Hype Cycle for Portal Ecosystems, 2006

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The 2006 Portal Ecosystem Hype Cycle shows evolutionary changes for several technologies, with several delivering high business benefit nearing maturity. Mainstream businesses are following the example of technologically aggressive enterprises that have successfully leveraged portals.
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1.0 What You Need to Know

Enterprise portals continue to be the user interfaces (UIs) that are most in-demand in Type A (highly technologically aggressive) and Type B (moderately technology aggressive) enterprises. Even those enterprises that took a wait-and-see attitude toward this technology in the first half of this decade are now evaluating how they can leverage enterprise portals. Gartner defines a portal as "Web software infrastructure that provides access to and interaction with relevant information assets (information/content, applications and business processes), knowledge assets and human assets by select targeted audiences, delivered in a highly personalized manner." Portals aggregate content and integrate applications, processes and humans. In effect, an enterprise portal provides "human integration," connecting a user to all information resources necessary to do business with a company, work for a company or interact with a government.

Enterprise portals may face different audiences, including: employees — business-to-employee (B2E); customers — business-to-consumer (B2C); or business partners — business-to-business (B2B). Portal products are the core technologies used to build and deploy enterprise portals, and an ecosystem of complementary technologies is normally included in a typical enterprise portal deployment. This Hype Cycle focuses on that ecosystem.

2.0 The Hype Cycle

Many of the technologies making up the portal ecosystem have matured well, including the basic integration mechanism for the portal, the "portlet." Portal vendors have historically been aggressive in adopting Web services standards and other Web technologies into their products. This trend continues as some portal vendors leverage architectural approaches, such as Ajax, and consumer Web concepts, such as mashups. Several vendors continue to focus on the portal as a framework for delivery of service-oriented applications.

Portal-specific standards, such as Web Services for Remote Portlets (WSRP), Java Specification Request (JSR) 168 and JSR 170 have experienced varying levels of productization by vendors and adoption by end users. JSR 286 and WSRP v.2 are expected to address at least some of the limitations of the first versions of these portlet standards (JSR 168 and WSRP), but a full set of standards that will fully enable peer-to-peer portal federation is still years away. Role-based personalization capabilities in portals are mature at this point, although specific capabilities do still vary between products.

Exciting new technologies that will have a high impact on the portal ecosystem include rich clients, as well as access via a wide array of mobile devices. Most portal access will evolve from a traditional Web browser to these new types of clients by 2008.
Figure 1. Hype Cycle for Portal Ecosystems, 2006

- **Visibility**
  - SMB Portals
  - Mashup
  - Hosted Portals
  - Open-Source Horizontal Portals
  - Portal-Enabled Content Management
  - Rich-Client Portals
  - Offline Portals
  - Desktop Portals

- **Technology Trigger**
  - WSRP v.2
  - JSR 286
  - Portal Ubiquity

- **Peak of Inflated Expectations**
  - Federated Portals Across Vendor Families
  - Smart Enterprise Suites
  - JSR 170
  - Virtual Content Repositories
  - Microportals
  - Advanced Web Services in Portals
  - Process Portals
  - Contextual Personalization
  - WSRP
  - Basic Web Services Support in Portals
  - Ajax
  - Open-Source Higher-Education Portals
  - Portal Fabric

- **Trough of Disillusionment**
  - Federated Portals Within Vendor Families
  - Advanced Integration in Portals

- **Slope of Enlightenment**
  - Collaboration Portlets
  - Enterprise-Scope Application Platform Suites

- **Plateau of Productivity**
  - Portlets
  - Mobile Access to Portals
  - Role-Based Personalization
  - Mashup
  - Ajax

**Years to mainstream adoption:**
- ○ less than 2 years
- ○ 2 to 5 years
- ● 5 to 10 years
- △ more than 10 years
- ○妇女 obsolete before plateau

Source: Gartner (June 2006)
3.0 The Priority Matrix

The portal ecosystem includes several technologies expected to mature in the near term (less than 2 years) that will deliver transformational or high-impact benefits. Portlets, the integration mechanism between the portal and back-end applications and repositories, have been a fundamental architectural element of enterprise portals since the beginning of commercial products in this area. While vendors continue to augment their own proprietary portlet capabilities, many also support the first versions of the portlet standards JSR168 and WSRP. Role-based personalization is a key means of delivering business value to individual end users.

Although its impact is not limited to portals, Ajax will be leveraged in portals to provide an enhanced, more-responsive user experience via the browser. Portals have provided support for basic Web services standards, such as Simple Object Access Protocol (SOAP), Universal Description Discovery and Integration (UDDI), Web Services Description Language (WSDL) and Extensible Markup Language (XML) for some time, but continued product enhancements have accelerated end-user deployment of these capabilities in their portal deployments.
**Figure 2. Priority Matrix for Portal Ecosystems, 2006**

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<tr>
<th>benefit</th>
<th>years to mainstream adoption</th>
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<td></td>
<td>less than 2 years</td>
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<td>transformational</td>
<td>Portal Ubiquity</td>
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<td>high</td>
<td>Ajax</td>
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<td>Smart Enterprise Suites</td>
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<td>Syndication</td>
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<td>low</td>
<td>Collaboration Portlets</td>
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*As of June 2006*

**Source:** Gartner (June 2006)

### 4.0 On the Rise

#### 4.1 Portal Ubiquity

**Definition:** Portal ubiquity is a follow-up to the portal fabric. With the portal fabric in place, access to any portal is provided by a portal aggregation feature. Portal ubiquity extends this access beyond the Web browser to any network device, including those found in automobiles, consumer electronics, voice and Web devices, and rich clients. Based on form factor, device characteristics, network capabilities and personalization, and user customization parameters, the presentation and interaction with many portals will morph. For example, an e-mail portlet on a PC will render in a standard portlet, but an e-mail portlet in a car-based portal will use voice for input and output. As the user changes location and context, the portal will follow the user. This flavor of portal ubiquity is known as the “follow me portal.”
**Position and Adoption Speed Justification:** No standards exist, and network access for many devices (for example, automobiles and consumer electronics) is immature or nonexistent.

**User Advice:** Track advancement of standards for portal ubiquity. Identify how non-PC portal access is required by your users, and experience with early instances of portal ubiquity as user requirements dictate.

**Business Impact:** Portal ubiquity will enable users to access a familiar portal interface with any business or personal content that they desire to access. The follow-me portal will enable users to easily change location and context, without having to copy data or have access to specific devices.

**Market Penetration:** Less than 1 percent of target audience

**Maturity:** Embryonic

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 4.2 JSR 286

**Definition:** Portlets will be accessed via standard mechanisms (the update to JSR 168) to support local portlets in a Java portal framework.

