The user experience platform (UXP) — an integrated collection of technologies and methodologies that provides the ability to design and deliver user interface/presentation capabilities for a wide variety of interaction channels (including features such as Web, portal, mashup, content management, collaboration, social computing, mobile, analytics, search, context, rich Internet application [RIA], e-commerce, an application platform, and an overall user experience [UX] design and management framework) — is rapidly emerging.

Key Findings

• Recent trends in user demand and independent software vendor behavior indicate a shift in the technologies used to deliver the UX.

• Vendors are already delivering integrated sets of technologies that will lead to the UXP — some as suites and, in one case (Microsoft SharePoint), a single product.

• The UXP will become a critical infrastructure capability for midsize and large enterprises to use for delivering the UX.

Recommendations

• Map the capabilities of the UXP against existing portals/websites to determine a path of evolution.

• Understand the UXP strategies of your primary portal/Web technology vendors.

• Plan to adopt the UXP as your primary UX tool, starting in 2015.

STRATEGIC PLANNING ASSUMPTION(S)

By 2015, the UXP will subsume traditional portal and mashup technologies, and will become the future platform for many portal, Web and mobile deployments.
ANALYSIS

The Emerging UXP

The UXP is an integrated set of technologies for providing comprehensive user interface and interaction capabilities. Features typically include Web, portal, mashup, content management, collaboration, social computing, mobile, analytics, search, context, RIA, e-commerce, an application platform, and an overall UX design and management framework. The UXP is emerging from traditional portal products and the surrounding set of complementary technologies, known as the portal ecosystem. Although there is a high degree of correlation between the portal ecosystem and the UXP, there are some key differences. The portal ecosystem is typically purchased as an independent set of technologies with little preintegration, while the UXP is purchased as a preintegrated suite. The portal ecosystem is also missing features that are included in the UXP, such as UX design and management.

The current market for portal products and mashup tools will likely be subsumed into the emerging UXP market by 2015. Complementary technologies, like Web content management (or the future online channel optimization [OCO] technologies) and collaboration, will remain in their current markets, but will also be critical components of a UXP.

What Is a UXP?

Since the emergence of the portal product market in 1997, portals have included personalization services, directory services, security, content aggregation, lightweight Web content management and integration capabilities, usually focused on the portal model. This functionality has frequently been very basic. Portals are the point of convergence for many types of application infrastructure and traditional infrastructure. Over the years, portal products have subsumed more functionality from these infrastructure technologies.

The components of the portal ecosystem are the genesis of the UXP. However, through 2015, the majority of UXP vendors will not have implemented all the features of the current portal ecosystem into their products. Rather, they will focus on the core components of portal, mashup, content, collaboration, social computing and mobile.

The UXP will include complete portal and mashup capabilities. It will also include partial functionality from content management, collaboration, context, analytics, search, social, RIA, mobile and e-commerce (see Figure 1). These partially included technologies may be delivered through the UXP by inclusion of functionality in the core UXP component (typically a portal product), or via integration with a separate product. For example, some UXPs will have their own content management capabilities built into the portal product, while others will tightly integrate with one or more content management products. For content, the most likely scenario is that the UXP will have some built-in content features (in the portal product), along with tight integration with external content tools.

The UXP will incorporate some new technologies and approaches that are only now appearing in enterprise portals. One area to watch is the emergence of the widget model. The widget model, being inherently simpler than the traditional portlet model, is very compelling from a portal development standpoint. Expect to see significant reliance on the widget model in future portal deployments. This also may give an edge in creating a UXP offering to the portal-less portal vendors versus traditional portal product vendors, which had to retrofit their architectures to support widgets.

The widget model is also the primary model used by mashup tools; hence, the inclusion of mashup capability in the UXP, and the eventual subsumption of the mashup tools market into the UXP market.

An inherent part of the UXP are methodologies for delivering award-winning UXs. This includes user-centric design, usability testing, user-centered metrics and tools to facilitate user feedback. These methodologies will be packaged up in solutions that will likely be delivered as part of a service offering, either from the UXP vendor or a partner. Technologies supporting user-centric and usability testing from vendors like TandemSeven will become an inherent part of the emerging UXP.

However, some of these methodologies will be built into the UXP. Tools that allow multivariate and split A/B testing, survey, and metrics will be included, as well as the ability to create personas and user scenarios. Usability experts, such as TandemSeven, will be early to market with these tools, but large UXP vendors will eventually incorporate these features into their UXP products, via their own capabilities or integration with third-party tools.

