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A graphic banner with a textured, golden-brown background. The text is centered and reads: 'Proven ROI Methodology' in a large, bold, orange font with a black outline; 'for Today's Enterprise Portals' in a large, bold, red font with a black outline; and 'By Tim Nolt' in a smaller, bold, black font at the bottom.

Competitive pressures and a more scrutinizing investment community are demanding that corporations become increasingly savvy regarding their information technology (IT) expenditures. Today's expectation is one of world-class performance and efficiency for improved profitability. To meet this benchmark, many companies have launched enterprise portal initiatives enabling operational gains through significantly improving access to disparate systems and eliminating traditional inefficient processes.

Is there a typical enterprise portal? Although subject to varying interpretation and lacking definitive required features, a portal must generally meet business objectives and user needs through system integration, aggregation of varied content and services, and user personalization. Let's assume that any system initiative striving to meet these general objectives applies to this discussion.

A prime corporate challenge is how to properly assess portal value. Is there a best approach for determining return on investment (ROI) to facilitate justification? Are value drivers being properly considered in the portal's design? If implemented, is it truly providing the expected benefit to the company's bottom line? To answer these questions, one must focus on accurately measuring value.

Revisiting the Past

The earliest enterprise portals were typically implemented as a nicety with an inherent assumption of value. Formal value measurement was not a primary consideration or driver. Not surprisingly, from their inception the portals often lacked comprehensive functionality, integration and personalization. They burdened corporate IT staff with complex, time-consuming integration efforts. These combined factors resulted in problematic portals with less than optimal return on investment for the early corporate movers.

Past enterprise portals were often limited as the result of a less-than-comprehensive game plan regarding functionality and infrastructure. Lack of development standardization resulted in less than efficient implementations. Portals, therefore, seldom delivered on their productivity promises to end users and corporate sponsors. In most cases this resulted in the enterprise portal receiving the brunt of poor reviews and ultimately a corresponding perception problem.

Recent Advancements

Enterprise portals have recently corrected course. This has been achieved largely through the emergence and endorsement of very capable portal software packages (i.e., WebLogic Portal, BroadVision, Epicentric, Plumtree.) Newer software capabilities have fostered methods to identify and

create optimal enterprise portal design. Custom software and integration providers are implementing lessons learned further reinforcing this advancement. As an example, portal products are typically suited for the Internet, extranet or intranet even though advertised as the complete solution for all three. Some companies have avoided the need for multiple portal products through implementing a comprehensive custom portal solution. In either scenario, the net result is more comprehensive portal designs, greatly improved implementations, more seamless integrations and maximized benefit to corporate operational performance. This has all helped to eliminate the negative perception.

Taking a closer view, today's portal design must aggregate all critical applications and information sources with enhanced personalization to streamline organizational communication and knowledge management. Additional design criteria requiring a best-practice solution include fully integrated business processes and intelligence, category management, external content, collaboration, publishing, multimedia distribution, search, personalization and administration. Additionally, the supporting infrastructure should minimally provide for transactional support, single sign on, extensibility, scalability, wireless support and security.

Taking on Return on Investment

Calculating portal return on investment (ROI) requires careful consideration of the previously mentioned criteria. Accomplishing this measurement task is just as important as executing properly on design and implementation. Yet, the art of calculating ROI for the enterprise portal is a great challenge for – and, therefore, often ignored by – most companies. This can be overcome! The corporation that elects to move forward with an enterprise portal must quantify and truly understand and appreciate the value that it will derive from initial project launch and follow-on enhancements.

It is important to note that various organizational stakeholders benefit tremendously from a complete ROI analysis. Portal project sponsors will be able to obtain buy-in more easily from senior management to move forward with initiatives. Implementation project managers will have a clearer charter and greater assurance of continuing organizational support due to the confirmed positive financial return. Portal business users, both internal and external, will be assured that they are ultimately getting the best product. And finally, management is assured that the project objectives are controlled and what's best for the business.

The ROI that should be calculated in the most basic sense is the ultimate value a business will receive from investing in an enterprise portal project. Various capital budgeting techniques such as net present value (NPV), internal rate of return (IRR) and payback period can and should be used in combination to summarize the financial return of the project. Beyond simple ratios, these measures properly account for time value of money effects while providing differing yet complimentary conclusions.

Performing this task requires a very robust supporting foundation. Because there are so many hidden cost drivers and value generators in a portal solution, the ROI practitioner must have significant expertise and a proven method to generate accurate measurement assumptions for varying detailed system attributes.

