ROI from a New Wave of B2E Portal: Closing the Loop Between Plan and Proof for Your B2E Portal Initiatives

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Organizations have learnt a great deal in providing their customers with a friendly, easy-to-use web experience. Many are now taking this new found knowledge, and applying it to the often numerous internal sites used by their own employees. The result is the widespread adoption of business-to-employee (B2E) portals. The resulting improvements in employee productivity, collaboration, knowledge sharing, and process efficiency can significantly impact a business’s bottom line.

When an employee portal does not meet expectations, people, organization, process, and/or planning factors independent of any technology decision are usually at fault. However, as a business becomes more demanding of how it uses its portal and of the features the portal needs to support, a technology decision can make the difference between ongoing success and a wasted investment.

In order to measure success or failure, it is important for an organization to understand where the return on investment (ROI) from a portal project will come from in the short and long term. An ROI model is very specific to an organization and needs to encompass the organization’s unique goals and objectives. Applying either a generic ROI model or someone else’s ROI model fails to take the principals behind measuring ROI into consideration.

An ROI model should extend beyond the cost justification phase of a portal project. Success metrics and key performance indicators (KPIs) should be checked throughout the life of the project. Over time, success metrics may evolve, but the initial ROI model creates the foundation for measuring the project’s long-term success.

This white paper identifies some of the criteria an organization can use to measure ROI for B2E portal initiative(s). It also outlines how a technology decision plays an important role in providing both enough flexibility to support evolving business demands and to support ongoing ROI measurements beyond the portal’s initial release.
Where to Look for Your Return on Investment (ROI)

The many ways in which organizations represent return on investment (ROI) vary, but the criteria used to measure it generally fall into one of the following categories:

- Cost reduction
- Productivity improvement (which translates into cost reduction)
- Revenue generation
- Competitive differentiation (which translates into revenue generation)

The duration in which the break-even point (when investment equals return) is expected is another factor. Duration can indicate how much of the ROI is expected from the initial portal release (for example, initial development) and how much is expected from the portal’s ongoing day-to-day maintenance and enhancements over a number of releases.

Examples to consider for each ROI category follow.

Cost Reduction

Efficient use of web infrastructure. Most medium to large organizations have invested in a TCP/IP-based network (the basic prerequisite on which to run internet and intranet technology), which may already support the organization’s e-mail and file sharing requirements as well as existing intranets for specific projects or departments. With a TCP/IP network infrastructure in place, employee portals can be added and accessed from any part of the organization and can add even more value to the organization’s networking investment.

Simplified new application rollout. An enterprise portal framework is an excellent vehicle for separating new and enhanced applications from the underlying IT infrastructure (PCs, networks, servers). One benefit of portal development is creating applications as Gears (or portlets), which are the individual elements on a portal page that provide information or access to an application. The portal framework is also an excellent environment for building and deploying new applications while leveraging many aspects of security, look and feel, and branding that, because of the portal, will already be in place and will not have to be re-scoped and redeveloped with each individual project. The framework also significantly reduces the time and resources necessary to install the same applications on every employee’s PC desktop.

Lower ongoing management costs. Employee portals can encourage a strong sense of community and self-administration. Through the use of a portal framework that is reused across all portal initiatives, organizations can make considerable cost savings, but would be unwise to attempt to administer the entire portal framework with one centralized team. Instead, administration can be delegated to individuals or groups within the organization who are responsible for specific areas of the portal. A good example is for a project leader to administer a community, working group, or project portal and its pages. The project leader can be given access to administer the pages and manage the ongoing development of those pages and the community that uses them without having to involve the overall portal administrator.

Corporate communication costs. The employee portal is an excellent vehicle for providing all employees with wide-scale, consistent, and timely information. Commonly distributed sales literature, organizational structures, messages, announcements, video streams from board members, and much more can be distributed via the portal and viewed when convenient to the employee. The alternative is for employees to download large e-mails or dial in to broadcast conference calls. The consistency of messages and collateral is improved and the dependence on inefficiently distributed and costly paper-based documents reduced.

Productivity Improvement

Efficient knowledge management and search. Employees can spend a large part of their day looking for information to help them make decisions. And an employee portal is an excellent place to give employees access to the documents, e-mails, spreadsheets, and research notes that make up a large portion of the corporate information base.

Techniques such as categorization, taxonomy creation, and indexing have become known as knowledge management when applied to electronic documents and content. And Knowledge Management done either semi-manually or automatically with special software helps make the corporate information base useful to all employees and allows them to add, maintain, retrieve, and remove information easily and as needed.

