## **BPR & BPI**

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By some estimates, over seventy percent of today's companies are performing business pro cess reengineering (BPR). BPR realigns business processes along more strategic lines by examining current processes and redesigning those processes to increase efficiency and effectiveness.

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**Introduction** While business process reengineering (BPR) efforts of the 1990's fell short of expectations, business process integration (BPI) has become a vehicle for achieving sustainable value for corporations. BPI projects help foster revenue growth, increase customer satisfaction, facilitate e-business deployment and meet cost reduction targets.

Business process reengineering was aimed at streamlining and eliminating business processes to make companies more efficient. But BPR got a bad rap because it focused on layoffs and forced retirements to boost profits and stock values.

Today, ebusiness initiatives have made the need to streamline, integrate and automate processes even more pressing. But this time, we have an opportunity to do it right.

Companies are seeking ways to integrate redundant processes, eliminate unnecessary tasks and automate deployment of processes. The intent: Make tasks more efficient and less error-prone. Two things differentiate BPR efforts of the past from today's process integration initiatives:

Motivation for process integration.

Ability to deliver technological solutions that streamline processes and support new external e-business requirements.

Web-based process automation tools allow business and IT analysts to create Internet front ends that allow users to trigger or authorize a manual or an automated process. For example, an outsourced sales team could post an order from the road, and an in-house manager could then authorize internally. These tools can also invoke redundant legacy

systems through common interfaces as a way to integrate systems. The fact that these tools run on the Internet means that employees, business partners, ASPs and customers can trigger processes internally and remotely.

Business process integration and automation pick up where BPR left off. An extending process integration and automation solution beyond the enterprise delivers the efficiency that management has been seeking for decades. And e-business is the prime motivation for you to pursue these solutions now.

**Critical Success Factors in a BPI Initiative** BPI delivers benefits by reaching beyond the traditional departmental retooling of processes found in BPR efforts to address a more comprehensive set of solutions. Specifically, BPI:

Enables functional integration across segregated business units.

Extends vertical process management into supply and distribution chains.

Provides companies with e-business integration capabilities.

In other words, BPI allows previously segregated business units to work in synthesis, enables business units to integrate processes with external entities and consolidate redundant processes across functional areas. This results in an enterprise that is more efficient and effective, which in turn drives up revenues and drives down costs. BPI relies on certain critical success factors, the most important of which include:

• Ensuring that BPI is a business-driven initiative.

- Building a BPI coalition that crosses functional and enterprise boundaries.
- Utilizing technology that facilitates BPI collaboration and deployment.

### **The BPI Coalition**

Given that BPI crosses functional and enterprise boundaries, most BPI initiatives will need to form a coalition of internal and external participants to succeed.

Coalitions are built through communication, coordination and collaboration. People, left to their own devices, may not wish to collaborate with other business units or third parties. This is especially true when the benefits of a BPI project require integration of processes that extend across functional areas that do not view themselves as allies. The challenge is even more pronounced when third parties, such as outsourcing firms, suppliers or distributors, are involved.

Part of a BPI project sponsor's job is to define the benefits of a BPI project and communicate these to relevant and affected bus iness units and third parties. This may include communicating how enterprise-wide benefits translate into benefits to a given business unit. Care must be taken in situations where people may be displaced by a BPI project. If this is the case, sponsors should find a way to shift these people into other roles or in some way compensate them.

The first step in coalition building involves assembling the management team from relevant and affected business units. This includes any business unit or third party owning or being impacted by the processes in question. Often time's parties affected by a BPI project, such as a business unit that may be forced to change behavior due to changes in related processes, are left out of the loop. Leaving these people out of the loop can delay deployment of the overall project.

The project team is responsible for drafting and implementing the BPI project plan. They must also establish success criteria that can be subscribed to by the coalition as a whole. The sponsors must remain involved to monitor the success against these criteria and participate in project progress and deployment.

#### **BPI** Automation Requirements

Deploying a large-scale BPI initiative requires technology to automate processes and enable collaboration among participants. This is particularly true when projects span multiple locations, environments, functional units, applications and organizational boundaries.

BPI analysts can then define the newly rationalized processes within the BPI software and re-deploy them to the appropriate participants. Fortunately, powerful software is available to support BPI automation requirements.

BPI software should allow participants to collaborate with peers, management, subordinates, other business units, suppliers, distributors and customers via Web-based interfaces. To do this, BPI technology must incorporate certain functions to facilitate crossfunctional projects.

Manual & Automated Process Integration - BPI, by definition, must address the consolidation of redundant processes for both manual and automated processes. Many workflow products only address process integration within the context of one or more application systems. To be truly effective, a BPI product must extend to all manual and automated steps within the processes being integrated or the efficiencies companies are trying to gain will be lost. Along these same lines, BPI software must also manage business processes from end-to-end, allowing a series of processes to function in an uninterrupted fashion from the point where they are triggered to their natural conclusion.

