

ESTIMATING AND DEMONSTRATING ROI ON BUSINESS PROCESS MANAGEMENT

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Justifying cost – whether for daily business operations or for the technology used to support them – is a constant requirement for competitive industries. Business Process Management (BPM) technology has reached a point of maturity to clearly show an impressive rate of return. This white paper explores how business and IT leaders estimate and frame the Return on Investment (ROI) for BPM projects.

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--- Aberdeen,
Aligning IT to Business Processes: How BPM is Complementing ERP and Custom Applications, 2007

ESTIMATING AND DEMONSTRATING ROI ON BPM

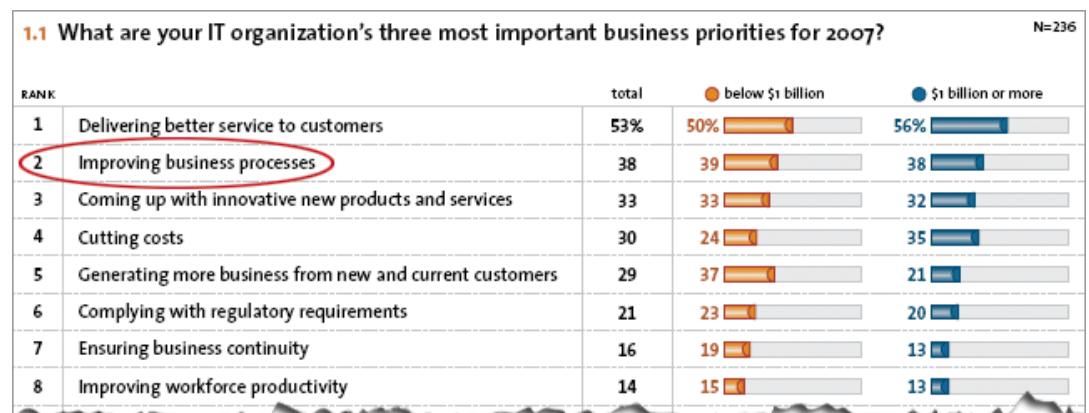
Business and IT managers are consistently required to estimate and demonstrate the results and benefits of IT investments. It is generally accepted that return on investment (ROI) represents the key measure of IT decisions and investment priorities. Justifying and validating the business case for business process management (BPM) is no exception.

BPM continues to gain momentum as the number of real-life examples of success have increased. While many IT projects and programs continue to struggle to perform as promised, BPM projects, in contrast, produce real gains and payback in months versus years. Gartner reported that 67 percent of BPM projects in its survey were completed in less than six months, and successful projects had an internal rate of return of no less than 10 percent¹. Aberdeen has found that best in class companies more than recouped their investment, with some organizations realizing a return of more than twice the investment².

Yet, some companies struggle in their attempts to demonstrate the value of BPM. IT professionals need to assess the real gains from the original application so as to build the case for subsequent proposals.

ESTIMATING ROI - AN OVERVIEW

The return on an IT investment is best justified when results are expressed in monetary terms. Simply put, executives respond when value is expressed in terms of cost reduction or revenue increase. Successful BPM projects deliver just that by enabling process automation and improvement. That's why in a recent *CIO Insight* Magazine survey of the most important priorities for 2007, "improving business processes" ranked #2, just after delivering better service to customers.



Most important priorities for 2007.

Source: CIO Insight Magazine 2007 Survey

¹ Gartner, Justifying BPM Projects, 2004

² Aberdeen, *Aligning IT to Business Processes: How BPM is Complementing ERP and Custom Applications*, 2007

The top ranked priority, “delivering better service to customers,” and the fourth ranked priority, “cutting costs,” also rely heavily on the improvement of business processes. After all, customer value and shareholder value is created by the level of performance of a company’s business processes.

About half of the Global 5000 companies are estimated to be using BPM technology³. Part of the attraction of BPM is that it produces rapid payback. Contrary to experiences with other enterprise systems, with BPM you can start small, plan to go for an early, if modest, payoff, and then build your systems incrementally.

In order to estimate the ROI from any IT project, it is important to understand the scope of investment, typically expressed in terms of the needed investment in software, people, training, and hardware. Then it’s essential to understand the core components of calculating ROI – cost, time, quality, and productivity, and frame the anticipated benefits of the project in terms that leaders understand – customer satisfaction, revenue improvement, cost reduction, and risk mitigation and compliance.

HOW TO ESTIMATE THE ROI ON BPM

There are six key steps involved in estimating the ROI on BPM projects.

