April 2003 Top Issues in Gartner Research

We provide summarized highlights of key findings from Gartner’s research during the past month.

**Application Development**

*A Service-Oriented Architecture Can Save the Mainframe*

Enterprises that implement service-oriented architectures on their mainframes can extend the life cycles of their systems; however, many have been reluctant to incur the costs required to attain high levels of granularity.

Large enterprises have tried a number of approaches to eliminate rigid legacy systems from their portfolios, but they have met with limited success. Despite packaged conversion or platform transformation, many find themselves left with a significant portfolio of legacy systems. Although some applications are simply too archaic to save in their current implementations, others are more flexible and can be leveraged by exposing the business rules embedded within.

Gartner espouses a development strategy that employs a service-oriented architecture (SOA). The service-oriented development of applications (SODA) framework provides the development mechanisms to implement an SOA. However, with little interest in anything invasive, enterprises have used legacy extension technologies to wrap current transactions and expose them through alternative presentation mechanisms (such as Java or HTML), or as programmatic objects (including the Component Object Model and Java).

This approach works when the granularity of the business function (as represented by the “screen”) is acceptable. By using programmatic integration servers, for example, you can package a flow of screens into a coarser granularity service than a simple screen — or you can expose only a subset of the screen through a service interface. While this “pseudo-SOA” approach works, true flexibility and “maintainability” are provided via finer-grained business functions that do not map to their traditional legacy presentation layers.

**Bottom Line:** Mainframe-based enterprises can increase their flexibility and reduce their risk by restructuring established systems around a service-oriented architecture (SOA). However, an SOA requires a willingness to undertake invasive “re-architecting” of these systems. In the past, most enterprises have shown little interest in doing this, leaving them with tactical extension or highly risky transformation approaches. The amount of change required is a function of the granularity desired.
from established systems. The greatest gain comes from the finest grain, but this requires the most restructuring and the highest expense.

COM-18-6317

Application Integration and Middleware

New Applications Emerge — Business Process Fusion

A new software category is emerging, enterprise process management applications, providing support for cross-functional business processes and built on a platform for collaboration, content management and transactions.

We are seeing the emergence of a new breed of business application. These applications differ in scope from current packaged applications, targeting cross-function, end-to-end business processes. They differ in technology base by incorporating not only transaction processing using relational data, but also the styles of processing associated with collaborative work processes, content management and business analytics, with the use of a service-oriented architecture as a key enabler. Business process management technology is also key in enabling flexible configuration of application components to match specific processes in an enterprise. None of these factors viewed independently is entirely new, but the confluence marks a discontinuity in the business application market. Gartner has termed this new category “business process fusion” applications.

Beyond the constant drive for innovation, the emergence of these applications is also driven by a more-specific shift in business demand. Business success increasingly is predicated on flexibility and speed in linking business processes — that is what increases the rate at which enterprises can deliver value to customers. This is the foundation of the “real-time enterprise.” It is no longer sufficient to optimize segments of a value chain; the entirety of a value-creating activity must be supported in a coherent way.

Some enterprises have created applications with these characteristics in the past, but the cost of development and integration has been high. The platforms for composite application development, based on Web services and incorporating the full mix of technologies relevant to business process fusion applications, enable the creation of new packaged applications, and also enable enterprises to develop or extend such applications at lower cost.

The boundaries between buying a packaged application, purchasing components to create a unique application configuration and developing a new application are blurring. Enterprises rarely create totally new application functionality from scratch. Business process fusion applications emphasize the core value of reusing application investments. They also emphasize the central role of integration technologies at the data level via integration broker technology, and at the user-interface level via portal frameworks.

**Bottom Line:** Business process fusion applications promise comprehensive support matched to specific business processes, taking advantage of extensive platform functionality and advances in composite application technology. This will bring about increased business agility and efficiency, and staff productivity. Enterprises should recognize that deploying business process fusion applications will still require a significant service input in many cases, particularly for early adopters. The lessons of enterprise resource planning (ERP) implementations should not be forgotten because of the enthusiasm for new technology and new functionality.

T-19-4028
Business Management of IT

Five Sure-Fire Ways to Reduce IT Asset Costs
IS organizations that are seeking significant cost reduction opportunities should take advantage of five often overlooked ways to reduce IT asset costs.

IS organizations that are still debating whether a formal IT asset management program makes sense need only to consider the potential cost savings. On average, IS organizations that implement a complete IT asset management program achieve payback on their investment within 18 to 24 months.

Today, IS management must squeeze every dollar out of their asset base without risking service. One way to accomplish this is to eliminate poor IT asset management practices. Eliminating wasteful practices requires:

- Accurate and complete information about the IT asset base
- An asset management process covering all life cycle activities (planning, procurement, maintenance and disposal)
- Sound strategic planning to ensure that all life cycle activities support a common set of goals

Although the toolsets available today have significantly reduced the manual effort associated with asset discovery and record maintenance, the key component of success rests with the establishment of processes and procedures that enable diverse business units to make use of the asset repository data.