**Position and Adoption Speed Justification:** This standard is not yet finalized. It is an update to JSR 168.

**User Advice:** Enterprises should leverage the JSR 286 standard in their portal frameworks once the standard has been productized. JSR 286 is expected to include support for interportlet communication, a key limitation of JSR 168.

**Business Impact:** Finalization of the JSR 286 standard likely will encourage development of standards-based portlets, thus helping to reduce the cost of switching between portal frameworks supporting the standard. Portlet standards also will help promote the adoption of open-source portal frameworks, as well as the development of a third-party market for portlets.

**Market Penetration:** Less than 1 percent of target audience

**Maturity:** Embryonic

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Web Services and Related Standards and Specifications, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 4.3 Portal Fabric

**Definition:** An average user accesses a wide variety of portals: work portals, banking portals, travel portals, government portals and "mega portals." Each is stovepiped from the others, and interoperability between them is usually nonexistent. With the portal fabric, the user becomes the center of his or her own portal universe.
In the same way that traditional portals provide content aggregation, the portal fabric enables portal aggregation. All of the portals that the user cares about are aggregated into a single portal shell. With the portal fabric in place, access to any portal is provided by an aggregation feature. Portlets, sections of portal pages, portal pages or entire portals can be aggregated. Key to this capability is universal, federated identity management, which provides key security and personalization data. Web Services for Remote Portlets (WSRP) provides basic portlet-level interoperability, but other interoperability standards must also be in place for the portal fabric to become reality. The emergence of the portal fabric will enable portal ubiquity, in which access extends beyond the Web browser, to any network device.

**Position and Adoption Speed Justification:** Federated identity management is relatively new, and there are no standards enabling portal fabric. Version 2 of WSRP will not be delivered until late 2006 at best.

**User Advice:** Track the evolution of portal interoperability standards, and leverage federated identity management as business requirements dictate. Press your portal product vendors to implement portal fabric features as standards emerge.

**Business Impact:** Vendors that provide the container for the portal fabric own the user experience. On the user side, multiple portals can be correlated and orchestrated into on-the-glass composites.

**Market Penetration:** Less than 1 percent of target audience

**Maturity:** Embryonic

**Sample Vendors:** Sun Microsystems

**Appears In Hype Cycle:**

- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

4.4 WSRP v.2

**Definition:** Portlets will be accessed via standard mechanisms — Web Services for Remote Portlets (WSRP) v.2 — to support remote portlets.

**Position and Adoption Speed Justification:** WSRP v.2 is not yet finalized.

**User Advice:** End users should monitor the standards definition process and encourage their portal vendors to implement support in their portal products as soon as WSRP v.2 has been finalized.

**Business Impact:** Finalization of this standard should accelerate adoption among organizations dissatisfied with the limitations of the first version of WSRP.

**Market Penetration:** Less than 1 percent of target audience

**Maturity:** Emerging

**Appears In Hype Cycle:**

- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Web Services and Related Standards and Specifications, 2006"
Analysis By: David Gootzit; Gene Phifer; Ray Valdes

4.5 Desktop Portals

Definition: Desktop portals are a successor to personal work portals. They are portal products running on client desktops, consolidating all enterprise portals, and handling local applications and content. The majority of desktop portals use rich-client technology. Desktop portals handle personalization and the portlet integration model. Most portlets in desktop portals will be based on Web services technology. Desktop portals will also have the capability to access applications and content on the local device.

Position and Adoption Speed Justification: Rich-client strategies are driving toward desktop portals. Replication models are robust in many cases. However, offline execution and storage mechanisms are immature, resulting in few desktop portal implementations.

User Advice: Look for desktop portals where business requirements, such as disconnected users, warrant them. Look at the rich client offerings of the large vendors for the most-robust replication and local storage features. Also, track the progress of Ajax, as some vendors are trying to leverage the Web browser to house a desktop portal.

Business Impact: Personal productivity improvements and reduced operating costs will see the greatest impact. Disconnected access allowed by desktop portals will allow field sales, field service and disconnected knowledge workers to use a portal user interface (UI) and benefit from the relevancy therein. Access to local applications and content will allow all users to use a consistent UI, and to integrate the local applications and content into on-the-glass composites.

Market Penetration: One percent to 5 percent of target audience

Maturity: Embryonic

Sample Vendors: Adobe; IBM; Microsoft; Tibco Software

Appears In Hype Cycle:

- "Hype Cycle for High-Performance Workplace, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: David Gootzit; Ray Valdes; Gene Phifer

4.6 Offline Portals

Definition: Today’s portals require a client, a server and a network to connect them. Offline portals work in a disconnected mode, delivering the same user interface and personalization as when they're connected. They enable disconnected users (for example, field sales workers, field service workers or knowledge workers on airplanes) to access certain types of content and applications. A sophisticated replication model and a local store are required to enable this. Data and content are cached. An offline portal has a local personalization engine as well as a local portlet execution engine. However, certain types of content and applications can't be replicated and cached, so offline portals will be limited compared with connected portals.

Position and Adoption Speed Justification: Offline portals exist primarily through third-party partnerships. They handle cache content and forms input, but they don't handle bidirectional synchronization well.
User Advice: If your users require offline portal capabilities, then investigate small vendors that deliver this capability. For most, this will be a future requirement; and for those users, track portal product vendors’ strategies for offline portals.

Business Impact: Occasionally, connected users and mobile users can contribute to and use content and applications. This enables field sales workers, field service workers and disconnected knowledge workers to leverage the same portal user interface, as well as most of the content and applications that they access in the office.

Market Penetration: One percent to 5 percent of target audience

Maturity: Emerging

Appears In Hype Cycle:
- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: David Gootzit; Gene Phifer; Ray Valdes

4.7 Rich-Client Portals

Definition: Portal clients use the familiar Web browser. The traditional Web browser is limited in its ability to deliver a robust user interface (UI). Rich-client portals use rich clients as the client-side technology vs. a traditional Web browser and standard HTML. This enables an extremely robust UI — one approaching the Windows desktop. It also provides client-side processing that would normally be run on the server (for example, sorting a table). Rich clients can access portal and non-portal services in the same client, expanding the reach of the user. Finally, asynchronous access and caching enable a rich client to perform better than a traditional Web browser accessing a traditional portal server. In addition, a rich client can house portal functionality (see desktop portal). Rich clients can be Ajax-enabled browsers, browser plug-ins or on-browser code components (such as the IBM Workplace Managed Client).