- Usability & Portability - BPI technology should be transparent to business and third party users. This means that the triggering of a process, or response to a process-driven request, must be incorporated into a Web-based environment that is available to each user involved in that process. Given that HTML is the universal interface for users, process initiation, review and approval should show up as just another Web-based front-end to the average user.

- *Process Modeling* - Modeling third party and enterprise-wide process flows provides analysts with a comprehensive view of how processes need to be retooled, consolidated and automated. Modeling also provides management with the insights needed to eliminate processes and this serves to **s**reamline user value. BPI software should be able to visually depict process flows as well as facilitate the reworking of those process flows during a given project.

- *Scale-ability* - BPI software must be highly scaleable. This means that a BPI product should accommodate a large number of internal and external processes, which include processes extending into supplier environments, distribution chains and customer domains. Scale-ability is measured in terms of the number of processes, concurrent users, and locations, types of security clearances, environments, roles and organizations that can participate.

- Analysis Capability -BPI software should accommodate a dynamic level of responsiveness. In large, process-laden environments, a BPI product can meet this requirement by offering analytical tools to help business users identify bottlenecks, redundancies, waste, circuitous flows and other opportunities to streamline business processes on a rapid **e**sponse basis.

# The Importance of BPI Critical Success Factors

Before moving into any type of full scale deployment of a BPI project, those chartered with the success of that project must minimally consider the three critical success factors discussed here. A BPI coalition ensures that the right team is in place to define success criteria and measure project progress against those criteria.

A business-driven approach ensures that a BPI project is not too narrowly defined and does not take a technology oriented view. Having the right tools in place ensures that the project can actually be implemented on a scale that meets the business requirements of the coalition. Paying close attention to these critical success factors throughout a BPI project will ultimately deliver the promised benefits of BPI.

# IT's Role in Business Process Reengineering Initiatives

As more organizations launch BPR projects, one issue becomes painstakingly clear. Radically altering business processes within highly automated work environments typically requires modification to the information systems that support those processes.

Information technology (IT) organizations have had significant difficulty meeting the BPR challenge due to the inherent complexities involved in "retooling" complex legacy environments. In order to more effectively respond to BPR retooling demands, IT must play a more active role throughout a BPR project. In order to more effectively respond to BPR retooling demands, IT must play a more active role throughout a BPR project. IT must play a more active role throughout a BPR project. IT must:

• Increase their level of participation in all areas of a BPR initiative;

 Provide key information regarding automated processes to business analysts;

• Build a transition strategy that meets short and long-term retooling requirements;

• Enforce the integrity of redesigned business processes in the target system;

• Reuse business rules and related components that remain constant in a target application.

Factors driving a BPR project can include improving customer service, streamlining processes to cut costs, or addressing inefficiencies in other high impact areas. For example, customers frustrated with having to speak to multiple individuals regarding an insurance claim may switch to the competition. To address this problem, an insurance provider determines that service functions must be consolidated to one point of contact. The underlying systems that manage claims ha ndling do not support single point of contact processing. In this case, legacy systems have become a barrier to the success of the BPR initiative.

To determine retooling strategies, a relationship between IT and the business must be formalized early on. This relationship, which supports BPR analysis and implementation, is reciprocal because business and technical analysts must devise a continuous feedback communication loop for projects to work. This is particularly critical because current systems analysis helps articulate the as-is business model while the redesigned business model dictates the impact BPR has on existing information architectures. Once this reciprocal cycle is in place, IT can determine exactly how to upgrade, redesign, or replace selected systems in order to implement ree ngineered business processes.

BPR retooling steps are:

1. Define strategy, select modeling methodology & establish BPR project plan

2. Build as-is business model for impacted business areas based on strategic vision

3. Refine / expand as-is model for all processes supported by existing systems

4. Integrate as-is process definitions with current system functions & components

5. Finalize functional and technical architecture required to meet BPR objectives

6. Select retooling strategy to redevelop, surround, acquire, webify or off-load applic ations

Maintain design integrity between bus iness requirements and retooled applications
Reuse applicable components including rules, interfaces & data in target application

9. Validate retooled application against initial simulation of redesigned processes

Internet utilization requires an assessment of the role of legacy data and functionality. Leveraging the Internet requires more than setting loose scores of para coders. Redeve lopment offers this broader view of the issue and the solution. Even package strategies require a retooling component. Legacy systems must be inventoried, deactivated, and integrated as part of package implementation. If the package requires retooling, redevelopment techniques may be applied after implementation. Any of these longer term approaches can be coupled with a parallel, interim surround strategy to deliver value nearterm. While it is true that BPR retooling efforts, a relatively new endeavor for IT, have stumbled in the past, this no longer needs to be the case. Following a few basic guidelines, along with education on the tools and techniques that support the process, allows managers to evaluate more options and make more informed retooling decisions in the long run. As IT moves up the retooling maturity curve, realistic interim and long-term retooling qp-tions should become the norm.

# References

http://www.prosci.com/-2003

http://www.systemtransformation.com -IT's Role in Business Process Reengineering Initiatives, William Ulrich -2002 http://www.systemtransformation.com/transf ormation\_articles.htm -2003