The following methods to reduce IT asset costs assume some degree of formality associated with the management of IT assets:

- Audit vendor invoices
- Match software with hardware
- Check telecommunications services and utilization
- Negotiate equipment trade-ins as a part of new acquisitions
- Migrate ‘zero value’ assets

Bottom Line: Significant cost savings opportunities associated with IT assets are available for IS organizations that are willing to “dive into the details.” Our advice to asset managers is: Don’t assume anything regarding billing accuracy and asset utilization.

DF-19-1214

RTE Key Technologies and Applications Hype Cycle
There are many real-time enterprise technologies. Their maturity and relevance to your organization should guide your choice.
The real-time enterprise (RTE) will use a variety of technologies and applications to speed up key business processes — and to provide earlier warning of key events from the enterprise’s business environment, so the organization can act on this information if needed. No two enterprises will use the same combination of technologies, because each will have a unique business strategy and should apply the RTE approach to accelerate progress in appropriate areas.

Some technologies and applications stand out from others because they speed up business processes, or because they enable high-frequency event monitoring. Figure 1 maps out the key RTE technologies on a Gartner Hype Cycle maturity curve.

**Figure 1**

**Key Technologies and Applications of RTE — Worldwide Viewpoint, 1Q03**

![Hype Cycle Diagram](Image)

**Bottom Line:** RTE is a business change competency for integrating, streamlining and automating information and process flows. Select only those RTE-enabling technologies and applications that are appropriate to your enterprise’s risk attitude — and that are directly relevant to your enterprise’s strategically selected, critical end-to-end processes.

COM-18-6919
Customer Relationship Management

The Evolution of CRM Requires Redefinition

Like all business strategies, customer relationship management is evolving. At the same time, it’s starting to merge with such closely related applications as supply chain management and enterprise resource planning.

Customer relationship management (CRM) is no longer just a good idea. Instead, it’s becoming a matter of survival, as customers increasingly demand greater control of, and convenience in, their transactions.

Enterprises recognize that CRM depends on front-office coordination (that is, the sales, marketing and service channels), as well as effective integration with the back-office functions. This has resulted in a rising level of interest from enterprise resource planning (ERP) vendors, as they begin to cast themselves as providers of cross-enterprise, process-focused business application solutions. These major ERP vendors have now recognized these emerging requirements and have begun to deliver solutions that address them.

Like most IT strategies, CRM began as a Type-A approach to addressing the needs of the customer. As it moves from Type A to Type B enterprises and beyond, the large ERP newcomers are likely to look for broad, but fairly basic CRM functionality, with integrated front-to-back-office applications provide an appealing alternative. In time, these types of applications are becoming a competitive necessity.

The traditional CRM vendors have already begun to remake themselves. How does a vendor compete with these large, front-to-back-process systems? In a phrase, “with real-time solutions.” Many of the CRM vendors are beginning to push the concept of their place in the RTE, offering increasingly faster access to customer information to enhance the likelihood of sales or improve the levels of service. In many cases, this turns out to be more “right time” then “real time,” but for many enterprises, that is sufficient.

Bottom Line: The designations of ERP and CRM will not go away. There will always be vendors that offer application-specific solutions in this space. However, especially among the larger-enterprise vendors, the focus will change from application to process, and from an either/or view of customers and products to an inclusive view. And users will find that, although these solutions will become larger, more complex and more all-encompassing, the emphasis on process will make them more adaptable, valuable and beneficial to the top and bottom lines of their income statements. The change is already beginning. Enterprises need to plan accordingly.

M-19-0045

Unused CRM Software Increases TCO and Decreases ROI

A Gartner survey shows that a large percentage of customer relationship management software purchased is never deployed. Buying too many CRM software licenses raises the total cost of ownership and slows return on investment.

In an economy that continues to be sluggish, almost all enterprise expenses are being closely scrutinized, and CRM software license purchases are no exception. For CRM software vendors (including e-commerce sell-side providers), buyer behavior has changed dramatically during the past few years, resulting in huge drops in the number of new licenses sold since 2000. Gartner projects
that the CRM application software market will begin to slowly recover in late 2003 and achieve a five-year compound annual growth rate of 8.3 percent through 2007.

The CRM software license revenue forecast for 2002 was $3.025 billion. Spending for 2003 is projected to remain flat. This is due, in large part, to enterprises’ tighter control of expenses, which has caused many to reduce or freeze spending on CRM initiatives. Increased due diligence and projections of return on investment (ROI) have become mandatory components of the purchasing process. Despite the increased scrutiny, enterprises implementing CRM applications are still purchasing more software than they can reasonably consume within the scope of their CRM projects.

A Gartner survey of 692 enterprises, which was completed in December 2002, included the following two questions:

- How many licenses have you purchased from this vendor?
- How many have you actually deployed?