Position and Adoption Speed Justification: Many large vendors have announced their rich-client strategies, but only a few have implemented them. Established rich-client implementations don’t have many portal capabilities.

User Advice: Analyze your user requirements regarding client-side technologies. Track your portal vendor’s strategies and capabilities regarding rich clients.

Business Impact: Rich clients offer the robust UI of a fat client, with the total cost of ownership and management advantages of a thin client. Rich clients also provide access to non-portal resources, including desktop applications and content.

Market Penetration: One percent to 5 percent of target audience

Maturity: Emerging

Sample Vendors: IBM; Microsoft; Tibco Software

Appears In Hype Cycle:
- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: David Gootzit; Gene Phifer; Ray Valdes
4.8 Portal-Enabled Content Management

**Definition:** Portal-enabled content management refers to the embedding of content-publishing and content-managing capabilities into a portal package. Historically, the set of features associated with content creation (including authoring, revising, editing, approving, publishing and purging) has been separated from those related to content delivery (such as personalized navigation, user access control, customization, presentation, delivery to mobile devices and contextual personalization). Previous Hype Cycles used the term "integrated content management" (ICM); however, "portal-enabled content management" better describes the trend.

**Position and Adoption Speed Justification:** In the early days of portals (circa 1999), vendors tried to add content-publishing features to portals, but reached a limit in terms of developer resources and product coherence. They then began to separately develop full-strength content management systems or acquire companies that had these products. In previous Hype Cycles, ICM was designated as "obsolete before plateau." Users that expect tighter integration have been disappointed by having two loosely coupled offerings from the same vendor. Microsoft SharePoint 2007 points to a revival of portal-enabled content management, because the SharePoint portal and Microsoft Content Server are tightly integrated on the same technology foundation.

**User Advice:** Assess your requirements in the two related areas of content creation and content delivery, then decide if you need two separate products (from the same or from different vendors), or if you require tighter integration.

**Business Impact:** A system that tightly integrates content creation with content delivery can deliver greater efficiency, productivity and lower cost of ownership than a loosely coupled system; however, tighter integration increases a company's dependence on a single vendor.

**Market Penetration:** Five percent to 20 percent of target audience

**Maturity:** Emerging

**Appears In Hype Cycle:**

- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Ray Valdes; Gene Phifer

4.9 Syndication

**Definition:** With respect to portals, syndication refers to scenarios in which portals share content and applications through mechanisms such as Web Services for Remote Portlets (WSRP), Really Simple Syndication (RSS) and proprietary mechanisms. The term is most often used with regard to content distribution, but can encompass business logic and content. Syndication can encompass portal interoperability (data transfers between two portals) within the enterprise, but it is more often used to refer to syndication of content and logic across business boundaries, thereby creating a multinode value chain of information, in which not every node in the chain is a portal. Portals can be consumers or producers of syndicated content.

**Position and Adoption Speed Justification:** Syndication adoption is relatively new to portals, even though standards such as RSS have been around since 1999 and are used in other settings such as blogs. Support for WSRP and RSS is on the product road map for all major portal vendors, and many have already shipped. Users are lagging in adoption, partly because of lack of familiarity, lack of technology to easily produce RSS or WSRP feeds and the fact that there are already in-place mechanisms (file transfer, content replication and proprietary syndication mechanisms) to achieve many of the same results.
User Advice: In addition to encouraging users to visit your portal, consider scenarios in which your content and business logic is delivered indirectly to users through intermediary portals or nonportal servers, so that users can get the information they need in the appropriate context (physical setting or logical environment).

Business Impact: Syndication enables easy access to paid or unpaid content, which is automatically delivered. It also provides contextual access to application logic without the update synchronization problems associated with the copying and replication of code.

Market Penetration: One percent to 5 percent of target audience

Maturity: Emerging

Sample Vendors: BEA Systems; IBM; NetUnity; WebCollage

Appears In Hype Cycle:

- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: David Gootzit; Gene Phifer; Ray Valdes

5.0 At the Peak

5.1 Open-Source Horizontal Portals

Definition: Open-source horizontal portals are built using open-source portal frameworks.

Position and Adoption Speed Justification: Open-source software (OSS) portal frameworks (such as Jetspeed and Zope) have been available for years, but they have seen little traction among Global 1000 companies. The complexity of portal software and relative immaturity of OSS portal packages inhibit enterprise adoption of OSS portals. For the average Global 1000 company, open-source portal frameworks do not offer compelling advantages in terms of cost or functionality for deployment at the enterprise level. Also, there are significant gaps in OSS portal functionality when compared with consensus features found in most commercial portal packages.

User Advice: Although open-source alternatives for application servers have become attractive, open-source portals vary in their focus (content management vs. a horizontal portal framework). Generation 3, 4 and 5 functional attributes are limited in most available open-source portals. Gartner does not expect the low level of OSS portal adoption to continue indefinitely, but enterprises should determine whether the OSS portal frameworks they are considering are ready for enterprise-level deployments. The technology in Java-based horizontal OSS portals is maturing, and vendor-independent portal standards, such as JSR-168, are reducing concerns about vendor lock-in. Once completed, JSR-286 and WSRP v.2 will provide additional options for enterprises evaluating OSS portals.

Business Impact: "Free" software for use by enterprises looking for complete customization of their portal frameworks is available and reduces or eliminates the initial license acquisition costs associated with portals.

Market Penetration: One percent to 5 percent of target audience

Maturity: Emerging

Sample Vendors: Apache Software Foundation; jPortlet; Jahia; JA-SIG (Java in Administration Special Interest Group); JBoss; Open Source Technology Group; PHPNuke; Plone; uPortal

Appears In Hype Cycle:
5.2 Hosted Portals

**Definition:** This is portal functionality delivered in a hosted model.

**Position and Adoption Speed Justification:** During the dot-com boom, hosted portals were closely associated with the first wave of application service providers (ASPs), and many disappeared during the dot-com bust. Many enterprises have found hosted portals costly and inflexible. Security concerns are one contributing factor to end-user reluctance to exploit this option for portal consumption. Efforts to deliver software as a service (SaaS) have resurrected this item.

**User Advice:** The beginnings of a revival of ASPs in general, specifically through SaaS initiatives such as Salesforce.com, is increasing end-user interest in hosted portals. SaaS initiatives, such as Windows Live, indicate that ASPs and hosted portals may be poised for a comeback as long as the mistakes made by previous hosted portal efforts are avoided. Enterprises should evaluate whether their portal vendor provides a hosted option.