1. Identify problems and opportunities
2. Define the scope of the process to be improved
3. Estimate both hard and soft benefits
4. Estimate the extent of the needed investment
5. Frame the cost-benefit in terms that leaders understand
6. Package, present, and gain commitment

1. Identify problems and opportunities

The first step to estimate ROI of a BPM project is to identify business problems to fix or opportunities for improvement that can be effectively addressed with BPM. In this respect, it is important to select an initial project area where the likelihood of creating value (increased revenues and/or reduced costs) is high and project complexity is relatively low. There are essentially two approaches to problem/opportunity identification. The first is to listen to complaints and feedback from customers or people in customer touching departments such as sales and customer service, compare the relative risk-reward of potential projects, and then scope a project accordingly. The second is to carry out a high level assessment of process candidates where BPM can be deployed to yield rapid, visible payback, compare the relative risk-reward of potential projects, and then scope the selected project.

To illustrate one method of comparing the relative risk-reward of potential projects, Figure 1 below depicts a view on the relationship of the estimated size of impact versus process complexity for selected BPM solution areas. While Figure 1 provides some general guidance, note that such an assessment will be different for each company.

“About half of the Global 5000 companies are estimated to be using BPM technology.”

— Aberdeen,
*Achieving More Value With
Enterprise Application*,
April 2006

“Gartner reported that 78% of the BPM projects in their survey yielded an internal rate of return (IRR) of over 15%.”

— Gartner,
Justifying BPM Projects, 2004

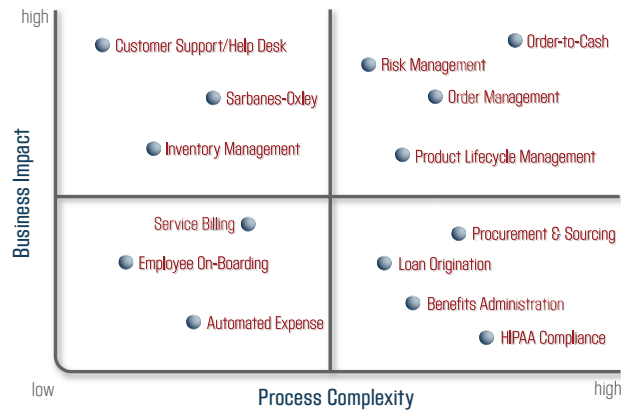


Figure 1. Example impact and complexity distribution of Process across the enterprise.

2. Define the scope of the process to be improved

Once a process candidate has been selected, the next step is to clearly establish the scope of this process. Several frameworks exist for understanding scope, but the key is to capture the following information: where the process starts, the key steps, where the process ends, and the outputs and outcomes produced by the selected process. Typically, referred to as the “AS-IS” state, this snapshot can be used to measure current performance. Defining scope and measuring performance are essential to establishing the “baseline” needed for estimating ROI.

3. Estimate both the ‘hard’ and ‘soft’ benefits

Think of the ‘hard’ benefits in terms of the core components of cost, time, quality, and productivity. BPM enables an organization to produce benefits in each of these areas. Estimating baseline performance of the process in the previous step will likely expose areas of cost reduction, for example, eliminating the need for certain manual tasks like data entry or manual report generation. These cost savings are often best described in terms of savings in full time equivalents (FTEs). Cycle-time compression is a multi-edged sword. Reducing the time to complete a process drives down cost, improves responsiveness, and positively impacts customer satisfaction. Similarly improving quality through the reduction of error rates has clear ‘hard’ benefits for customers and also to the company in terms of reduced costs such as manual exception handling, fewer returned products, and lower warranty costs. Productivity improvements such as increasing throughput (more transactions with the same or fewer resources) are also important to capture.

While sometimes difficult to quantify, it’s equally important to consider ‘soft’ benefits such as increased transparency and visibility, improved capability for ad hoc reporting, and improved risk mitigation. These soft benefits are sometimes categorized under the heading “agility” or “flexibility.”

4. Estimate the extent of the needed investment

A realistic estimate of the required investment in software, people, training, and hardware is equally critical. In this respect, the focus should be on incremental costs, and core infrastructure expenditures should be treated as the “cost of doing business.” To estimate the ‘total cost of ownership’ (TCO) pay particular attention to incremental staffing, training, and other incremental costs in areas such as quality assurance, capacity planning, other production related incremental expenses. Also consider the estimated savings once BPM systems are in place as a result of repurposing.