The 631 respondents that answered these two questions purchased a total of 251,626 licenses, of which 146,200 have been deployed. From these numbers, we determined that 41.9 percent of the purchased licenses are “shelfware” — purchased software licenses that are undeployed (that is, still sitting on the shelf). Applying this percentage to the CRM software market as a whole, we estimate that $1.0 billion to $1.27 billion has been spent on software that is not being used. This estimate does not include the maintenance fees that enterprises pay in addition to the initial cost of the software itself. It is apparent that enterprises are spending large amounts of money with software vendors for licenses that go unused, and for associated maintenance fees.

**Bottom Line:** Despite the increased scrutiny enterprises have placed on CRM software purchases, many are still purchasing more software than they need. Calculating the total cost of ownership (TCO), benefits and ROI — and analyzing the effects of increasing or decreasing the number of licenses and discounts — will enable enterprises to understand more accurately the true number of licenses they need and the ROI they can reach. Unless this type of analysis is routinely conducted, buyers will continue to pay for more than they need, increasing benefit to the CRM vendor, rather than the enterprise.

SPA-19-4655

**Enterprise Networking**

*Global NSP Magic Quadrant for 2003: Significant Changes*

Gartner has expanded its coverage criteria for the 2003 Magic Quadrant for global network service providers. However, the vendor choices are still limited, with Infonet and Equant as the clear leaders.

The global network service provider (NSP) market changed radically in 2002. Concert was officially dissolved in April 2002, leaving AT&T and BT to pursue their solo strategies. Global Crossing and WorldCom both filed for bankruptcy under U.S. Chapter 11. Qwest Communications’ joint venture with KPN of the Netherlands, KPNQwest, disappeared during mid-2002 in one of the most
spectacular failures that the networking industry has ever seen. A number of NSPs scaled back their international coverage to their home continent or, in some cases, to their home country.

Under our past criteria for global NSPs, we only considered providers that had their own networks on every continent; simple interconnection did not meet our criteria. Using this criterion in today’s NSP market, there would be very few NSPs labeled “global providers.” We have, therefore, been somewhat more liberal in the Global NSP Magic Quadrant for 2003: We have included major NSPs that have their own network coverage in one or two continents, and then supplement the coverage through agreements with other providers, such as Infonet and Equant. Providers received a higher or lower rating for geographic coverage, depending on how much they use their own networks vs. how much they use resale facilities.

When evaluating providers, enterprises must take into account where the majority of their geographic requirements are and how much each carrier can provide. For example, most U.S.-based carriers will have greater network geographic density in the United States vs. the rest of the world; and European-based carriers will have greater density in Europe. The leaders are still Infonet and Equant (see Figure 2), although both have had challenging years.

Figure 2

Global NSP Magic Quadrant

Bottom Line: The number of truly global players in the global NSP market is still small. Some NSPs are moving to expand their geographic coverage, but because of the current economic situation and the debt that many of them carry, this expansion will not be quick. For the next several years, enterprises considering a single provider are really limited to two NSPs. For those clients considering a regional approach, the choice is much richer.
ERP II, Supply Chain and Manufacturing

Vendor Rating: i2 Technologies

Although i2 has the tools and the technology to be a leader in the supply chain management market, its recent financial results and the ensuing turmoil have caused Gartner to be cautious about its future.

With some of the richest supply chain management (SCM) solutions in the market, i2 Technologies’ ability to solve specific complex planning problems with advanced algorithms is unequaled. Its collection of supplier relationship management functionality is expensive for i2 to assemble; however, it is also visionary and differentiating. Its services in India to manage content, application development and model maintenance reduce overall costs, while enabling customers to augment internal resources.

In the late 1990s, i2 made two critical mistakes for which it is now paying. First, it failed to react quickly to changing market dynamics. Second, it failed to deliver promised functionality in a timely manner. The company is now going through the painful process of realigning the organization with its original strategy — helping the largest and smartest global enterprises achieve greater operational efficiency through SCM.

At a time of increased competition and continued economic malaise, i2 must continue to execute its turnaround plan of delivering the value that it has long promised its customers. Prospects in i2’s core industries should shortlist i2’s solutions; however, they should also ensure that lines of communication are well-defined and designated resources are available for implementation and support. Customers that have not engaged i2 should seek clarity on the question of migration to the new platform, and they need to understand the new support processes and structure. Furthermore, they should monitor i2’s ongoing financial health, because continued decline will mean further disruptions in service and could lead to i2 being acquired.

Figure 3

i2 Technologies: Detailed Rating
### Initiative | Rating
--- | ---
Corporate Viability | Promising, Caution, Caution, Caution
   | Strategy
   | Financial
   | Marketing
   | Organization
Product/Services/Technologies | Positive, Promising, Positive, Positive, Promising, Promising, Promising
   | Product/Service
   | Fulfillment Optimization
   | Logistics Optimization
   | Production Optimization
   | Spend Optimization
   | Revenue and Profit Optimization
   |Additional Services
   | Technology
   | Integration
   | Pricing
Customer Service/Product Support | Caution, Caution
   | Sales/Distribution
   | Support Services
Overall Rating | Caution

Source: Gartner Research

**Bottom Line:** After coming through the SCM decline, i2 has positioned itself as a trusted SCM advisor to large enterprises worldwide; however, we rate it a “Caution” overall because of challenges in its financial situation and negative market “mind share” (see Figure 3).