**Business Impact:** Hosted portal options could provide cost savings for small and midsize businesses or for large enterprises.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Sample Vendors:** IBM; Oracle

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Software as a Service, 2006"

5.3 Mashup

**Definition:** A "mashup" is a lightweight tactical integration of multisourced applications or content into a single offering. It's a composite application built outside the enterprise that partly relies on data and services from public Web sites, such as Google Maps, craigslist, eBay, Amazon and many others. Because mashups leverage content and logic from other Web sites and Web applications, they're lightweight in implementation and built with a minimal amount of code (which can be client-side JavaScript or server-side scripts such as PHP or Python).

Mashups exploit lightweight mechanisms such as REST- (REpresentational State Transfer) based application programming interfaces (APIs) to public Web services, as well as Ajax "snippets" and "widgets" (see "Adopting Ajax Means Choosing From Four Levels of Ajax Technology"). Mashups aren't intended to be strategic, systematically built, industrial-strength enterprise applications; rather, they're created quickly or opportunistically to meet a focused tactical need. The cultural context of mashups involves the confluence of many innovations: Web APIs, lightweight client-side scripting, delivery of content via Really Simple Syndication (RSS), wikis, Ajax, social networking and the explosion of Web-based communities. The closest thing to mashup-creation tools for "civilians" is an RSS feed or podcasting client, which enables them to "mash" content from more than one site.
**Position and Adoption Speed Justification:** Mashups are driven by the Web culture — that is, social networking sites tailored to communities of interest. There are thousands of mashups on the Web today, often built by nonprofessional programmers. For example, housingmaps.com combines data from Google Maps, with apartment rental information from craigslist, to create a new application that shows the location of available apartments in a given city — all accomplished without the direct participation of Google or craigslist staffs. In addition, Web sites such as CommunityWalk have enabled thousands of nontechnical users to build mashups using geodata from Google Maps.

**User Advice:** Mashups are used to integrate content or functions from multiple sources and present easily understandable items of interest. The trade-off is time-to-market over application robustness or longevity. For example, merging geographic data, map images and real-estate locations may be a real-estate site’s offering. The house locations come from craigslist or Multiple Listing Service (MLS), but geographic coordinates and map images come from other sources (such as Google Maps or Yahoo Maps). "Events" can be layered on top of the same geographic and map applications to provide guides to local musical events.

Mashups are a good way to avoid development costs when many necessary components are publicly available for reuse. Because mashups combine data and logic from multiple sources, they’re vulnerable to failures in any one of those sources. There are also risks and concerns regarding the use of intellectual property and the longevity of provider relationships. In 2006, mashups are part of a "style" that will experience strong growth through 2009.

**Business Impact:** Mashups can quickly meet tactical needs with reduced development costs and improved user satisfaction.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Sample Vendors:** Applibase (datamashups.com); craigslist; CommunityWalk; Google Maps; housingmaps.com; The RSS Weblog; Yahoo Maps

**Recommended Reading:**
- "Adopting Ajax Means Choosing From Four Levels of Ajax Technology"
- "Cool Vendors in Platform Middleware, 2006"

**Appears In Hype Cycle:**
- "Hype Cycle for Emerging Technologies, 2006"
- "Hype Cycle for High-Performance Workplace, 2006"
- "Hype Cycle for Media Industry Advertising, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Web Technologies, 2006"

**Analysis By:** Ray Valdes; Nikos Drakos; Rita Knox

**5.4 SMB Portals**

**Definition:** These portals target small and midsize businesses (SMBs), departments of large enterprises and the original equipment manufacturer component of third-party independent software vendors.
**Position and Adoption Speed Justification:** "Express" versions of portal products exist from multiple vendors. Although SMBs might be a fertile ground for hosted portals, few companies have embraced that portal delivery mechanism at this point.

**User Advice:** SMBs should examine the several options targeted at their specific needs available in the market. In many cases, these versions deliver more-limited functionality, but at a significantly reduced price when compared with "enterprise"-level portal solutions.

**Business Impact:** Their impact includes rapid deployment and easy-to-manage portal frameworks.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Adolescent

**Sample Vendors:** IBM; Microsoft

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 5.5 Federated Portals Across Vendor Families

**Definition:** Portal products from different vendors can be seamlessly deployed and accessed in a federated network, which enables the interoperability and sharing of resources.

**Position and Adoption Speed Justification:** Other than for portlets, interoperability standards are in their infancy.

**User Advice:** Enterprises seeking to federate portals across vendor families will rely heavily on Web services for remote portlets (WSRP).

**Business Impact:** Federation across portals from different vendor families will enable:
- Users to access the resources exposed by those portals without having to log into multiple portal interfaces
- Complete interoperability across portals without developing custom integration code and replicating user profiles across multiple portal directories

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Sample Vendors:** BEA Systems; IBM; Tibco Software; Vignette

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 5.6 Smart Enterprise Suites

**Definition:** Smart enterprise suites (SESs) are the convergence of portal, content management and collaboration support in a single, integrated product offering.
Position and Adoption Speed Justification: Users and vendors have a growing interest in this convergence of functionality. However, the slow movement of non-SES technology users to SES, coupled with the potential rise of Web-2.0-type applications, could mean that SESs will never reach maturity (0.4 probability).

User Advice: Enterprises often already have one of the three components of an SES, so SES is more often viewed as an architecture. However, for users that need a portal, content management and collaboration, an SES is often the right choice. The advent of Web 2.0 applications may change the way SESs evolve, as well as how vendors develop applications. Enterprises must balance the need for a perfect suite with the emerging "mashup" type of suites that may be "good enough."

Business Impact: Improve the integration of key applications for information management and access; lower the total cost of ownership; and provide a platform for collaboration, content management, information retrieval and business intelligence.

Market Penetration: Five percent to 20 percent of target audience

Maturity: Emerging

Sample Vendors: Hummingbird; IBM; Microsoft; Oracle; SAP; Sun Microsystems; Vignette

Recommended Reading:
- "Evolving Smart Enterprise Suites Into Workplace Architectural Models"
- "ECM Market Shifts With Symphony's Planned Hummingbird Buy"

Appears In Hype Cycle:
- "Hype Cycle for Collaboration and Communication, 2006"
- "Hype Cycle for Content Management, 2006"
- "Hype Cycle for E-Learning, 2006"
- "Hype Cycle for High-Performance Workplace, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: James Lundy; Gene Phifer; Mark Gilbert

5.7 JSR 170

Definition: Java Specification Request (JSR) 170 is a content repository for Java technology application programming interfaces (APIs) that makes content management repositories more open to integration. This should enable content management systems to access and manage content across multiple repositories using a standard connector specification.

Position and Adoption Speed Justification: JSR 170 was finalized at the end of 2004, approved in May 2005 and is now being engineered into commercial software products.