Many of these attributes or elements are driven by business purpose. An organization's portal focus can change the emphasis on various direct or indirect metrics. Does the portal serve employees (primarily delivering internal productivity), customers (primarily delivering increased market share and revenue), or suppliers (primarily delivering supply chain and procurement efficiency)? Furthermore, one organization may place emphasis on, for example, collaboration and globalization while another may underscore business intelligence and business process integration. These and other factors will affect the elements that should be included in the ROI model and how much they influence results.

Regardless, determining true portal value requires one to follow a common approach to carefully

identify and measure various standard elements for the purpose of relating each item to a cash inflow or outflow. The following highlights key considerations that should be employed when performing the portal ROI analysis.

Prime general methodology considerations include:

- Don't lose sight of the entire corporate portfolio. You don't want to be measuring your portal initiative differently from other IT as well as general business initiatives. A standard measurement framework must be applied to all initiatives to keep proper perspective.
- Be cautious with ROI automation tools or software packages. In most cases software provider and consultant ROI tools are rigid or biased. A custom Microsoft Excel based model is typically the best solution.
- Ensure proper due diligence when determining costs and benefits. System impact often grows with time as one looks more closely at the situation during the discovery phase and more and more touchpoints are identified.
- Involve the right business, information technology, and financial resources in both assessment creation and assumption buy-off. Although ROI is often described as a scientific approach to measuring project value it is in fact much more of an art. Thus, it is very important for individuals experienced in both information technology and finance to perform the assessment. Additionally, the people that will actually be impacted by the system should provide or concur with time- (and, therefore, resource cost-) savings assumptions to improve precision.
- Regular checkpoints should also be part of the assessment process to ensure that the project is tracking towards the planned ROI. An initial forecast should be checked periodically during the implementation, as monthly cash inflow and outflow projections become actual results. Additionally, a final check should be performed three to six months and two to three years after full implementations to audit and improve past modeling and assumptions iteratively as part of the ROI continuous improvement process.
- Don't underestimate the impact of the time value of money and base financial assumptions such as the cost of capital, tax rate, years modeled, depreciation.
- Always include a sensitivity analysis. An ROI model is only as good as its assumptions and should include baseline recommended, conservative, and aggressive scenario conclusions to put the impact of varying key assumptions into perspective.

Beyond high-level process, detailed portal benefit elements that should always be considered as a standard during model creation include:

1. Reduction of resources through:

- Fully integrated business processes enabling electronic transaction initiation and support, information exchange, collaboration, streamlined organizational communication and progress monitoring resulting in cycle time reductions and elimination of paper-based methods. Applies to employee, customer, partner and supplier workflow and business processes. Also standard business analysis and decision making functions requiring information lookup and entry across multiple sources. Moreover, those personnel remaining will benefit from increased speed, availability (e.g., work while traveling or at home) and quality of information.
- Fully integrated business intelligence, publishing and multimedia distribution for organizational reporting efficiencies (e.g., folks previously used to maintain hard-copy reference books and guides, marketing materials, procedures, logs, etc.
- External content infusion and reduction of research time.
- Personalization benefits such as HR gets access to HR forms and systems, while accounting gets access to financial forms and systems.
- Movement away from islands of legacy applications requiring data input and presenting users with dated cryptic green screen interfaces

- Streamlined knowledge management, category management and search.
- Reduction of traditional IT development and support resource manpower through eliminating the need for additional application presentation layers, administration and single sign-on.
- Reduction in HR and new employee resource manpower through reduced system deployment and training requirements resulting from consolidation and standardization.
- Extensibility, scalability, wireless support and security.

2. New revenue from new and current customers through:

- A careful tie of the portal benefit to the sales plan. This requires detailed modeling of the total customer base.
- Laying out customer attrition in some cases.

3. Standard portal cost elements that should always be considered include:

- Expenditures on hardware and software including associated maintenance and renewal costs. Be sure to consider the desired availability level in the cost of hardware and software.
- IT and business unit direct manpower consumed during portal project planning, implementation and support.
- For both the portal and any periphery integrating systems requiring some form of modification as well.
- Any manpower that indirectly supports the initiative.
- Incremental facilities costs.
- Any third- party or consulting fees that are part of the initiative.
- Communication costs such as additional T1 lines.
- Additional resource requirements due to required training and ongoing support.

Everything said, the valuation of enterprise portals will certainly continue to challenge companies for years to come. Carefully considering and acting upon these points will help ensure that your ROI effort is a success.

Timothy D. Nolt is a manager with Tallán, responsible for project management and performing strategic business analysis for clients. He has gained significant project experience by working with numerous Fortune 500 clients. Nolt has demonstrated his thought leadership in the area of return on investment as a regular speaker to executive forums, sales personnel and clients.