

PI³
**Process Improvement, Integration
& Implementation**

Assuring Success in BPR

December 2011

INTRODUCTION

Best Practices, Technology Transformation and Business Process Improvements: Marketer's dream or reality?

"A vision without execution is a hallucination." - **Thomas Alva Edison**

Software companies, IT implementers and major consulting firms have grown market share by delivering "process improvements" to large corporations. Marketed under the banner of process improvements, IT implementations or Business Process Reengineering (BPR), these companies claim that they can make businesses more effective and efficient, thereby delivering an improved bottom line. Ever since the publication of *Reengineering the Corporation* in 1994, an entire industry has grown from this concept with the promise of increasing operational efficiencies by applying improved processes to existing ones.

But can merely changing a company's business processes actually provide lower costs, improved quality and engaged employees? Will upgrading to the newest technology deliver better results? Numerous corporations have tried Total Quality Management (TQM), Six Sigma and other BPR methodologies with varying degrees of success. Some IT firms even dangle the promise of "transformation" if their applications are installed company-wide. However, most organizations have discovered that enterprise-wide software integration carries the following issues:

- Commercial applications require numerous workarounds
- Employees have to be trained on the new system
- The extra costs result in minimal savings

With little cost savings and few improvements—save for financial reporting—many companies ask themselves if it was all worth it.

Too often BPR projects get lost in the methodologies, buzzwords and jargon. Typical deliverables are promised to improve and revolutionize the organization, but in the end the customer receives a stack of documentation—derisively referred to as "binderware"—and a bad feeling about the value of BPR.

In order to be considered a success, any BPR effort must produce:

- Measurable, improved performance with sustainable results,
- Increased market share, or
- Advantageous competitive positioning

Does BPR really work, or is it just some pie-in-the-sky consulting promotion, an Oprah Winfrey group-feel-good-moment? The answer can be found in the definition of "process improvement". As we shall see, an improved business process is one thing, but how it is implemented and integrated across the entire organization will determine its success or failure.

THE PRACTITIONERS

The Three Faces of BPR

BPR efforts are generally delivered by one of the following:

- Process analysts,
- Management consultants or
- IT workflow integrators

Process analysts typically perform a study and present the results as deliverables. With luck, you'll like their findings and engage them to find a solution that will fit their analysis. Often, their findings are academic in nature and tend to be strong on theory but weak in practical use. The analysis will be strong on identifying symptoms that can be tied to a set of causes, and they may focus on identifying as many problems as possible. Analysts may also be overly fond of so-called tools, which begs the question: What exactly is a tool? A pen is a tool, but if I gave you a pen could you write *War and Peace*?

For too many process analysts, selling the tool itself becomes more important than solving the client's problems.

Management consultants usually have a packaged solution in mind but promise to "customize it" for an organization. The major consulting firms like to refer to themselves as "trusted advisors", but they all share these issues:

- As part of a large, global firm, they must load up personnel to maximize billable hours;
- They are too large and unwieldy to respond quickly to problems as they arise (it's like trying to turn a battleship);
- They typically deliver a stack of documentation, but do not stay around long enough to fully implement or integrate the recommendations; and
- They push to include "change management", or training, in their overall package (more billable hours).

Consulting firms generally encourage you to take their solution offerings and adapt your business practices to fit their solution. They like to say that they've seen the same problems before and know what will work for you.

Most will offer you a base solution and a fixed number of modifications to their standard package—at a substantial price. Documentation is usually a "search/replace" booklet, where they substitute your company's name for their last client.

IT workflow integrators are focused on installing technology that will "save your company". IT implementers like to claim that they can deliver results through an enterprise-wide implementation of

their application, but miss several processes that should be integrated into their product. In short, technology will solve all of your problems. But IT implementations are enormously expensive and time consuming. Problems typically arise when a client asks, “Can your application do this?” The answer is usually, “No, but ...” with the resulting change orders and increased billable hours.

The state of California discovered this when it awarded a \$95 million software contract to Oracle. According to a CNet article “California Not Alone in Oracle Criticism,” the company proposed it would save the state millions of dollars, but a scathing state audit found the deal would cost California up to \$41 million more than was needed and give the state more licenses than the size of its entire workforce.¹

The advent of cloud computing or software-as-a-service (SaaS) has reduced the value proposition for many IT integrators. If you can use SaaS from any computer with Internet access, why spend the money on an enterprise-wide implementation? Gartner predicts that the cloud SaaS market will grow to \$10.5 billion by 2014.²

A major drawback to these solutions is that process analysts typically don’t look at IT, while IT integrators only look at technology—each believes that their solution can work independently of the other. The choices for BPR appear to be “analysis paralysis”, billable hours to support a larger organization, or getting caught in the tractor beam of an IT implementation that goes on forever with no escape.