User Advice: Ask your content management vendors what their specific plans are for supporting JSR 170. Some vendors are hesitant to open up their repositories, which they will do by supporting JSR 170. A lack of support for this standard may force clients to make decisions about which vendors they continue to do business with.
**Business Impact:** The potential benefits of JSR 170 are real, and enterprises with multiple legacy repositories should embrace it.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Sample Vendors:** Day; EMC; FileNet; Hummingbird; IBM; Interwoven; Open Text; Oracle; Stellent; Vignette

**Recommended Reading:**

- "Learn the Difference Between Portals and Content Integration"

**Appears In Hype Cycle:**

- "Hype Cycle for Content Management, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** James Lundy; Gene Phifer; Toby Bell; Karen Shegda; Mark Gilbert; David Gootzit

### 5.8 Virtual Content Repositories

**Definition:** The virtual repository provides users with bidirectional access to physically diverse repositories so that users can access, revise, move, manage and store content regardless of its location. New middleware applications and extensions to portal applications can provide unified interactions with the different repositories.

**Position and Adoption Speed Justification:** Most vendors don't support virtual content repositories, although several of the enterprise content management suite vendors use IBM's or Day Software's connectors. Concerns exist about security and the ability to maintain versioning across multiple repositories. Adoption of the Java Specification Request (JSR) 170 standard should drive this market toward maturity faster.

**User Advice:** Building virtual repositories is the first step toward better content integration across applications. JSR 170 will be a catalyst, so organizations should ask their suppliers when they will support it. At present, a content architecture should allow for repository access and metadata management. Business search and portal technologies — along with enterprise application integration and human-to-human process control — are strategically related, as are XML databases.

**Business Impact:** Virtual content repositories will enable organizations to make better use of their multiple content management platforms and reduce the need to migrate or replace applications. Virtual repositories are essential to help eliminate "content blindness," and they can improve customer service, legal discovery and overall content governance. Easier integration of content into portals will allow "apparent integration" with structured data sources.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Adolescent

**Sample Vendors:** Day Software; IBM; Oracle; Vignette

**Recommended Reading:**

- "Content Integration Will Become a Top Priority by 2006"
5.9 JSR 168

**Definition:** Portlets will be accessed via standard mechanisms (JSR 168) for the invocation of local portlets in a Java portal framework.

**Position and Adoption Speed Justification:** JSR 168 was finalized in October 2003, and the code supporting it has shipped in most of the portal products tracked by Gartner.

**User Advice:** Enterprises that have deployed Java-based portal frameworks supporting JSR 168 should develop portlets according to that standard, where possible.

**Business Impact:** Standard portlets enable easier integration and a third-party market for portlets.

**Market Penetration:** Twenty percent to 50 percent of target audience

**Maturity:** Early mainstream

**Sample Vendors:** BEA Systems; Day Software; IBM; Oracle; Tibco Software; Vignette

**Appears In Hype Cycle:**

- "Hype Cycle for Content Management, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** Toby Bell; Karen Shegda; Kenneth Chin; James Lundy

5.10 Microportals

**Definition:** Microportals are cascading portals that can be created and managed by users.

**Position and Adoption Speed Justification:** Support for cascading portals is present in most portal products, and some vendors have extended this feature to support user creation and management of the cascaded subportals. These microportals are often used to enable ad-hoc collaboration.

**User Advice:** Microportals can deliver significant value in portal deployments. However, enabling end-user microportal creation without proper policies and management can create management issues. In general, if the portal product used by an enterprise includes this feature, then it should be leveraged.

**Business Impact:** End users frequently express interest in the ability to create an on-demand portal site to meet narrowly defined short-term needs. Microportals developed and managed by users avoid a potential IT bottleneck.

**Market Penetration:** One percent to 5 percent of target audience

**Appears In Hype Cycle:**

- "Hype Cycle for Content Management, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Web Services and Related Standards and Specifications, 2006"

**Analysis By:** David Gootzit; Ray Valdes; Gene Phifer
5.11 Advanced Web Services in Portals

**Definition:** Advanced Web services in portals support advanced Web services standards (including security, transactions and choreography).

**Position and Adoption Speed Justification:** Generally, the delay in the production of advanced Web services is often linked to the larger picture of Web services adoption (such as increased complexity, the slow delivery of tooling and others) rather than anything specific to portals. Although adoption of Web service standards by portal product vendors has been good to this point, much more is needed.

**User Advice:** Enterprises should leverage what advanced Web services support is available through their portal, especially in the areas of process orchestration (Business Process Execution Language).

**Business Impact:** This will impact portal interoperability across vendor families and delivery of composite applications.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Adolescent

**Sample Vendors:** BEA Systems; IBM; Oracle; SAP; Tibco Software; Vignette

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

6.0 Sliding Into the Trough

6.1 Process Portals

**Definition:** Process portals are focused on enabling business processes.

**Position and Adoption Speed Justification:** Good enterprise portals provide access to business processes. Portals describing themselves only as "process portals" are usually so focused on exposing processes that they often ignore other important elements, such as content aggregation. Portals focusing on one type of access or interaction pattern usually have to be expanded to include others after 12 to 18 months. As a term, "process portal" is often used in promotional materials, but is often little more than marketing hype. Enterprises looking to expose business processes through a portal, or use a portal as a platform for the creation of new business processes, should use horizontal portal products and not "process portal" specialists.

**User Advice:** Beware of portals that focus on one type of access. A robust, fully functional portal will provide access to content, applications, processes and human resources. An enterprise portal built with a narrow focus will likely have to be expanded in 18 months.
**Business Impact:** Portals are one of the key platforms for the exposure of business processes to end users, and the best environment to integrate business processes siloed in multiple technology components of a high-performance workplace.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Sample Vendors:** abaXX Technology

**Appears In Hype Cycle:**
- “Hype Cycle for Portal Ecosystems, 2006”

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 6.2 Contextual Personalization

**Definition:** Contextual personalization in portals delivers personalized views based on such contextual attributes as device, bandwidth, time, location and task at hand.

**Position and Adoption Speed Justification:** Multiple vendors deliver this; however, few have implemented a flexible model.

**User Advice:** Enterprises should start looking for ways to provide more-complex personalization, because they'll soon need it to keep users satisfied in many different contexts.

**Business Impact:** Targeted marketing and more-relevant delivery of portal content.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Emerging

**Appears In Hype Cycle:**
- “Hype Cycle for Portal Ecosystems, 2006”

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 6.3 WSRP

**Definition:** Portlets are accessed via standard mechanisms, such as Web Services for Remote Portlets (WSRP), for the invocation of remote portlets.