Organizations rarely lack information. The challenge is how to use the information they have. The ability to use search and knowledge management techniques through employee portals combined with employee processes provides an easy way for employees to share information across the entire organization. If the use of search and knowledge management software through an employee portal can save an average of 20 minutes per employee per day, an organization with 20,000 employees can see a significant, tangible ROI from an employee portal.
Employee self-service. A by-product of providing access to the corporate information base, together with providing access to front- and back-office business applications through the portal, is that employees develop a self-service mindset. In the same way that the web has become a 24 x 7 always-available resource for information to customers, employee portals give employees ownership by giving them tools to solve their own problems, which removes bottlenecks in the organization. And the portal will increase the use of its available applications and tools simply because they are easily accessible with a single log in to a single point.

**Revenue Generation and Competitive Differentiation**

**Speed to market**. Any new revenue-generating initiative requires that people effectively work together. Technologies cannot slow them down. And employee portal lets teams collaborate, unconstrained by department or physical location. It also supports more effective, less compartmentalized tasks. New initiatives can be supported in a timely manner and allow the organization to maximize its benefits. Portals are most effective when as little work and as few resources as possible are used to set up a new portal or support a new initiative.

With an employee portal, when new functionality is required, the framework for security, client access, look and feel, branding, etc. is in place so that developers can focus exclusively on developing the functionality instead of worrying about these issues. Creating new pages and setting up member access is delegated to the individual business owner, freeing the developers for other tasks and letting the business owners take ownership of their specific area of expertise.

**Informed decision making**. One objective of any employee portal is to give its users timely and accurate information so they can make informed decisions. When employees make decisions quickly and accurately, a business can more readily capitalize on decisions and drive more revenue for the business while staying ahead of the competition. The success of any business depends on the use and management of its intellectual assets, and the employee portal is the perfect vehicle for sharing intelligence.

**Responsiveness to better serve customers.** An employee portal’s ability to proactively support the business results in leads to better customer service and increased customer loyalty. Employee portals that provide employees with information when requested have some benefit, but a portal that is always listening, waiting, and watching for changing customer circumstances, changing business conditions, or breached thresholds, is better able to support employees in their jobs and allow them to better serve customers.
Understanding the Scope of Your B2E Portal

To many people, a B2E portal conveys a portal that supports only corporate communication and human resource-related functions. Other aspects of the business, such as sales, finance, or R&D, may have in-house systems or packaged applications that support their business functions, some of which may be browser-enabled, but for several reasons, these applications frequently fall outside the scope of the employee portal. A commonly cited reason is that a packaged application uses the portal provided by the application’s vendor. “I have a sales portal for my sales force automation system,” is commonly heard.

The definition of a B2E portal, however, is broadening considerably. Organizations now take a more framework-based view of their portal purchases. And the need for flexibility and open standards is now prioritized alongside, and often above, the need for application-specific out-of-the-box functionality delivered by the portal vendor. In fact, a Forrester Research survey cites that “…41 percent of organizations will look to integrate seven or more systems into their enterprise portal ("Making Enterprise Portals Pay," August 2001)." Packaged application vendors are unlikely to favor this statistic, since they only need to web-enable their own application without concerning themselves with integrating other people’s systems. Moreover, META Group cites that framework-based portals will replace the mono-functional portals of today’s market over the next few years (November 2001), which supports the idea that portals must be ubiquitous for an organization.

To accommodate growth and integration, a B2E portal is being redefined as a portal framework that has enterprise fit (scalability, flexible, portable, standards-based) and that can serve all of an organization’s numerous and varied portal initiatives. Such a framework will frequently be reused for portal initiatives beyond employees, such as to partners, suppliers, customers, and other stakeholders. And from an ROI perspective, there are significant technical and business benefits to using a single framework for all portal initiatives.
Increasing ROI through Process Integration and Automation

The ability for employee portals to use process integration and automation to take on many tasks that are ordinarily done manually is both new and exciting. Employee portals need to connect to diverse data sources and systems in order to provide the user with the right information at the right time and improve their own productivity. Process integration and automation takes the tasks that an employee may ordinarily do manually from the information given to them by the portal, and tries to completely automate them, eliminating the need for users to carry out repetitive tasks altogether. Existing business applications already automate many of the processes for the back office, but many organizations are now considering how the portal itself can automate these processes since it is frequently accessed, user-oriented, and closest to the user. Every portal that delivers information to an employee keeps them informed and/or helps them perform a specific task. And process integration and automation can be applied to any employee portal, regardless of its function or departmental scope, and improve employee productivity.