5. Frame the cost-benefit in terms that leaders understand

Once both the benefits of the BPM deployment and the needed investment are understood, it's vital to frame these factors in terms that executives will understand and support. Table 2 outlines one example of a worksheet for framing the benefits.

	Reduced Costs	Increased Customer Satisfaction	Compliance and Risk Management
Time	Shorter processing cycle times Reduced administration time	Faster processing time More responsive Fewer manual errors	Decreased time to process Faster report generation
Quality	Fewer manual errors More efficient data entry	More visibility Consistent business practices Better exception handling	Better policy enforcement Controlled environment Reduced risk
Productivity	Fewer hand-offs Higher throughput	Greater focus on value added tasks Fewer hand-offs	Consolidated view of compliance effort Significantly reduced manual tracking
Other	Reduced support costs Improved ad hoc reporting	Stronger customer loyalty Stronger brand	Peace of mind Better risk mitigation Greater trust

Table 2. Framing the Benefits

The actual completion of such a worksheet depends, of course, on the nature and scope of the selected process and should be populated with specific benefits relevant to the chosen project. Addressing customer-touching processes will generally have higher values in terms of "customer satisfaction" and potential revenue increase opportunities.

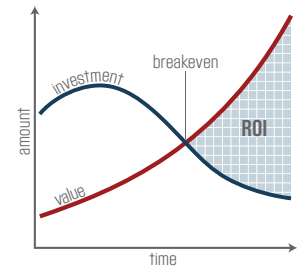
6. Package, present, and gain commitment

To package estimated cost-benefits, create a summary statement of estimated benefits in terms of cost reduction and revenue increase, versus the estimated incremental investment. This will facilitate a crisp representation of the breakeven point for the investment and the ROI calculation. When presenting the case for BPM to executives, the objective should be to go beyond commitment of funds to full engagement of the executive group at critical stages of the initial BPM project. This is important to lay the groundwork for subsequent efforts.

BPM initiatives yield significant results when properly scoped, planned, and deployed. Gartner reported that 78 percent of the BPM projects in their survey yielded an internal rate of return (IRR) of over 15 percent⁴. Aberdeen has observed that 50 percent of organizations in their survey turned to BPM to complement ERP functionality⁵. Whether BPM is applied to targeted areas or used to complement an existing IT environment, research reinforces success using BPM, often a critical factor for gaining support and corporate commitment.

EXAMPLE CASES

BPM success stories span both the private and public sectors and include both product-based and service industries. In the commercial sector, the case of a leading vibratory equipment supplier is thought provoking. The BPM project was triggered by the realization that sales representatives would often negotiate custom product modifications without



The value from BPM projects quickly exceeds the investment when properly scoped, planned, and deployed.

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Gartner, Justifying BPM Projects, 2004

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Aberdeen, Aligning IT to Business Processes: How BPM is Complementing ERP and Custom Applications, 2007

advice, involvement, and assistance from the engineering department, thereby creating disconnects between the customer's expectations and the manufactured results. Moreover, sales orders were often incomplete, lacking certain information to ensure timeliness and accuracy of contracts and product delivery. While the entire contract to cash process needed to be addressed, the initial effort focused on the "contract to delivery" component of this process. In estimating the ROI of the BPM effort, the company expects that BPM project deployment would take place in under four months, the breakeven point to recoup project related expenses would be 10 months, and the estimated ROI was about 25 percent.

Key benefits were estimated in terms of cost savings due to reducing the loss of time, and costly duplication of engineering and manufacturing resources. Both cost savings and quality improvements were anticipated related to the reduction of inaccurate contracts, incorrect billings, and write-offs. Increased revenues would be generated (1) by eliminating losses due to the enforcement of rules relative to engineering and manufacturing mandates, and (2) through improved customer satisfaction by reducing delivery delays. The sales cycle, and order development and processing times, will be significantly reduced and error rates reduced by at least 95 percent.

To illustrate the deployment of BPM in the public sector, consider this case of BPM applied to the application management process. An agency with the mission of encouraging the development and deployment of anti-terrorism technologies recognized that its capability to monitor and manage key applications was flawed. Several independent and unlinked Excel spreadsheets were being used to track application status. These spreadsheets were perceived to be inaccurate and out of sync with one another. Lists of applications and key deadlines were charted by way of whiteboards in various offices. The lack of visibility and the means to anticipate action on deadlines lead to a "fire-fighting" environment.