How did it come to this? First, let’s go back for a historical look at how “improving a process” got started.

¹ Dawn Kawamoto and John Borland, “California not Alone in Oracle Criticism,” CNet, May 28, 2002.

² Deborah R Wilson, Nigel Rayner, *E-Procurement Market and Vendor Landscape*, Gartner Report, 2 September 2011.

The Beginnings: Just Another Brick in the Wall

The business of BPR owes its genesis to industrial engineering, in particular the efficiency movement pioneered by **Frank** and **Lillian Gilbreth**. In the early 1900s they collaborated on the development of motion study as an engineering and management technique. Frank had observed that bricklayers did not always use the same motions in the course of their work and had developed their own peculiar ways of doing things. These observations led him to seek the single-best way to perform tasks.

Tools to Drive Improvement

Besides improving the process for laying bricks, Frank also provided the workers with a tool. He invented a scaffold that permitted quick adjustment of the platform so that the worker would be at the most convenient level at all times. He equipped it with a shelf for the bricks and mortar, saving the effort formerly required to bend down and pick up each brick.

Implementing the Process

Next, Frank had the bricks stacked on wooden frames by low-priced laborers, with the best side and end of each brick always in the same position. This way the bricklayer no longer had to turn the brick around and over to look for the best side to face outward. The bricks and mortar were placed on the scaffold so that the bricklayer could pick up a brick with one hand and mortar with the other.

Measuring the Results

Through these and other improvements, he reduced the number of motions made in laying a brick from 18 to 4½ and improved output from 1,000 to 2,700 bricks laid a day. From this desire to drive efficiency and increase production began the birth of the “best practices” model and, in turn, BPR. Frank Gilbreth was successful because he:

- Improved a process: Bricklaying;
- Provided workers with a tool to implement his improvements: The adjustable scaffold;
- Integrated it across the organization by providing one best way to perform a task: Placing all bricks in the same direction; and
- Delivered measurable results: Fewer steps taken and more bricks laid in a day.

However, what followed was a group of programs more based in recommendations than practical application, because they got away from the basic maxim of industrial engineering: “Engineering is implementation.”

THE MODERN ERA:

TQM, Six Sigma and Reengineering the Corporation

Capitalizing on the desire to improve output and productivity, several programs emerged that promised better results for companies willing to embrace change. Pitched as “a new paradigm”, they quickly found favor with the business consulting community. However, unlike the efficiency movement of the early 1900s, these programs focused more on attitude and process.

In the mid 1980s, **Total Quality Management**, or **TQM**, became an integrative philosophy of management for continuously improving the quality of products and processes. TQM functions on the premise that the quality of products and processes is the responsibility of everyone involved with the creation or consumption of the products or services offered by an organization. In other words, TQM capitalizes on the involvement of management, workforce, suppliers and even customers themselves to meet or exceed customer expectations.

Critics noted that it is very difficult to implement TQM. Another criticism was that it is, “Designed to be motivational, in that it increases the responsibilities of the employees in the organization and widens the scope of their duties. However, the reality is that the natural outcome of the organizational total quality management system is to drive the employee to work harder and longer hours.”³

Six Sigma was a strategy originated in 1986 from Motorola’s drive to reduce defects by minimizing variation in processes. The term “Six Sigma” comes from a field of statistics known as process capability studies. Originally, it referred to the ability of manufacturing processes to produce a very high proportion of output within specifications. Six Sigma is effective at what it is intended to do, but it is narrowly designed to fix an existing process and does not help in coming up with new products or disruptive technologies.

In 1994, **Michael Hammer** and **James Champy** released *Reengineering the Corporation: A Manifesto for Business Revolution*. The book went on to sell three million copies and foment the growth of the BPR consulting industry. (Interestingly, both authors were industrial engineers.)

Their premise was simple: Most of the work being done does not add any value for customers and this work should be removed, not accelerated by automation. Instead, companies should reconsider their processes to maximize customer value while minimizing the consumption of resources required for delivering their product or service. However, critics were fast to claim that this was just a way to dehumanize the workplace, increase managerial control and justify major reductions in the workforce.