The biggest differentiation between a UXP and traditional portal products lies not in the feature list, but in the off-the-shelf integration. Traditional portal products come with some integration with the portal ecosystem, but not much. A consulting engagement or large development project is required to complete the integration. Today’s portals are a “heap” of functionality that is often difficult and expensive to deploy. A UXP is a preintegrated suite that installs mostly off the shelf, reducing the need for a consulting engagement or large development effort, and allowing the enterprise to deliver results faster and significantly reduce time to market. In fact, for the UXP to ultimately be successful, it must dramatically accelerate time to value and decrease the cost and complexity of deployment.

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In addition, the UXP contains new features, like support for UX design and management. In fact, UX design and management is another distinguishing feature of the UXP. For most traditional websites and portals, UX is an afterthought. Even when it is a forethought, effective UX design is a set of activities that is usually disconnected from website and portal development. User-centered design and usability testing are key tenets of an effective UX, yet these methodologies are frequently done by hand, with little to no tool support. The UXP encompasses automation support for UX design and management. This includes support for persona, interaction patterns and scenarios.

Demand for the UXP

Users have complained for years about the multitude of technologies and tools that they must use to deliver the variety of UXs necessary. The demand for the UXP comes from users who are frustrated by the effort it takes to take technologies from different vendors, or perhaps from the same vendor, and integrate them for a complete UX solution. Most of this technology is not adequately integrated, requiring internal resources or external service engagements to facilitate the integration. This can require a significant amount of time and money, leading to delays and cost overruns.

Lack of usability of traditional Web and portals is another demand driver for the UXP. Many websites and portals significantly underperform due to poor usability. While the UXP doesn’t guarantee usable websites and portals, the UX design and management features of the UXP, coupled with usability-centered design and usability testing, will result in levels of usability not generally attained.

Many corporate websites use third-party design firms for design and creation, seeking out their creativity and their focus on usability. The tools and techniques of leading third-party Web design firms are encompassed in the concepts of the UXP, and enterprises that want to insource this activity will need to embrace tools and methodologies that help ensure usability.

Finally, consumerization — or, as some put it, consumer-driven IT — is another driver of the UXP. A wide array of client devices increases demands on IT to provide websites and portals targeted at these devices. Many times, IT can’t meet that demand. Additionally, users have begun to expect the ease of use of devices like the iPhone and the iPad, and have begun to demand similar levels of usability from their enterprise websites and portals.

The Impact of Mobility

The combination of the growing number of relevant smartphone platforms; a diverse universe of applications, developers and ecosystems; and the increasing pressure of consumerization means three things for the enterprise:

- Outside of a few key vertical industries, the ability for IT to enforce a single device platform, OS or device type continues to weaken, and, within the next two years, will be impossible.

- Applications — those developed for internal users (such as sales force automation [SFA], asset management or dashboards) or those developed for external users (partners, customers, etc.) — will increasingly be requested for a wider audience of devices. Security and access to information will no longer be accepted as gating factors.

- A growing number of applications for end users will not be provided directly by IT.

Mobile technologies and applications are highly fragmented and highly volatile. Seamless integration across all mobile platforms via a UXP is a target that may take many years to accomplish. In the meantime, the UXP will provide mobile Web capabilities leveraging cross-platform tools, such as HTML5.
Supply for the UXP

The supply for the UXP comes from several sources, primarily from traditional portal product vendors, like IBM, Microsoft, Oracle, SAP and OpenText. These vendors have provided a set of complementary technologies for years. Many of these complementary technologies are integrated, and some are not. No portal product drops in completely off the shelf. In fact, early portal projects had significant integration tasks, sometimes resulting in development costs ranging from three to seven times that of the software itself. Over time, portal product vendors have worked hard to better integrate their portal frameworks. Today, many are mostly off the shelf. This preintegration by portal product vendors is what has led the supply for the UXP.

At the same time, vendors are being pressured by users for solutions that are easier to use and that simplify the development process. Users want the simplicity and usability of sites like Google and Facebook. This user demand is driving vendors to supply products that facilitate high levels of usability, and the UXP is one of the primary vehicles for delivering that capability.

The convergence of demand and supply for the UXP is leading to a new technology market. By 2015, the UXP will become a true market, subsuming the current markets for portal products and mashup tools.

