CAD for product design, or process control in manufacturing.

If the RS/6000 is an engineering wiz from MIT, the AS/400 is a Harvard MBA. It has always been an application-centric computer, as the very name--Application System/400--makes clear. The descendant of venerable generations of IBM mainframes, the AS/400 is also heir to their rich legacy of business applications. According to Jim Kolassa, Manager of Sales Specialists for Dickens, "Many clients have applications that are 20 to 30 years old, brought to the AS/400 from System/36 or /38 mainframes, and running unaltered."

The AS/400 has an extremely loyal customer base, in part because IBM has been careful to safeguard their customers' investment even as the technology has advanced. Doug Mullis, AS/400 Marketing Specialist with IBM, notes that the PowerPC-based AS/400s were the first systems on the market to employ 64-bit technology at all levels, including database and applications. Even so, these machines still support programs written for older CISC-based AS/400s--and without requiring that the software be recompiled. Mullis cites this as an example of the IBM's policy of "non-disruptive growth" for AS/400 customers.

If compatibility with existing applications, and the loyalty of an established customer base, are two key advantages of the AS/400, another is the tight integration of the platform. The AS/400 features a mature, proprietary operating system (OS/400), built-in security and utilities, and a native database (DB2)--all of which mean that the cost and effort of system integration can be almost nil. Mullis points out that

AS/400 business partners typically don't even touch the system until it arrives at the customer site. "Sometimes," he says, "IBM even preloads the customer's applications."

The unified, closed architecture of the AS/400 can also mean ease of use and lower cost of operations. Tyra Luhrsen, AS/400 Team Leader for Dickens, calls it an extremely user-friendly platform. "You don't need a DP manager or technical staff to run the AS/400. The RS/6000 requires more technical sophistication to manage." And IBM touts studies by independent consultants that show the overall cost of computing for the AS/400 to be consistently lower over 2 to 5 years than for comparable UNIX systems from other vendors.

Of course, the tight integration of a closed system model also means limitations. If a customer wants the features of a particular commercial application or database system, they probably won't buy an AS/400. According to IBM's Mullis, the AS/400 is more apt to be favored by customers who want a package deal, the RS/6000 by customers who want to "roll their own"--that is, to pick and choose components or to have a systems integrator such as Dickens do it for them. But Mullis does see instances where the two markets can overlap. He cites the example of a manufacturing customer who might choose AS/400s to run accounting and other front-office applications, while using RS/6000s to manage calculation-intensive process control on the shop floor.

The overlapping of the markets can be a delicate subject. To what degree are the two IBM product lines competing against each other? The October 1996 issue of UNIX Review claims there is a lack of marketing effort for the RS/6000 and UNIX and wonders aloud if this is due to internal factors at IBM. The column quotes Gene Lee of International Data Corp.: "The RS/6000 lies in the shadow of the System 390 and AS/400 families--the RS/6000 has not been allowed to spread its wings and fly." IBM's position, quoted in the same column, is that this is not the case, that "the AS/400 is aimed at customers who want total ease of use and packaged solutions, while the RS/6000 systems are aimed at customers who are comfortable putting together the solutions they need."

While it's obvious that the two platforms are positioned differently and that each has its traditional strengths, it's equally obvious that there is significant overlap. Both products, for example, perform high-volume database processing, and both are marketed as both PC-LAN and Internet servers. Will both product lines continue indefinitely, or will they eventually be merged?

IBM (obviously) has no announced direction on this, and at the moment no one is taking any bets. Scott Earnest, AS/400 Product Manager for Dickens, does propose one interesting scenario. Based on the need to incorporate more open-systems functionality into the AS/400, Earnest suggests that the platform may, in the future, run multiple operating systems. In a layered or "managed" OS environment, customers could run a UNIX subset or an NT subset, in addition to OS/400.

Whether this scenario or some other will eventually play out, no one can say. One thing is for certain, though, about the AS/400 and the RS/6000: Neither system is going away anytime soon.

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