**Position and Adoption Speed Justification:** The WSRP standard was finalized in October 2003, and the code supporting it has shipped in more than half of the portal products tracked by Gartner. End-user organizations have not used WSRP as aggressively as might have been expected, but there are numerous organizations successfully leveraging the standard in their portal implementations.

**User Advice:** Enterprises should use WSRP in portlet development and deployment efforts, especially in cases where portlet-level integration between different portal frameworks is a requirement.

**Business Impact:** Portlet standards enable easier integration between portal products and with third-party applications, and they provide the basis for third-party portlet market.

**Market Penetration:** Five percent to 20 percent of target audience
6.4 Ajax

**Definition:** Ajax is a collection of techniques that Web developers use to deliver an enhanced, more-responsive user experience in the confines of a modern browser (for example, recent versions of Internet Explorer, Firefox, Mozilla, Safari or Opera). The term "Ajax" is relatively new (it was coined in early 2005), but the techniques date back to 1999 — although widespread use of these techniques (previously known as DHTML) was not possible because of limitations in browser compatibility and hardware performance. Ajax relies on the JavaScript engine built into modern browsers to update portions of the page without having to redraw the entire page in response to a user interaction. Ajax also relies on a de facto standard, the XMLHttpRequest function, to undertake background transfers of data between the browser and Web server that are not explicitly tied to user actions, such as clicking the "submit" button or hyperlink. Other related techniques have been packaged into toolkits and frameworks, many of which are open-source, that developers can use to create "single-page applications," exemplified by Google's Gmail and Google Maps.

**Position and Adoption Speed Justification:** Ever since the term "Ajax" was coined in early 2005, there has been rapid and widespread adoption of Ajax techniques by Web developers at the level of code snippets and user interface "widgets" (for example, pop-up calendar controls). There has been more-limited adoption of comprehensive frameworks and toolkits by commercial vendors (such as JackBe, Backbase and Tibco Software) and open-source communities (for example, packages such as Dojo, Kabuki, Scriptaculous and 130 other toolkits). Major IT software vendors have added Ajax capabilities to their product road map or are shipping technology previews (for example, Microsoft Atlas, Adobe Spry, Oracle ADF Faces and IBM's Open Ajax extensions to Eclipse IDE). Users have yet to encounter limitations or issues with Ajax related to maintainability, security, performance, offline processing, vendor longevity, or integration with local devices and applications.

**User Advice:** Consider enhancing established applications with narrow-scope Ajax (by using snippets and widgets). Evaluate the tactical use of Ajax frameworks and toolkits, while keeping in mind that there are no strategic choices yet. Assess application requirements to see if full-strength non-Ajax "rich client" technology, such as Adobe Flex, Eclipse RCP or Sun Microsystems' Java Webstart, is better suited to your needs. Do not embark on an Ajax or rich-client initiatives without adopting a usability-centered design process that begins with usable interaction patterns that are independent of front-end technology.

**Business Impact:** A narrow-scope use of Ajax can have a limited impact in terms of making a difficult-to-use Web application somewhat less difficult. Even this limited impact is worth it, and users will appreciate incremental improvements in the usability of applications. High levels of impact and business value can only be achieved when the development process encompasses innovations in usability and reliance on complementary server-side processing (as is done in Google Maps).

**Market Penetration:** Twenty percent to 50 percent of target audience
**Maturity:** Adolescent

**Sample Vendors:** Adobe Systems; Backbase; IBM; Infragistics; JackBe; Laszlo Systems; Microsoft; Nexaweb Technologies; Oracle; Sun Microsystems; Tibco Software

**Appears In Hype Cycle:**

- "Hype Cycle for Emerging Technologies, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Web Technologies, 2006"

**Analysis By:** Ray Valdes; Gene Phifer; Mark Driver

### 6.5 Basic Web Services Support in Portals

**Definition:** Portals consume Web services, using such basic Web services standards as Simple Object Access Protocol (SOAP); Universal Description, Discovery and Integration (UDDI); Web Services Description Language (WSDL); and Extensible Markup Language (XML).

**Position and Adoption Speed Justification:** Portal products began consuming Web services in late 2002.

**User Advice:** Enterprises should leverage the Web services capabilities provided by their portal frameworks, especially in conjunction with the use of Web Services for Remote Portlets (WSRP).

**Business Impact:** Easier integration of applications.

**Market Penetration:** Twenty percent to 50 percent of target audience

**Maturity:** Early mainstream

**Sample Vendors:** BEA Systems; IBM; SAP

**Appears In Hype Cycle:**

- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Ray Valdes; Gene Phifer

### 6.6 Open-Source Higher-Education Portals

**Definition:** Open-source horizontal portal frameworks have experienced the greatest adoption among higher-education organizations.

**Position and Adoption Speed Justification:** More than 250 higher-education enterprises have adopted Java Architectures Special Interest Group uPortal.

**User Advice:** Higher-education enterprises implementing a portal should closely consider uPortal, but carefully evaluate their requirements against what is available from this open-source portal framework.

**Business Impact:** Relying on an open-source horizontal portal framework reduces the initial acquisition costs traditionally associated with a portal product, but the trade-off may be less than leading-edge functionality in some areas and increased reliance on internal staff and peer organizations for technical support.

**Market Penetration:** One percent to 5 percent of target audience
6.7 Advanced Integration in Portals

**Definition:** The integration of complex applications can be accomplished via integration suites or integration brokers.

**Position and Adoption Speed Justification:** Advanced integration is frequently accomplished through partnerships with integration vendors. In these partnerships, the coupling between the portal and the integration tool is loose.

**User Advice:** Enterprises should examine how to leverage their integration broker or enterprise service bus to improve the depth of application functionality that can be exposed through their portals.

**Business Impact:** Less-brittle integration of line-of-business applications.

**Market Penetration:** Twenty percent to 50 percent of target audience

**Maturity:** Early mainstream

**Sample Vendors:** BEA Systems; IBM; Microsoft; Oracle; SAP; Tibco Software; Vignette

Appears In Hype Cycle:

- "Hype Cycle for Portal Ecosystems, 2006"

Analysis By: David Gootzit; Gene Phifer; Ray Valdes

6.8 Federated Portals Within Vendor Families

**Definition:** Portal products from the same vendor can be deployed in a federated network that enables interoperability and the sharing of resources.