Vendor and Market Challenges Along the Road to the UXP

The realization of the UXP is not without challenges. In fact, some significant challenges, and risks, are present. Large emergent UXP vendors haven’t done a great job in the UX department. In fact, the UX capabilities of many large vendors are very poor. Simply taking their existing portal products and rebranding them as a UXP won’t do the trick. This “UXP washing” will be a tactic of some current portal product vendors, and users should be wary of it.

Large vendors may price themselves out of the emerging UXP market. Because the UXP has a large collection of components and considerable intellectual property value, large vendors may be tempted to simply add up the prices of the piece parts to come up with the price tag for the UXP.

Current leaders of portal products may be hesitant to evolve into a new market when they are doing very well in the existing market. This is unlikely, however, as the leaders of the portal product market are all well down the path toward a UXP.

As for the smaller vendors, they don’t carry the baggage of large vendors. They are nimble and agile. However, they typically don’t have the breadth of product portfolio required to deliver a complete UXP, and may have to enter into partnerships, or lean heavily on open-source technologies, not to mention the significant effort that will be required to preintegrate this broad set of components. The time, effort and risk of integrating products that weren’t designed to work together will keep many vendors from trying (and succeeding) to roll up multiple products via acquisitions and partnerships. And, while the consumer-centric Web tool vendors have an advantage in areas such as user-centered design, usability and simplicity, they have little to no experience in selling enterprise software infrastructure.

User Challenges Along the Road to the UXP

There are many challenges to users in deploying and successfully leveraging a UXP. Today, no vendor has every component of the UXP in a fully integrated state. Most vendors are missing some components from their portfolios, and would have to acquire or build that functionality. This adds a significant amount of risk from the user perspective, because there will be a lot of new code floating around, some of it not fully tested and debugged. Historically, suites usually contain some best-of-breed functionality, and some “good enough” functionality. The UXP will be no different in this regard.

Large enterprises already have most of the UXP components deployed in some fashion. Some of these enterprises will be hesitant to walk away from their investments in these legacy technologies, especially if they are delivering good results. Finally, users would be relying on a single provider for a broad set functionality, upon which they will be deploying mission-critical applications. While a “single threat to choke” is a good thing from a user perspective, they will have little choice but to rely on the UXP vendor for support and enhancements in the future.

Emergent UXP Vendors

Although the UXP market is still emerging, some vendors are well-down the path toward a UXP. We examine a small subset below.

Microsoft

Microsoft may become the large-vendor poster child of the UXP. With the MOSS 2007 release of SharePoint, Microsoft exhibited that it understands the convergence of UXP features. Its current offering, Microsoft SharePoint 2010, is a single-product emergent UXP focusing on Web, portal, RIA, content, collaboration, social, search and composite application capabilities.

SharePoint has become almost pervasive in midsize and large enterprises. Microsoft has leveraged a viral deployment strategy, and further leveraged that by including SharePoint in broad Enterprise Agreements. The net result is the fastest-growing portal product in the 2009/2010 time frame, and a trajectory that will likely see Microsoft become the No. 1 portal vendor in market share in 2011.

SharePoint runs in a .NET environment, thus will be highly desirable in .NET-centric enterprises. Because most large enterprises have some aspect of .NET computing, they will also be amenable to SharePoint.

One downside of SharePoint’s .NET centricity is a lack of Java support, including UXP-centric Java standards, such as JSR 170, JSR 168 and JSR 286. Microsoft uses a combination of de facto standards (e.g., WebParts) and other industry standards (e.g., Content Management Interoperability Services [CMIS]), and this seems satisfactory for most SharePoint users.
Microsoft has outstanding integration among the components of the UXP, giving it a lead in the emerging UXP market. However, Microsoft is missing some critical UXP features, such as UX design and management, so this early lead will not last, unless Microsoft focuses on filling in the functionality gaps.

Oracle

Oracle’s entry in the UXP game is WebCenter, specifically the WebCenter Suite. WebCenter is the strategic UX framework for Oracle, and will provide the front end for the new generation of Oracle Fusion Applications, with initial applications to be delivered during 2011.

Oracle has a large set (seven, at last count) of portal products that it has obtained mostly via acquisitions. One of the concerns expressed by Oracle customers is that there are seven portal products in the Oracle portal portfolio. However, Oracle has been clear that WebCenter is the only strategic offering, and has recently announced a strategy of convergence between the portal products in its portfolio.