³ Lestrade, Dr. Edward. “Total Quality Management in Trouble,” *Monday Business Briefing*, March 22, 2002

Time Magazine went so far as to write, “No wonder the book is credited with inspiring corporate downsizing in the 1990s.”⁴

The problems inherent in each of these BPR programs were a lack of implementation and integration. Until a process is implemented, it’s not done. And if you don’t integrate it across your company, you are merely increasing the chances for human error and maximizing your mistakes.

PI³: Process Improvement, Implementation and Integration

Back to the Basics: Results, Not Words

Process improvement, integration, and implementation—or PI³, as it came to be known—was developed by Romanyk Consulting Corp. as an answer to the overwhelming number of failed BPR efforts experienced by clients today.

No one can afford a BPR project that simply gives analytical insight—**worthwhile BPR must deliver results**. Romanyk Consulting differentiates itself from other firms by delivering measurable results and adhering to the following principles:

- The best process improvement is one that helps *everybody*.
- It is not an “improvement” until it is implemented and integrated.
- Integrating an improvement means that data should be entered once but used many times.
- Real process improvement can only occur when employees cannot revert to the old way of doing things.

⁴Roya Wolverson, “The 25 Most Influential Business Books, *Time* magazine, August 9, 2011, http://www.time.com/time/specials/packages/article/0,28804,2086680_2086683_2087684,00.html#ixzz1cYv9rWl7

HOW WE DO IT:

The PI³ Difference

PI³ differs from standard BPR engagements because of our proven and established process and our ability to show measurable improvements early. We actually implement the workflow process for you and integrate it to remove human error. PI³ is about making sustainable improvements to business processes, but not necessarily with technology.

The Romanyk Methodology

Generally, consultants tend to only look at processes, while IT integrators only look at technology. Romanyk Consulting looks at both with a strong focus on an element other providers typically overlook—*information flow*. We examine your process flow *and* the information flow that goes along with that process because how information is entered and shared is critical to any process improvement.

Here's why:

- You must have consistent information to ensure accuracy.
- The more users that touch the information, the greater the chance of errors.
- You must determine who needs specific information and who should have access to it.
- Any process improvement must be hard coded into the new process so it will be sustainable.

The real value of PI³ is that by hard coding a data tool into the new process, we make certain that everyone will continue to use it correctly even after we have left the premises.

Romanyk Consulting also believes our size is a benefit. Some large, global firms are simply too bulky and cumbersome to be able to get down to the ground level and truly understand your pain points. Our size makes us more nimble and responsive, so we can get immersed with you in the improvement process from Day One. This agility permits us to make small improvements rapidly and deliver value often for a quicker return on investment.

Here's How PI³ Works:

Improvement

- Identify all key processes: Map the processes across the entire organization.
- Focus on each individual process: Locate the bottlenecks.
- Analyze and document each key process within the company: Can it be optimized, automated or eliminated?

- Eliminate human errors: A new process must be preventive or you will not see improvement.
- Optimize key processes and align them to the strategic goals and objectives: Facilitate the best solution with accountability.
- Identify key metrics: Show measurable improvement early for faster payback.

Improvement starts with analysis. The first item is to establish what the company's goals are for PI³. Next, we look at the current state and set metrics for the future state. A process transition map is created to move from the current state to the future state for each process. Based on this analysis, a projection of savings is created. The analysis effort is iterative and interactive with management to identify key bottlenecks. Finally, we engage stakeholders and personnel responsible for the implementation to deliver behavioral changes that incentives alone may not produce.

Integration

- Define inter-process relations: No two divisions do the same thing the same way—map how things get entered into the central database.
- Resolve inter-process information ambiguities: Make it easier to use our tool.
- Map inter-process information flows: Use the same source.
- Map cross-system requirements to tie together workflow.
- Develop data bridging automation strategies: Get knowledge to where it's needed.

As specific processes undergo improvement, these positive changes will cascade across all units in the organization. Many times the only unit, or silo, to see improvement from a process improvement or IT implementation is finance, usually through improved time and expense reporting. At Romanyk, we believe that the best process improvements are the ones that help everyone. PI³ builds the bridge between process improvement and technology to ensure integration across a customer's silos as a repeatable process. Our data tools prevent anyone in the organization from saying, "I'm not using this. I'm going back to the old way of doing things."