VDR-19-4048

**Wal-Mart Encourages Vendors toJoin UCCnet**

A recent letter from Wal-Mart to its suppliers urges UCCnet adoption for product data synchronization. Providers of data synchronization outside of UCCnet will suffer as this value-add service evolves to a commonly shared service.

On 23 February 2003, Wal-Mart sent a letter to 3,000 of its U.S. suppliers explaining that it plans to receive all product data electronically by January 2004. The letter laid out the options, focusing on Wal-Mart-specific technology in the short term and on UCCnet in the long term. It strongly urged adoption of UCCnet services, as this is the direction in which Wal-Mart will be headed. Wal-Mart then followed up with additional communications to more suppliers, and posted the original letter to Retail Link, its supplier-facing extranet.

UCCnet’s product content exchange initiative promises to synchronize product data between retailers and consumer goods manufacturers on a global basis. UCCnet has set its sights on creating global, real-time synchronization of product and extended data between retailers and suppliers.

Wal-Mart’s recent moves will no doubt hasten the adoption of UCCnet — not only in Wal-Mart’s value chain, but also throughout the broader consumer goods and retail industries. Wal-Mart, the channel master in the retail industry, had already voiced its support for UCCnet, but the letter signifies that the company is beginning to take action to move its value chain in that direction. As channel masters have the opportunity to drive adoption due to their power within a particular channel.
or market, this will increase the number of consumer goods companies that are deploying UCCnet. This will also hasten the adoption of UCCnet by Wal-Mart’s competition.

Any company connecting to UCCnet is able to synchronize product data with any other so connected, so there is a form of “network effect” here. As suppliers connect to UCCnet to service Wal-Mart’s needs, they will be more capable of connecting to other retailers more easily and at a lower cost.

**Bottom Line:** Wal-Mart has made its support of UCCnet known to its suppliers. Wal-Mart value chain participants should prepare sooner rather than later to connect to UCCnet and exploit the value of synchronized product data. As Wal-Mart intends to receive all product data electronically by January 2004, the window for connection is short. Enterprises that are using or evaluating legacy catalog applications should ensure that they do not pay twice for registration and synchronization, and should ensure that their preferred vendors align closely with UCCnet. Consumer goods and retail companies that are not Wal-Mart suppliers should see this as a strong signal that UCCnet is here to stay and should begin preparing their own plans for adoption.

E-19-5792

**Financial Services**

**BPAY: Success With Billing and Payments Consolidation**

Australia’s banking community has banded together to create a consolidated e-billing and e-payment solution that has succeeded with consumers.

Australia’s banking community built a consolidated Web-based billing and payment system for consumers, and proved the theory that banks can be ultimately successful in providing consumer electronic bill presentment and payment (EBPP) solutions. Australia’s experience is in direct contrast to the efforts of U.S. banks, which failed at two previous consortium attempts — Spectrum and Integron — both of which disbanded a few years after they were formed. BPAY, the name of the Australian EBPP bank consortium, is highly successful, with 20 percent of Australian consumer bills paid through the platform and 185 financial institutions participating.

This success story began in the mid-1990s, when a number of Australian banks looked at the feasibility of providing Internet payment services to their retail customers. They soon recognized that, without a central hub managing all of the bank-to-bank relationships, there would be significant replication of infrastructure.

Motivated by a desire to have a less-complex and more-efficient solution, BPAY, a consortium of Australian banks, was launched in 1997. Initially, BPAY was supported by nine founding institutions, which included the four largest Australian banks. The aim was to provide consumers with the ability to pay a wide range of bills from their banks’ Web sites. From the consumer’s perspective, all bills are handled in the same way with common processes and biller codes.

**Bottom Line:** When it comes to managing financial and personal information, consumers consistently express greater trust in banks than any other service providers. U.S. banks were unable to leverage this trust to build a consolidated EBPP system for consumers, because they were only mildly interested in the consortiums they established to carry this out, leading to noncompetitive products and poor performance. In contrast, the smaller Australian banking industry was able to rally together behind a robust and cost-effective consumer EBPP platform that leverages strong consumer relationships and trust, as borne out by notable gains in consumer adoption. Non-
Australian banks should learn from the Australian experience — banding together to form new standard infrastructures augments the banks’ value proposition to consumers.

CS-19-4416

**Huge Stolen Credit Card Case Poses Risks to Many Parties**

The theft of 8 million credit card records from an independent sales organization reveals serious risks for all involved in card transactions. Consumers are hurt the most, and new laws may be needed if the industry doesn’t act.

On 18 February 2003, Visa, MasterCard and American Express confirmed that a computer hacker had accessed 8 million credit card records, including 2.2 million MasterCard accounts and 3.4 million Visa accounts. The hacker targeted Data Processors International (DPI), an independent sales organization that mainly services Internet-based merchants and other retailers that fall into the high-risk, card-not-present mail order/telephone order category. DPI sells and services merchant accounts that are held by acquiring bank Provident Bank of Cincinnati, a subsidiary of Provident Financial Group, and manages the authorization of merchant transactions, but not the entire settlement process.