Portals that provide process integration and automation significantly improve the effectiveness of the portal’s ability to support the business and its employees. Simple use of a particular function in the portal can trigger processes that tie the various people and departments together in a seamless and automated fashion. Employees can be notified through the portal about things that are relevant to them based on their role or position within the organization.

Consider the following process. A sales account manager completes a new sales contract. He uploads the contract to his portal, into a Gear (a portlet) on his portal page called “New Sales Contracts.” The gear acts as a storage place for the contract, where he and others with the correct authority can review it. With process integration and automation, the portal becomes considerably more proactive.

Uploading the contract to the portal triggers the scenario illustrated in Figure 1.

This scenario shows how the portal can aid communication and collaboration across departments. When the scenario receives the contract, it lets everyone in the Legal department know that there is a contract to review. The scenario then waits, preferably for an employee whose role is ‘contract manager’ to review the document. If after one week, no one has reviewed the document, the scenario sends out another alert to let all contracts managers know that the contract review is behind schedule. This basic example shows how a portal can be extended and be considerably more useful to the business. The Gear is not just a generic document storage mechanism; the portal knows that documents held by this specific Gear have a special business context, and they need to be treated in a special way to improve organizational efficiency.

![Diagram Figure 1](image-url)
Additional examples of tasks that can be automated with a portal enabled with process integration and automation include:

**A Corporate Communication Portal**
- Can automatically send employees an e-mail and a link back to the portal when a new video message from the CEO is posted.
- Can automatically aggregate all external company press coverage and e-mail it to employees every week.
- Can serve as a place for employees to post news items from their department, which avoids cluttering company e-mail boxes.

**A Sales Portal**
- Can automatically alert sales management if a forecast account changes status in the sales force automation system.
- Can provide a repository for all contracts and automatically alert the Legal department when a contract needs reviewed and if the contract still has not been reviewed after a certain time frame.

**A Marketing Portal**
- Can notify marketing employees when the corporate marketing calendar is updated.
- Can route marketing purchase orders to the Finance group for tracking against the receivable invoice.

**An HR Portal**
- Can automatically e-mail employees a new Annual Appraisal form two weeks before the appraisal is due. It can also alert and remind the employee’s manager to arrange the appraisal meeting.
- Can automatically e-mail Stock Purchase participants the number purchased and purchase price at the end of a purchase period.

**A Finance Portal**
- Can automatically notify employees when expenses are approved.
- Can automatically alert “Insider” employees at the beginning and end of blackout periods.
- Can automatically notify an employee that a purchase order has been approved.

**An Investors Portal**
- Can automatically e-mail investors when new press or other corporate announcements are released.
- Can automatically alert investors if the stock price falls outside of defined thresholds.
Pick the Right Strategy. Maximize ROI.

Taking advantage of the significant improvements that result when process integration and automation are introduced are only possible when an organization chooses a framework-based portal strategy as opposed to a mono-functional portal strategy. With a mono-functional strategy, at the technical level, integrating different portal products results in too high a cost to be viable.

When process integration and automation are used with an enterprise portal framework, the portal becomes a major component of how a business functions. And it helps tie people together in more dynamic ways. As more employees, departments, or functions use the enterprise portal, process integration and automation become even more relevant and more inclusive for the stakeholder involved in the business processes.

Robert Metcalfe, founder of 3Com Corporation, introduced a rule of thumb that states that computer networks become exponentially more useful as new users are connected to them. The same can be said for enterprise portals. Creating a suite of portals that use the same portal product offers cost benefits. Creating a suite of portals that integrate and automate processes across roles and departments results in increasing returns every time a new department or area of the business is included.

Figure 2 illustrates the expected costs and returns associated with mono-functional and framework-based portal strategies.

In Figure 2, the graph on the left illustrates an example of where a new portal product was purchased by each area of the business to solve a specific problem or help manage a specific relationship (employees, customers, partners, etc.). Each new portal project started from a blank piece of paper and the company did not reuse anything from previous projects. Although each portal project had a justifiable ROI model, at a macro level there were diminishing returns, not the least of which was that each new portal reduced the business’s ability to provide its employees with a single view of the business.

The graph on the right illustrates the adoption of portals as a framework-based portal purchase, with each new portal project (or community to support) built on the existing infrastructure. Each new portal initiative likely needed some specialized features and functions, but a great deal of time, effort, and money was saved as the business accrued a pool of skills and reusable code assets based on the infrastructure. As the business builds more and more portal initiatives on top of the same infrastructure, each one will be cheaper than the last. A single portal infrastructure will be cheaper to maintain than several portals, resulting in diminishing costs. Portals built on a single framework can be integrated from both technical and process perspectives, but they can appear separate and can be used in a detached manner as if they were created on separate platforms if desired.
Close the Loop. Remove the Ignorance.