Implementation

- Bring value as soon as possible for a rapid ROI.
- Hard-code improvements into the process: When we leave, employees have to use the tool the way it is designed.
- Provide management dashboards to grant visibility into processes and performance: Show early, measurable improvements.
- Simplify procedures for workers, management and supervisors to support improvements after the consultants leave.

- Eliminate resistance by removing objectionable features.

Romanyk Consulting's approach is to take an off-the-shelf business application that will facilitate the best solution. Repackaging and repurposing data elements is much faster, less expensive and lower-risk than reinventing systems. Because most of the data is already available within your company, we can measure and report results much more quickly.

We then train your people how to use it through an online business application hard coded into the process. All employees must follow the steps in the new process, in the correct order, or the information will not go into your system.

PI³ CASE STUDY:

Medical Research Firm

A major medical research firm had to order samples for testing and analyze the results. This was all tied into a single protocol. Researchers had to submit requests for the samples, tell how long they needed the samples and detail what chemicals would be required to test the samples. All of these processes were performed on paper, taking several weeks for a request to move through the process. Once approved, the purchasing department obtained the samples, put them into the inventory and tracked the test results. Any kind of aggregation was entered manually into a spreadsheet.

Once an experiment began, two or three divisions in the company were involved and the resulting data had to be tracked. All records were kept on paper and stored in metal filing cabinets.

Romanyk Consulting was brought in to improve the company's process. Using our PI³ methodology, their processes were first mapped across all silos in the company. Romanyk Consulting then built a tool (a central database) that tracked all of the information for any administrative overhead off of the process.

The central database contained some information that wasn't critical to every department, but was important to the central office. Rather than make each department take extra steps through more reports, Romanyk Consulting built a custom tool that pulled only what a department needed from the database while updating missing information. This allowed departments to provide information to the central office without increasing their workload.

Automated alerts were created to send researchers an e-mail 30 days before a sample experiment was set to expire and tell them when an experiment had closed down. Notifications were also sent automatically to researchers performing the analysis, based on their level of involvement.

Each division received a benefit from the process, with a reduction in costs, reporting, and work time. Romanyk Consulting simplified the process and provided the necessary information across silos. Now they are able to do in one hour what used to take a week, and they have moved all of their filing cabinets out into the hall.

At Romanyk Consulting we did not just say, "We did it": We improved it, implemented it, and integrated it. We did not produce a document of what needed to be done, but actually delivered a tool that did what we said it would do to improve the organization.

CONCLUSION

A successful PI³ initiative can only occur when a process is implemented and integrated across the organization. This requires changing the way you do things without giving employees the ability to revert to “the old way”. Many times PI³ is initially resisted because people fear change. Our philosophy is to make it easier for employees to do the right things with our tool.

Most process improvement practitioners and IT integrators fail because they look at process and technology separately. They push a pre-packaged solution, then include so many charges for change orders and training that the anticipated savings disappear. Creating PI³ strategies is a short-term senior-management event. Implementing and integrating PI³ strategies into reality requires investment in a program that will benefit everyone in the organization, not just finance.

The differences between Romanyk’s PI³ methodology and other solutions are highlighted in the following table.

Process analysts	Consulting firms	IT integrators	Romanyk Consulting
Provide recommendations but not integration or implementation	Provide packaged solutions and training	Install their software	Make improvements to business processes, not necessarily technology
More analytical than customer service-focused	Large size impacts responsiveness	Respond only to issues with their product	Agile and quick to respond
Variable pricing	High cost, extra billable hours	High cost	Lower cost, high value
Academic in theory, not real world	Sell same solution multiple times	Time consuming	Immediate ROI and payback
Only look at process, not IT	Push you to adapt your processes to their solution	Only look at technology, not process	Integrate IT and process across the organization in a hard-coded tool

Just as the Internet transformed documentation, PI³ can transform your operations by truly improving the way your company does business, which requires careful observation and study. The process must be mapped, bottlenecks identified, and then a new process applied and measured against the desired

benchmarks. When measurable improvements can be shown early, a company is well on its way to PI³ success.

Mature process improvement consultants like Romanyk Consulting take the benefit of operational efficiencies, then deliver the benefits sought. We do not give recommendations of what should be done, rather, we hard code a data capture tool into the process to reinforce your business rules. This improves buy in from management and the employees.

Romanyk Consulting's proven PI³ methodology increases productivity while reducing the human risk factor. We do this by applying technology to create a workflow process that delivers improved quality by removing human error.

The key value of PI³ is not some marketer's dream, or vision; it's in actually delivering measurable, sustainable results for our clients.