The card associations began to notify their member institutions of the hacking in early February 2003, right after DPI reported it to them. The card companies said that no information accessed was used fraudulently and that all card-issuing banks were alerted. However, fraud could potentially occur later on if the illegally accessed records are used. Law enforcement and credit card association investigations are not yet complete.

The hacking event yet again highlights serious risks to all parties that participate in the highly decentralized U.S. credit card transaction network. The credit card industry has focused too much on reducing fraud and not enough on protecting cardholder information. If the credit card industry doesn’t act quickly to address this imbalance, it may find that legislators will overreact and pass laws that represent a cure that is worse than the disease.

**Bottom Line:** All parties to credit card transactions are at risk when it comes to the hacking of credit card numbers. It is incumbent on the credit card associations to implement and enforce stricter rules regarding security and data protection practices by card issuers, merchant acquirers, processors, merchants and any other entities that manage or store card numbers on their servers. The card associations should also implement and enforce new rules that protect consumers from identity theft and credit reporting misinformation that can result from credit card fraud. Otherwise, consumer groups will force protective legislation in a lengthier and costlier process.

E-19-4564

**Hardware Platforms**

**Boeing’s Connexion to Deliver In-Flight Internet Access**

High-speed wireless computing is on its way for airlines. Prepare now for the security risks and expenses that will accompany the demand for wireless access from the air.

On 7 February 2003, Boeing, Intel and the San Francisco Port Authority conducted test flights that demonstrated wireless Internet access from the air. Gartner was invited to participate in a test flight that demonstrated real-time, high-speed Internet connection from an aircraft. The experimental flight,
which lasted approximately 1 hour and 15 minutes, was sponsored by Boeing, Intel and the San Francisco Port Authority. Connexion by Boeing’s goal is to be an Internet service provider that partners with airlines to offer high-speed wired (Ethernet) and wireless (802.11b) connectivity from airplanes. Lufthansa is already testing the system on a commercial flight (from Washington, D.C. to Frankfurt, Germany), and other airlines are expected to follow soon.

For the most part, the test flight can be deemed a success. During the flight, connection to the Internet was interrupted three times — the first two outages lasted less than five minutes, and the last one was about 10 minutes. Although the system is clearly not ready for mainstream deployment this year, the speed of the connection (average speeds on bandwidth metering tools showed typical connection speeds of around 325 Kbps) was more than acceptable for general-purpose use. Gartner forecasts that, by 2005, 20 percent of U.S. flights lasting two hours or more will have wireless Internet connectivity, at rates of 150 Kbps (0.7 probability).

**Bottom Line:** Onboard broadband access is coming. Enterprises need to plan now for increased demand for wireless access, ensure that firewall software exists on each notebook, and establish a policy and plan detailing who uses and pays for it.

E-19-4374

### Internet Platforms and Web Services

**The Horizontal Portal Product 2003 Magic Quadrant**

The portal product market is undergoing significant segmentation. Gartner presents the 2003 Magic Quadrant for the horizontal portal product market, the final analysis of this market as a single segment.

The portal product market is in the process of segmentation. Vendors are aligning within four main segments:

- Application platform suite (APS) only
- Smart enterprise suite (SES) only
- APS/SES combination
- Traditional package

Because portal frameworks are being packaged many different ways due to this segmentation, the Horizontal Portal Product 2003 Magic Quadrant will be the last for a single-segment portal product market.

The portal product market underwent continued consolidation in 2002 and 1Q03. This is another sign that portal products represent a mature market. The large independent software vendors, especially those with an APS/SES combination, have gained significant traction and market share. The SES-only segment of the market continues to perform nicely as well. The APS-only and traditional segments of the market are quickly headed toward niche status.

The Horizontal Portal Product 2003 Magic Quadrant (see Figure 4) shows only a subset of the vendors in this market. Although the number of vendors has declined steadily from about 100 in early 2000, there are still too many to include on a single chart. We focus on those vendors with the
most impact on the market and that own software used to build and deploy horizontal enterprise portals in any of the four segments. For those selling an APS/SES combination, the portal framework is almost always associated with the APS.

Figure 4

Horizontal Portal Product 2003 Magic Quadrant

Bottom Line: The consolidation of the portal product market has been going on since early 2000, but accelerated in 2002. The impact of the integrated suites, APS and SES segments has become very evident. The SES and APS/SES combination segments are positioned to completely dominate this market. Enterprises should expect continued consolidation among the middle-tier vendors, and further dominance by large independent software vendors.

M-19-5812

Whatever Happened to .NET?
The .NET name appears to be lessening in focus at Microsoft. However, the technologies remain as alive as ever. Was this marketing “run amok”?

Originally code-named “next-generation Windows services,” .NET entered the computer industry lexicon with great fanfare in June 2000. Now, the technologies known as .NET have in some ways returned to their roots as the next-generation programming models for Windows (“Longhorn,” the
code name for the next release of Windows). .NET (actually “.NET Connected”) will be Microsoft’s brand for Web services and connectivity.