**Position and Adoption Speed Justification:** Many vendors support federated portals within their own product family, but provide a limited set of interoperability features. Web Service for Remote Portlets (WSRP) help enable some degree of federation across distinct instances of a portal product built on the same vendor's technology, but a seamless portal within portal vendor families is still not available. Ideally, the user of an instance of a vendor's portal product should be able to access the resources exposed and managed by different instances of that vendor's portal product in a seamless fashion. Even in cases where some level of federation between instances is provided by the vendor, the federation is not provided out of the box and may even require directory entry replication.

**User Advice:** Enterprises that have deployed multiple portals should implement portal-relevant standards. Examine the federation of some functionality via portlet interoperability mechanisms.

**Business Impact:** Most enterprises have multiple, horizontal portal frameworks deployed across their architectures. Enterprise architectures supporting multiple portals within an enterprise can
provide an increased user experience if they can federate these portals, rather than forcing users to move from portal to portal, depending on the business interaction.

**Market Penetration:** Five percent to 20 percent of target audience

**Maturity:** Adolescent

**Sample Vendors:** BEA Systems; IBM; SAP; Vignette

**Appears In Hype Cycle:**
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** David Gootzit; Gene Phifer; Ray Valdes

### 6.9 Enterprise-Scope Application Platform Suites

**Definition:** Application platform suites (APSs) are integrated software platforms that combine the functionality of an integration broker, a business process manager, an application server and a portal. An APS is typically extended with an integrated development framework, integrative systems management and other add-on features. Some APSs also include an operating system or a database management system (DBMS). These extensions are useful and important, but not definitional. The capability to support the end-to-end processing requirements of a modern, often service-oriented, heterogeneous and composite business application at runtime is definitional.

An enterprise-scope APS (E-APS) targets an IT department and its diverse projects over a period of time. Its goal is to enable all of these requirements through a single platform offering. Thus, the E-APS is judged by its ability to compete with specialized products in multiple application scenarios. The differentiated premise of an E-APS is that the building blocks of the suite are pre-integrated by the vendor and enriched with add-ons from the same vendor and from partners, thus increasing the synergy of the platform, compared with a best-of-breed collection of point platform products.

In contrast, a project-scope APS (which is a separate technology category) targets individual modern projects (typically, composite application projects). Some specialized APSs focus on business process management (BPM), integration, Web services, service-oriented architectures (SOAs) and other usage patterns. Specialized APS suites sometimes have specialized category names (also reflected separately).

**Position and Adoption Speed Justification:** E-APS technology from the leading software vendors is used widely, although the individual components are often acquired and deployed separately, rather than as part of the entire suite. The degree of internal integration among the component parts is improving, and the depth of extensions and add-ons for the suites is growing as well. Users are developing practical experience and realistic expectations in dealing with vendor suites.

**User Advice:** Recognize that, although an integrated suite of platform technologies improves overall productivity within IT (and is likely to continue improving this area during the next three years), few users will be able to depend exclusively — or even primarily — on technology from one vendor or one vendor ecosystem. Thus, users must develop strategic plans based on the expectation of continuing heterogeneity and the continuing central need for consistent and systematic platform-agnostic integration.

**Business Impact:** A comprehensive, one-vendor suite of system software marginally decreases costs and improves the productivity of an enterprise's IT department; however, it also increases the IT organization's and the enterprise's dependence on the selected technology vendor.
Typically, only the largest software vendors deliver comprehensive E-APS products. Thus, enterprises experience greater lock-in with a giant software provider, but only incremental improvement in the operational efficiency of their IT functions.

**Market Penetration:** Twenty percent to 50 percent of target audience

**Maturity:** Early mainstream

**Sample Vendors:** BEA; Oracle; SAP

**Recommended Reading:**
- "Who's Who in Enterprise-Scope Application Platform Suites, 1Q06"
- "Magic Quadrant for Enterprise-Scope Application Platform Suites, 3Q05"

**Appears In Hype Cycle:**
- "Hype Cycle for Application Integration and Platform Middleware, 2006"
- "Hype Cycle for Government, 2006"
- "Hype Cycle for Manufacturing Technologies, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

**Analysis By:** Yefim Natis

### 6.10 Collaboration Portlets

**Definition:** User-facing Web page fragments that expose collaboration services, which are combined with other portlets by a portal server to make up a complete Web page.

**Position and Adoption Speed Justification:** The availability and acceptance of such standards as JSR 168 and Web Services for Remote Portlets (WSRP) will help collaboration vendors produce and users deploy collaboration portlets. Collaboration portlets can provide a common user interface (UI) to different collaboration services. A common UI is a defining feature of integrated collaboration products.

**User Advice:** Collaboration portlets are a quick way to surface collaboration functionality and data into the context provided by other portlets, making them more relevant to a user's role or activity. Collaboration portlets usually offer a partial and less-rich experience than a dedicated client or a rich Internet application.

**Business Impact:** No new end-user functionality; however, collaboration portlets will help improve the usability, deployment and management of collaboration support technology.

**Market Penetration:** One percent to 5 percent of target audience

**Maturity:** Early mainstream

**Sample Vendors:** BEA Systems; CollabraSpace; IBM; Microsoft; SAP; Sitescape; Vignette

**Appears In Hype Cycle:**
- "Hype Cycle for Collaboration and Communication, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"
7.0 Climbing the Slope

7.1 Mobile Access to Portals

Definition: This technology provides access to portals by mobile devices.

Position and Adoption Speed Justification: Most portal products provide mobile access to portals, but the user experience is unacceptable for most of them.

User Advice: Explore situations where providing mobile access to the portal, like providing sales personnel access to systems with client data via mobile devices, will deliver business value.

Business Impact: It provides enhanced communications.

Market Penetration: Twenty percent to 50 percent of target audience

Maturity: Early mainstream

Sample Vendors: IBM; Oracle; Sybase

Appears In Hype Cycle:

- "Hype Cycle for Portal Ecosystems, 2006"
- "Hype Cycle for Wireless Hardware, Software and Services, 2006"

Analysis By: David Gootzit; Gene Phifer; Ray Valdes

7.2 Portlets

Definition: Portlets provide the primary integration mechanism for portals. These low-level, point-to-point components usually access Web services, application programming interfaces, uniform resource locators or Structured Query Language statements.

Position and Adoption Speed Justification: Portlets are the dominant integration model for portals; however, they can be problematic for the integration of complex, line-of-business applications.

User Advice: Enterprises should rely on the out-of-the box portlets provided by their portal vendor for their first deployment, but should leverage portlet standards, where possible, for future portlet development.

Business Impact: Portlets facilitate a simplified means for integrating content and applications, along with a method of displaying results in a personalized manner. Providing personalized access is the primary means by which enterprise portals deliver value.