This public sector organization deployed BPM to reduce staff used to track the status of applications from six FTEs to one process administrator; to realize time savings of eight hours per week in the generation of weekly reports; to enable visibility into internal milestone goal completion (met vs. unmet) by employee; to enable visibility into upcoming milestones (both internal and external) across the organization to ensure applications stayed on schedule and external deadlines were met 100 percent of the time; and to improve compliance via the auto-maintenance of a complete audit trail of documents created that related to the review and access to technology information submitted by applicants. The organization was able to design, implement, and begin seeing benefits of a sophisticated BPM project within six months.

BPM TRENDS THAT AFFECT ROI

There are also a number of trends that are important to monitor, including the availability of BPM "software as a service" (SaaS), the increasing convergence of BPM and business intelligence (BI), better insight into the interdependence of BPM and Service Oriented Architecture (SOA), and the increasing use of BPM to provide added functionality to Enterprise Resource Planning (ERP) systems. In evaluating BPM vendors, it's important to consider the extent to which a given vendor is a leader in these key trend areas. Appian is a leading vendor in this respect as it was the first to offer on-demand BPM through its Appian Anywhere product. Also, consider the extent to which vendors offer full Web-based modeling capability with desktop-like functionality (no downloads or installs), Business Process Management Notation (BPMN) compliance, and features such Microsoft Office integration.

SUMMARY

BPM has the potential to produce value for any company in virtually any industry. Table 3 depicts key business drivers for a selected sample of industries conducted by Aberdeen⁶.

Business Driver	Manufacturing	Service Sector	Government
Real time visibility into operations	65-67%	80%	75%
Reduced operating costs	41- 58%	40%	50%
Revenue growth	23-59%	44%	NA

Table 3. Top Business Drivers by Industry

Now, what should you look for in a BPM system or Business Process Management Suite (BPMS)? BPMS should offer a robust modeling capability, ease of use, scalability, and the ability to leverage rules-based logic, combined with powerful analytics. These key features should address both human-centric and system-centric processes, and should deliver increased control over and visibility into key business processes. Similarly, a BPM system should enable the organization to explicitly assign responsibilities to people or groups or to dynamically assign them according to business rules, policies, skills, or workload balancing algorithms, and provide the means to act as a sort of centralized, Web-based layer of logic atop legacy applications and ERP systems.

There is a natural evolution in terms of the deployment of BPM systems. Most organizations begin by tackling a transactional based business process with the dual objectives of cost reduction and increased visibility. However, thoughtful managers realize that it is important to go beyond one time improvement and that BPM has the potential to address a broad range of issues to improve customer satisfaction, reduce costs, increase revenues, and mitigate risks. The skill set of estimating and demonstrating the ROI on BPM projects is essential to get the most out of this technology.

In spite of better project management, iterative development, and emerging Web infrastructure, the Standish Group estimates that in 2006 only about 35 percent of all IT projects were delivered on time, on budget, and meeting user requirements⁷. BPM projects can significantly improve that proportion of success. Gartner noted that by simply “making the current-state handoffs, timing, and responsibilities explicit, productivity improvements of more than 12 percent are normally realized⁸.” Aberdeen recently reported that some companies average a return of more than twice the original investment in BPM implementations⁹. BPM practitioners realize that a significant portion of the ROI gained by using BPM isn’t just what is delivered, but how it is delivered.

What’s at stake here? Ultimately, competitive advantage. The longer you delay in deploying BPM, the greater the likelihood that your competitors have not.

The skill set of **estimating** and **demonstrating** the **ROI** on **BPM** projects is **essential** to get the most out of this **technology**.

⁶ A modified representation of data from Aberdeen, The Business Process Management Benchmark Report, August 2006

⁷ <http://www.sdtimes.com/article/story-20070301-01.html>

⁸ Gartner, BPM's Success Hinges on Business-Led Initiatives, July 2005

⁹ Aberdeen, Aligning IT to Business Processes: How BPM is Complementing ERP and Custom Applications, 2007

ABOUT APPIAN

Appian is a leading provider of business process management (BPM) technology that helps organizations design, manage, and optimize their business processes. Appian Enterprise has revolutionized process design with a modeling environment that is simple enough for business users yet powerful enough for IT. Appian is the first BPM vendor to combine collaboration and content management with process to create best practice business processes. Appian's patent-pending Active Optimization Technology, which analyzes the in-flight process data stream, not just stored data, helps companies stay ahead of the competition. With more active seats deployed than any other vendor, Appian is helping more people work smarter, every day. To learn more, visit www.appian.com, email info@appian.com, or call 703.442.8844.



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