The change in positioning and branding became evident in January 2003, when Microsoft once again changed the name of its soon-to-be-released server operating system from Windows .NET Server to Windows Server 2003. This is the fourth name change for the product that began with the code name “Whistler.” Microsoft named the platform Windows 2002 Server in April 2001, when it delayed delivery until early 2002. In June 2001, Microsoft renamed the product as Windows .NET Server; and, in August 2002, renamed it again, calling it Windows .NET Server 2003, with a scheduled delivery date late in that year. This is solely a rebranding issue — there is no change in commitment to any technology in the operating system.

With this name change — and others that will likely follow — Microsoft is beginning to clear up some of the confusion around .NET. Instead of branding products with the .NET name, Microsoft will focus the .NET brand on its “.NET Connected” logo, which, like the Windows XP logo, will require that manufacturers meet certain standards established by Microsoft. Among other things, products that receive the .NET Connected logo must provide Web services using the .NET Framework.

**Bottom Line:** Regardless of changing positioning and branding, the technologies identified by the .NET name are alive and well. The Windows Server 2003 name change, along with Microsoft’s repositioning and rebranding of .NET, should not alarm enterprises that have awaited the delivery of the new Windows server or those that have committed to technologies known by the .NET moniker. Ultimately, it is the beginning of a trend that will help Microsoft rationalize its terms and product names, and clarify them for enterprises.

SPA-19-4422

**Microsoft vs. Linux: The Changing Nature of Competition**

Microsoft’s attitude toward competition has changed as a result of Linux and other open-source software. Its business tactics are changing to focus on areas that have not been Microsoft’s traditional strengths.

Linux and open-source software are unlike any competition that Microsoft has ever faced. Microsoft is now perceived as “expensive,” at least in preliminary discussions regarding Linux. There is no single competitor or group of competitors that Microsoft can challenge. Free open-source software is more a fundamental movement, and because the nature of competition has changed, Microsoft must now employ strategies that are very different.

Microsoft has faced many types of competitors in the past. It has actually thrived on this competition, often worrying more about that than technology or customers’ wants and needs. While the constant focus on, and even obsession with, competition has kept Microsoft remarkably agile, it has also contributed to Microsoft’s sometimes overly aggressive tactics. One of these tactics involved bundling, which landed Microsoft in antitrust court in the late 1990s. It was found guilty of illegally maintaining a monopoly, but it escaped with permission (at least for now) to bundle products in any way its sees fit, with relatively minor restrictions. However, many are wondering whether this will matter in the future.

Competitors have come and gone, but one tactic has remained constant — Microsoft’s ability to use price to its advantage. Although neither unique to Microsoft nor the sole reason for its success, this price advantage has been effective and consistent with Microsoft’s original goal — having PCs that
run Microsoft software on most desktops. As part of that goal, Microsoft has been a low-cost software provider. For years, its entry into markets and aggressive price competition lowered the cost of computing and made it much more mainstream. Microsoft benefited enormously. It had long been considered the champion and enabler of end users, as well as an overall force for lower software prices — until recently. Today, Linux and open-source software are changing everything — at least for Microsoft and its competitive stances.

**Bottom Line:** Enterprises will see major changes in Microsoft’s competitive strategy as Linux and other open-source software continue to erode Microsoft’s traditional sources of income. Don’t expect Microsoft’s bundling strategies to continue as before, and don’t expect it to support Linux before 2006 at least — if ever.

COM-19-3908

**Knowledge and Content Management, Collaboration, and E-Learning**

**The Smart Enterprise Suite Magic Quadrant for 2003**

This is Gartner’s first Magic Quadrant for the smart enterprise suite market. Enterprises evaluating portal, content management and collaboration functionality should consider how these markets are evolving.

Gartner first identified the emergence of the new category that we called the SES in May 2002. A combination of portal, collaborative and content management functionality, the SES is becoming a highly significant evolutionary trend as these related markets mature and merge. Market events have clearly confirmed this move. Notable acquisitions driven by the need to aggregate larger suites of functionality include Documentum buying eRoom, Vignette acquiring Epicentric and, most recently, Open Text acquiring Corechange. Portal vendors continue to expand the scope of their products well beyond the gateway (for example, Plumtree Software’s Enterprise Web, Computer Associates’ Cleverpath and IBM’s WebSphere Portal).

This is the first Magic Quadrant for SES products (see Figure 5). As always in an emerging market segment, the criteria for inclusion are still somewhat fluid. Any vendor that offers a combination of portal, content management and collaboration support, and chooses to offer those functionalities as a suite, was considered. Other functions (particularly analytics capability), although not requirements, are considered additional strengths in this market. We have not regarded it as necessary for a vendor to own or develop all of the technology in the suite, but it must be delivered as a package from one vendor, not simply by cross-marketing agreements.