WebCenter features Web, portal, RIA, composition, collaboration and social capabilities. It is also tightly integrated with Oracle’s strategic content management tool, Universal Content management (UCM), as well as its new collaboration product, Beehive. WebCenter also features integration with Oracle’s mobile offerings.

WebCenter will be strategic for customers of Oracle applications. In addition, many users lean on the Oracle Fusion Middleware (OFM) stack, where the presentation layer is composed of WebCenter, for non-Oracle applications.

While WebCenter is already several years old, it has seen somewhat limited deployment — usually to those already heavily invested in Oracle solutions. Part of this issue stems from concerns about the strategy for Oracle’s seven-portal product portfolio, and mixed signals in the past from Oracle regarding its portal strategies. This should be mostly behind Oracle now, as it clearly states that WebCenter is the strategic portal framework, and that most of its other portal offerings will converge into WebCenter.

IBM

Until recently, IBM’s entry in the UXP game has been an integrated set of Lotus and WebSphere products, with the WebSphere Portal as the centerpiece. However, as of September 2010, IBM announced a new product, the Customer Experience Suite. This product is a customer-centric UXP.

Included in the Customer Experience Suite are Web, portal, RIA, collaboration, social computing, search, mobile, analytics and e-commerce capabilities. One ingredient that differentiates IBM’s offering from the other leading UXP offerings is e-commerce; however, because the target for this product is customers, e-commerce is a requirement.

IBM’s Customer Experience Suite still has the WebSphere Portal as its centerpiece. The broad capabilities of the WebSphere Portal and its open architecture make it a natural for tying together all the components of the UXP. Whereas IBM’s previous offerings here have been an integrated set of technologies, the Customer Experience Suite is a single-product stock-keeping unit (SKU).

IBM’s WebSphere Portal has been one of the more-difficult-to-deploy portal frameworks. For the past 10 years, IBM has been working steadfastly to improve integration across the portal components, and has launched programs such as Portal NOW to facilitate rapid deployment. However, IBM has big challenges ahead of it to provide the kind of integration across the UXP components that will be expected by its customers. In addition, IBM is targeting its initial foray into the UXP world with a customer-centric offering — one with non-IT buying centers. IBM must learn to sell to the marketing and sales departments of enterprises to be successful with its Customer Experience Suite, and the company has plans to leverage relationships and personnel from some of its recent acquisitions to make that happen.

Cisco

Cisco has built a UX framework called the Enterprise Collaboration Platform (ECP), and recently launched its first product on that framework, Cisco Quad, which is sold as a collaborative user interface tool.

The genesis of ECP is the Liferay portal and an internal Cisco project that created ECP as a business-to-enterprise (B2E) portal framework for internal use. ECP has been turned into a product-centric framework, and Cisco Quad is the first of multiple products targeted at ECP.

ECP boasts capabilities for Web, portal, RIA, collaboration, social computing and mobile. ECP also boasts tight integration with unified communications (UC) and video technologies, which somewhat differentiates Cisco’s offering from the rest.

ECP and Cisco Quad are both brand new from a product perspective. Cisco is not known as an enterprise software provider, so there will be a significant uphill battle for it to compete effectively with other UXP competitors. In fact, Cisco is focusing its messaging on Quad, rather than a comprehensive UXP strategy driven by ECP. However, this is a strategic initiative for Cisco, and it has tremendous enterprise presence, so don’t be surprised to see Cisco make inroads in the emerging UXP market.

Adobe

Adobe delivers an integrated set of software, highlighted by its Flash, LiveCycle and Day technologies, with four key focus areas:

• Process — Automation of the customer-facing experience across back-office systems, to simplify the customers’ world, help them through each step and keep them apprised of status.

• Social — Bringing the patterns people are engaged in on Facebook, Twitter and Skype into a branded enterprise experience, so they can have authentic, person-to-person interactions with other customers, or directly with employees, not only through asynchronous forums, but also through richer real-time experiences.
• Content and applications — Using the complexity of Web 2.0 technologies to combine simplified application experiences together with highly personalized content.

• Optimization — Optimize the UX for business leaders, so they can make decisions and innovate, and for customers, to provide them the best and most personalized experience possible.