Market Penetration: More than 50 percent of target audience

Maturity: Mature mainstream

Sample Vendors: BEA Systems; BroadVision; CA; Day Software; Fujitsu; Hummingbird; IBM; Microsoft; Oracle; SAP; Sun Microsystems; Tibco Software; Vignette; webMethods

Appears In Hype Cycle:

- "Hype Cycle for Portal Ecosystems, 2006"
8.0 Entering the Plateau

8.1 Role-Based Personalization

**Definition:** A portal delivers personalized views based on the role of the user, as well as other static attributes, such as business unit.

**Position and Adoption Speed Justification:** This original personalization feature is commonly used in enterprise portals.

**User Advice:** For most enterprise portals, role-based personalization produces a sufficient level of personalization to meet user needs, as well as the overall needs of the business. However, as portal technology evolves to a sixth generation and delivers greater ubiquity, enterprises will need to increase the level of personalization that their portals offer to satisfy users and keep up with their competitors.

**Business Impact:** Role-based personalization enables the enterprise to deliver more-relevant portal content.

**Market Penetration:** More than 50 percent of target audience

**Maturity:** Mature mainstream

**Sample Vendors:** BEA Systems; BroadVision; Computer Associates International; Day Software; Fujitsu; Hummingbird; IBM; Microsoft; Oracle; SAP; Sun Microsystems; Tibco Software; Vignette; webMethods

**Appears In Hype Cycle:**
- "Hype Cycle for Collaboration and Communication, 2006"
- "Hype Cycle for Content Management, 2006"
- "Hype Cycle for Portal Ecosystems, 2006"

9.0 Off the Hype Cycle

**Integrated Collaboration:** Collaboration features are integrated directly into the portal product, but will be replaced by the smart enterprise suite. Most portal products provide some collaboration features, although most offer only low-end features.
10.0 Appendices

10.1 Previous Iteration of the Hype Cycle

Figure 3. For Reference: Hype Cycle for Portal Ecosystems, 2005
Plateau will be reached in:

- less than 2 years
- 2 to 5 years
- 5 to 10 years
- more than 10 years
- obsolete before plateau

Source: Gartner (July 2005)
10.2 Hype Cycle Phases, Benefit Ratings and Maturity Levels

Table 1. Hype Cycle Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Technology Trigger</strong></td>
<td>A breakthrough, public demonstration, product launch or other event generates significant press and industry interest.</td>
</tr>
<tr>
<td><strong>Peak of Inflated Expectations</strong></td>
<td>During this phase of overenthusiasm and unrealistic projections, a flurry of well-publicized activity by technology leaders results in some successes, but more failures, as the technology is pushed to its limits. The only enterprises making money are conference organizers and magazine publishers.</td>
</tr>
<tr>
<td><strong>Trough of Disillusionment</strong></td>
<td>Because the technology does not live up to its overinflated expectations, it rapidly becomes unfashionable. Media interest wanes, except for a few cautionary tales.</td>
</tr>
<tr>
<td><strong>Slope of Enlightenment</strong></td>
<td>Focused experimentation and solid hard work by an increasingly diverse range of organizations lead to a true understanding of the technology’s applicability, risks and benefits. Commercial, off-the-shelf methodologies and tools ease the development process.</td>
</tr>
<tr>
<td><strong>Plateau of Productivity</strong></td>
<td>The real-world benefits of the technology are demonstrated and accepted. Tools and methodologies are increasingly stable as they enter their second and third generations. The final height of the plateau varies according to whether the technology is broadly applicable or benefits only a niche market. Approximately 20 percent of the technology’s target audience has adopted or is adopting the technology as it enters the Plateau.</td>
</tr>
<tr>
<td><strong>Years to Mainstream Adoption</strong></td>
<td>The time required for the technology to reach the Plateau of Productivity.</td>
</tr>
</tbody>
</table>

Source: Gartner (June 2006)

Table 2. Benefit Ratings

<table>
<thead>
<tr>
<th>Benefit Rating</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transformational</strong></td>
<td>Enables new ways of doing business across industries that will result in major shifts in industry dynamics</td>
</tr>
<tr>
<td><strong>High</strong></td>
<td>Enables new ways of performing horizontal or vertical processes that will result in significantly increased revenue or cost savings for an enterprise</td>
</tr>
<tr>
<td><strong>Moderate</strong></td>
<td>Provides incremental improvements to established processes that will result in increased revenue or cost savings for an enterprise</td>
</tr>
<tr>
<td><strong>Low</strong></td>
<td>Slightly improves processes (for example, improved user experience) that will be difficult to translate into increased revenue or cost savings</td>
</tr>
</tbody>
</table>

Source: Gartner (June 2006)

Table 3. Maturity Levels

<table>
<thead>
<tr>
<th>Maturity Level</th>
<th>Status</th>
<th>Products/Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Embryonic</strong></td>
<td>In labs</td>
<td>None</td>
</tr>
<tr>
<td><strong>Emerging</strong></td>
<td>Commercialization by vendors</td>
<td>First generation</td>
</tr>
<tr>
<td></td>
<td>Pilots and deployments by industry leaders</td>
<td>High price</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Much customization</td>
</tr>
<tr>
<td>Maturity Level</td>
<td>Status</td>
<td>Products/Vendors</td>
</tr>
<tr>
<td>---------------</td>
<td>------------------------------------------------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>Adolescent</td>
<td>Maturing technology capabilities and process understanding</td>
<td>Second generation</td>
</tr>
<tr>
<td></td>
<td>Uptake beyond early adopters</td>
<td>Less customization</td>
</tr>
<tr>
<td>Early mainstream</td>
<td>Proven technology</td>
<td>Third generation</td>
</tr>
<tr>
<td></td>
<td>Vendors, technology and adoption rapidly evolving</td>
<td>More out of box</td>
</tr>
<tr>
<td>Mature mainstream</td>
<td>Robust technology</td>
<td>Several dominant vendors</td>
</tr>
<tr>
<td></td>
<td>Not much evolution in vendors or technology</td>
<td></td>
</tr>
<tr>
<td>Legacy</td>
<td>Not appropriate for new developments</td>
<td>Maintenance revenue focus</td>
</tr>
<tr>
<td></td>
<td>Cost of migration constrains replacement</td>
<td></td>
</tr>
<tr>
<td>Obsolete</td>
<td>Rarely used</td>
<td>Used/resale market only</td>
</tr>
</tbody>
</table>

Source: Gartner (June 2006)

**RECOMMENDED READING**

"Understanding Gartner's Hype Cycles, 2006"

This research is part of a set of related research pieces. See "Gartner's Hype Cycle Special Report for 2006" for an overview.
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