**Figure 5**

Smart Enterprise Suite Magic Quadrant
In rating the vendors, we have looked at strengths in each of the component areas, as well as market presence and other standard “Ability to Execute” factors. For “Vision,” we have considered the degree to which the vendor has identified with the concept of a suite as a primary element in its approach to the market, and the capabilities so far delivered by the suite.

**Bottom Line:** The SES market is showing the potential strength of some “powerhouse” vendors (IBM and SAP), but there is a good range of smaller or more-specialized companies also pursuing this opportunity. Potential users will have to decide between the breadth of an offer and its potential tie-in to current infrastructure, or choose to pursue more-targeted approaches to the integration of collaboration, applications and information access with lower initial cost and commitment.

M-19-3949

**Ghosts in the Network: Managing Risks of Personal Records**

Automatic backups, distributed storage and computer forensics create significant risk exposure to enterprises from personal records and communication. Users may be held accountable for even deleted content.

It’s a nightmare scenario for corporate executives: A series of prime-time television advertisements depict incriminating personal, internal memos written by an enterprise’s employees years earlier, allegedly implicating the enterprise in the death and deception of thousands of people. Even worse — the documents were obtained from court case records of lawsuits that cost the company billions, as well as U.S. congressional hearings. Fantasy? Not for tobacco company executives.

During the past decade, all industries have seen a surge in the use of corporate personal records in criminal and civil courts, congressional hearings and mass media. Now that users write memos to
the ether of a corporate network, such problems can no longer be resolved with shredders. In this
digital age, three factors have increased the risks associated with personal documents:

- Widespread reliance on technology as a communication and content creation tool
- Increased regulations governing corporate information, decisions and actions
- Technology advancements — in particular, storage, business continuity and security

Memos are no longer photocopied and distributed to internal mailboxes. Instead, corporate
communications are dominated by the use of Internet-based technologies, including e-mail, instant
messaging, knowledge-sharing systems, corporate intranets and electronic documents. Some
enterprises are converting the spoken word to internal, digital communications by initiating voice
over IP projects to leverage their network infrastructure for phone communications.

Today, nearly every corporate document is produced, exchanged and stored on enterprise networks
and the Internet. E-mail, instant messaging and other tools are used for official communications and
private conversations. Written documents, even if printed and stored in file cabinets, are also
archived on corporate networks. By 4Q03, at least 90 percent of corporate communications will be
created, discussed or summarized (for example, in meeting notes or follow-up e-mail) in digital
systems (0.8 probability).

**Bottom Line:** Enterprises’ failure to understand the implications of data management is growing into
a significant risk exposure. When information is typed into a corporate keyboard, or touches a
corporate network, users can’t assume they can control its life span. Enterprises must formulate and
follow a plan to reduce the risks associated with personal records.

COM-19-5752

**Sourcing**

**Better Outsourcing Relationships Save You Money**

Gartner shows how four key performance indicators can help managers cut outsourcing
costs by 5 percent or more, and enhance a deal’s value. The secret lies in better deal
structures and supplier relationship management.

As companies increasingly use third parties to deliver more of their business operations (for
example, in property management, human resources, finance and accounting, payment services
and IT) they are realizing that establishing and managing these deals is not just a procurement
activity. They are building complex, long-term, dynamic business relationships on which they will
become highly dependent. Managing these relationships requires a much broader range of
capabilities than is often found in the line management of procurement departments, IT departments
or business units.

A good outsourcing deal requires more than a competitive price and challenging service levels. We
have identified four key performance indicators that form a balanced scorecard for outsourcing:

- **Alignment and vision:** Can both parties meet their strategic and operational goals, and
  respond to business and technology?

- **Stakeholder satisfaction:** Are business unit users and managers satisfied?
• Service level and pricing: Is the scope of the work — delivered service and price — reasonable, and does it meet business requirements?

• Contract and relationship: Does the management of the contract and the relationship meet the needs of both parties?

Bottom Line: As managers outsource more of their business operations, the question is no longer “What should we outsource?” but “How do we improve the value of our deals?” Supplier relationship management is the key to long-term success. Executives responsible for managing business-critical outsourcing deals should use the key performance indicators described here to identify and aggressively address poor supplier relationship management. Companies that are prepared to invest in improving relationship management can cut deal management costs and improve value for both parties.

DF-18-1221

Wireless and Mobile

Delay 802.11a Adoption Until YE03

Intel’s development of the 802.11a wireless standard has not yet produced a suitable replacement for 802.11b, which will continue to be the superior solution at least through late 2003.

The wireless LAN (WLAN) 802.11a standard, although a full-fledged Institute of Electrical and Electronics Engineers (IEEE) standard with Wireless Ethernet Compatibility Alliance certification, is still immature. Frequency allocations are still in flux in some parts of the world, especially in Europe. U.S. government regulations are changing as well, with the potential for more spectrum in the 5GHz band being considered under different rules.

Also, IEEE regulations that could affect how silicon is designed have not been finalized, despite vendor hype to the contrary. Wireless Fidelity testing recently has begun, and new issues will affect silicon, drivers and other components. Personal digital assistants (PDAs), which are expected to be a big consumer of embedded WLANs, do not support CardBus, the only interface for 802.11a. As CardBus is not yet offered in PDA chipsets, power management and other schemes could change, again not a standards issue but a certainly a maturity issue.