It is one thing to define an ROI model that justifies the initial investment of an employee portal. It is another to continuously prove that the model was built on the right assumptions and that the portal is delivering the intended benefit. Too often, senior management do not receive the information they need to really prove that their portal initiatives are effective. As part of the planning of a portal and during the creation of the ROI model, metrics that measure the success or failure of the portal need to be defined. These metrics are key performance indicators (KPIs) that support the ROI model. They must be "hard" metrics that are measurable and have an initial estimated value associated with them. Senior managers then have a good basis to measure the success of their portal initiatives against.

An obvious portal KPI is user adoption rate; from its launch, how many employees are actively using the portal and how much is the number increasing each week. A seemingly simple metric like this can itself prove complex. For example, what does "using the portal" actually mean? Is it a log in? Is it a new page request at least once every five minutes? The business must decide how it will measure metrics on a consistent basis.

As part of the portal implementation, a traditionally manual process can be identified and automated by the portal. A possible metric is, how frequently is the automated process being executed. For example, every time an employee uses the travel authorization function in the portal, management knows that it is saving $2 over the traditional manual process. They also know that the automated process is faster and of better quality.

The ROI can easily be calculated when the portal is providing real-world, real-time feedback on the KPIs the business chose to measure. Information provided by the portal is accurate and available at any time. If the KPIs are not meeting the expected targets, the timely availability of the information allows management to be responsive and take the appropriate action.

Beyond the KPIs that help prove the portal's success, there is likely a lot of management summary information that can be used to plan the future of the portal. As more employees and departments adopt the portal, it is important for management to know where it is best to make future investments in the portal. The portal itself should help by answering questions such as:

- How frequently is a specific portal function used?
- What are the most used functions?
- What are the least used functions?
- Which communities are using the portal most often?
- Which roles are using the portal most often?

Another area where the portal can provide valuable information is in the compliance or measurement of the automated business processes. For example, in the "New Sales Contract" example, it would be valuable for the business to know how often reviewing a contract goes beyond the one-week window. Such a measurement can support either corporate-imposed guidelines or help show regulatory conformance.
Conclusion

Portals are increasingly becoming a framework-based and strategic purchase for organizations. As the popularity of portals grows, if businesses web-enable different departments with point-solution portals that solve specific problems, it can lead to a high total cost of ownership for their total IS/IT portfolio. In justifying the purchase of a B2E portal that supports all of a business’s portal initiatives on one framework, managers need to know how to identify performance indicators that make up a good return on investment (ROI) model.

All too often, an ROI model is used to support the initial cost justification of a portal initiative, but little is done to really measure if the portal achieves what it was supposed to over time. Senior management is left unaware of how successful their portal initiatives actually are, because of a lack of real-word measurement of the key performance indicators (KPIs) that were defined. Only by understanding how people are really using the portal will management understand the productivity improvements achieved. In order to improve employee productivity, portals should leverage the information that they successfully aggregate, and use it to automate many of the traditionally manual business process and tasks performed by employees. Doing so can result in significant cost reduction.

Today’s portals need to go further than simply aggregating information and applications on a single, customizable display for users. They need to be more supportive of people, how people organize themselves, and how people work, and they should align with the processes and tasks that make a business successful.

ATG® Enterprise Portal Suite

The ATG® Enterprise Portal Suite supports all of your employee portal initiatives, including knowledge sharing, corporate communication, collaboration, sales support, finance, e-Learning, and HR self-service, all from a single portal application. The ability to reuse the same portal framework for all your portal initiatives significantly reduces your total cost of ownership compared to maintaining individual, mono-functional point-solution portals for each business purpose. The ATG Enterprise Portal Suite improves communication and collaboration throughout your whole organization. It increases ROI by seamlessly tying the organization together through process integration and automation and by providing notifications and alerts to the right people by tracking significant business events.

The ATG Enterprise Portal Suite helps prove the ROI of your portal initiatives with its built-in support for Portal Analytics, which gives managers the hard metrics needed to show how people are using the portal and which areas are most effective and to help identify areas for improvement or future investment. The ATG Enterprise Portal Suite pulls together information and content from diverse data sources and applications throughout the business and gives employees a single view of your organization.

The inherent scalability and J2EE application server independence of the ATG Enterprise Portal Suite allows all employee portal initiatives to be built on the same standards-based framework. You can also extend the suite beyond organizational boundaries to reach out to partners, business customers, consumers, investors, and any other touch-point your organization wants to manage online.