Adobe is also pursuing a new strategy of Customer Experience Management. This strategy pulls together technology from across Adobe’s portfolio, and is underpinned by an emerging UXP, that Adobe calls the Customer Experience Platform. While this is a powerful strategy, it requires significant selling to the enterprise, an area where Adobe has had limited success.

Edge IPK, a Small-Vendor Example

No short survey of vendors pursuing the UXP would be complete without a small, unknown vendor with some really good ideas. Edge IPK is a European-based vendor with a UXP framework in wide use. It boasts some marquee European clients, and is expanding to a global audience.

The vendor’s edgeConnect has features for Web, portal, RIA and composition. Its open architecture easily integrates with third-party tools for content management, collaboration, mobile and social computing.

Edge IPK boasts an aggressive pricing model, a small footprint, lightweight approaches to developing applications and rapid time to market. It is a relatively small vendor, however, with limited geographic coverage. These limitations must be taken into account when considering edge IPK as a strategic vendor.

The UXP’s Impact on Existing Markets

The portal product market is prime for a major evolutionary step. The portal ecosystem has always reflected the reality of deploying a portal framework. Now, we are seeing major features of the portal ecosystem integrated into suite offerings. While a UXP doesn’t require a suite to exist, most UXPs will be delivered as suites or single-product SKUs.

By 2015, the portal product market and the mashup tools market will be subsumed into the UXP market. The signs are there: Microsoft delivering SharePoint in a single-SKU package, Oracle delivering WebCenter as an integrated suite, and Cisco building its ECP UXP framework and delivering its first product, Cisco Quad, on that framework. In addition to the supply side, the demand side is clear about the fact that users want a more out-of-the-box experience in deploying portals and websites. The UXP will deliver on that demand.

However, this market may not coalesce as predicted. The scope of the UXP is broad, leading to complex integrations and a bloated set of software, which may be too pricey for many enterprises. Also, some portal product vendors may want to keep the franchise intact and not embark on the UXP path.

Our best guess is that the UXP market will form, and will subsume the portal product and mashup tool markets by 2015.

UXP Adoption Strategies

Enterprises will adopt the UXP in different ways. One method will be the “roll your own” approach, where the enterprise will assemble technology components from a variety of open-source and commercial off-the-shelf products and roll them up into its own UXP. This is the approach already taken by Mphasis, a service company owned by HP, which created its own UXP and builds customer solutions on top of it.

Other enterprises will adopt the UXP incrementally, as users’ needs and projects demand new functionality. Yet others will go all the way, jumping feet first into the UXP offerings of a specific vendor, likely one that is already a strategic vendor for the enterprise. Here is where users should be on the lookout for UXP washing.

While the roll-your-own approach may deliver the most targeted functionality for any particular enterprise, the lack of standards will require a significant amount of integration; therefore, any cost savings will likely be negated with development and maintenance costs. The incremental approach could work, as long as the products are from a single vendor and are integrated into pluggable design time and runtime environments, or partners exist that provide excellent integration. The all-the-way approach gets you to a UXP quickly, but could be disruptive with the replacement of many components simultaneously.

Another deployment option for the UXP is the cloud. This option is a little further down the road, as we are still in the early phases of portals “in the cloud,” and it must mature before a UXP in the cloud would be feasible.

As to the initial user target, through 2013, most UXP-based deployments will be targeted at customers. Customer-facing initiatives are an area of enhanced investment, and will likely garner the funds and attention necessary for deployment of UXP-based solutions, at least for the next several years. This provides an advantage to vendors that are initially targeting their emergent UXPs toward customers (e.g., IBM and Adobe).

In working with Gartner clients for more than 13 years on portal projects, some common themes have surfaced regarding those projects. First, they are expensive and take a lot longer than expected to deploy. Unfortunately, higher-than-anticipated costs and excessive time to market cause many portal projects to fail, or at least to miss some major objectives. However, other issues, such as lack of appropriate governance and missing users’ needs and expectations, are also major causes of portal project failure.

Will the UXP ensure the success of future Web and portal projects? Absolutely not. However, the off-the-shelf integration of the UXP should minimize surprises created by the current effort to integrate the portal product with the portal ecosystem, leading to fewer misses on time to market and cost. In fact, if the UXP is to take off in the market as a distinct new platform, it will have to make a huge improvement in ease of deployment over current portal products.

In the end, however, good project management and alignment with users’ wants and needs, via appropriate governance and an inherent understanding of users’ needs and expectations, are critical success factors, independent of the technology.