These issues should begin to stabilize in late 2003 or early 2004. At that time, we expect 802.11a to enjoy the same stability available from the 802.11b standard because of its strong worldwide acceptance. We also expect other important standards to be approved, such as 802.11g for 54 Mbps at 2.4GHz, 802.11i for security and possibly components of 802.11e for quality of service. Organizations cannot be asked to constantly update drivers, firmware and possibly the hardware itself. It seems logical to wait until these components are ratified and made available, and to combine them with 802.11a, the assured successor to 802.11b. By late 2003 or early 2004, we expect an 802.11a/g product with Advanced Encryption Standard security and other features, which will be a better option than today’s 802.11b products.

Bottom Line: 802.11a WLAN solutions should be avoided unless they are offered for zero price premium over and above 802.11b. That said, there will be exceptions in which applications demand the performance and the returns justify the investment. However, these will be in the minority. Expect many of the maturity issues around 802.11a to be resolved by the end of 2003, at which time...
we will likely prefer the 802.11a standard, combined with 802.11g, for most enterprise deployments. Until then, 802.11b investments are low-cost and should suffice for most enterprise needs.

T-19-5132

Workforce and Workplace

Using IT to Slash Occupancy and Travel Costs

Enterprise occupancy and travel costs together represent one of the largest enterprise cost components, second only to labor costs. Smart enterprises leverage their IT investments to slash these costs.

Occupancy and travel costs represent, on average, 11 percent of revenue for a typical enterprise. Occupancy costs include real estate rental, depreciation, taxes, insurance, maintenance, and the costs associated with the provision and service of enterprise facilities. Travel costs are self-explanatory. In a period of continued economic distress and tight budgets, enterprise management should consider every practical strategy to reduce overhead costs, particularly strategies that don’t entail further lay-offs of personnel. Using IT applications and infrastructure capabilities, managers can dramatically slash occupancy and travel cost accounts by 15 percent to 30 percent, if not more.

Occupancy Costs: Typical suburban office space, even in a distressed market, can cost between $20 to $30 per square foot. Added to this base rental is the cost of furniture depreciation and support services (such as security, maintenance, janitorial services and utilities), bringing the occupancy cost to more than $60 per square foot. The average office allocation per employee, including workstation size as well as allocation of support space such as conference rooms, typically ranges between 200 and 250 square feet per employee. Thus, an office population of 300 employees will cost between $3.6 million and $4.5 million per year. Once IT costs, which typically average between $10,000 and $12,000 per workstation per year, are added, the enterprise total cost of ownership can range from $6.6 million and $8.1 million per year. For a five-year lease, the total cost for occupancy alone would be between $18 million and $23 million.

Most enterprise offices are 50 percent vacant all of the time, because employees today are working more on the move and more collaboratively. There is theoretically an opportunity to reduce occupancy expense by 50 percent by using this average surplus in office space. Research suggests that 20 percent to 30 percent of a typical office population is eligible for nonassigned office use because their jobs can be done two or three days a week from home or on the road. By sharing 30 percent of the offices on a ratio of 5-to-1, managers in could reduce annual occupancy cost by 24 percent. IT capabilities make this shared office strategy possible by use of laptops, remote access connectivity and call-forwarding technologies.

There are other strategies for reducing occupancy costs that are directly enabled by sophisticated facilities management applications. For example, computer-aided facilities management software empowers the enterprise with powerful tools to manage space, lease contracts and equipment inventories. Lease administration functionality tracks escalation clauses, renewal options and other contract entitlements, and sends alerts about critical due dates. Savings of 5 percent to 10 percent of annual rental fees have been attributed to the use of lease administration functionality.

Travel Costs: Travel costs can represent between 2 percent and 4 percent of revenue. An enterprise with revenue of $1 billion per year can expect to process 20,000 expense claims. Although the average cost per travel and entertainment claim is low —$150 to $200 — the price of an average business airfare was $1,179 in 2002, according to the National Business Travel
Association, which also reported that business travel costs are expected to rise globally by 5 percent in 2003.

Substituting IT collaborative and meeting application functionality for business travel can dramatically reduce travel costs. Web-hosted meeting applications such as WebX, Placeware and NetMeeting, in combination with audioconferencing for voice communication, can reduce the cost for a one-hour, eight-person face-to-face meeting involving travel expenses of $4,000 to $300 to $400 (for a Web-hosted meeting fee). Collaborative applications such as OpenText, Lotus Quickplace, E-Room and Groove greatly facilitate team collaboration, also reducing the need for travel.

**Bottom Line:** IT investments can be leveraged to reduce enterprise occupancy and travel costs by 15 percent to 30 percent. However, this requires a mind set change in the enterprise by supporting a more-distributed, virtual workstyle. It also requires an integrated workplace management approach, melding the disciplines of IT, human resources, travel and corporate real estate and forging unified workplace budget and implementation processes.

DF-19-234