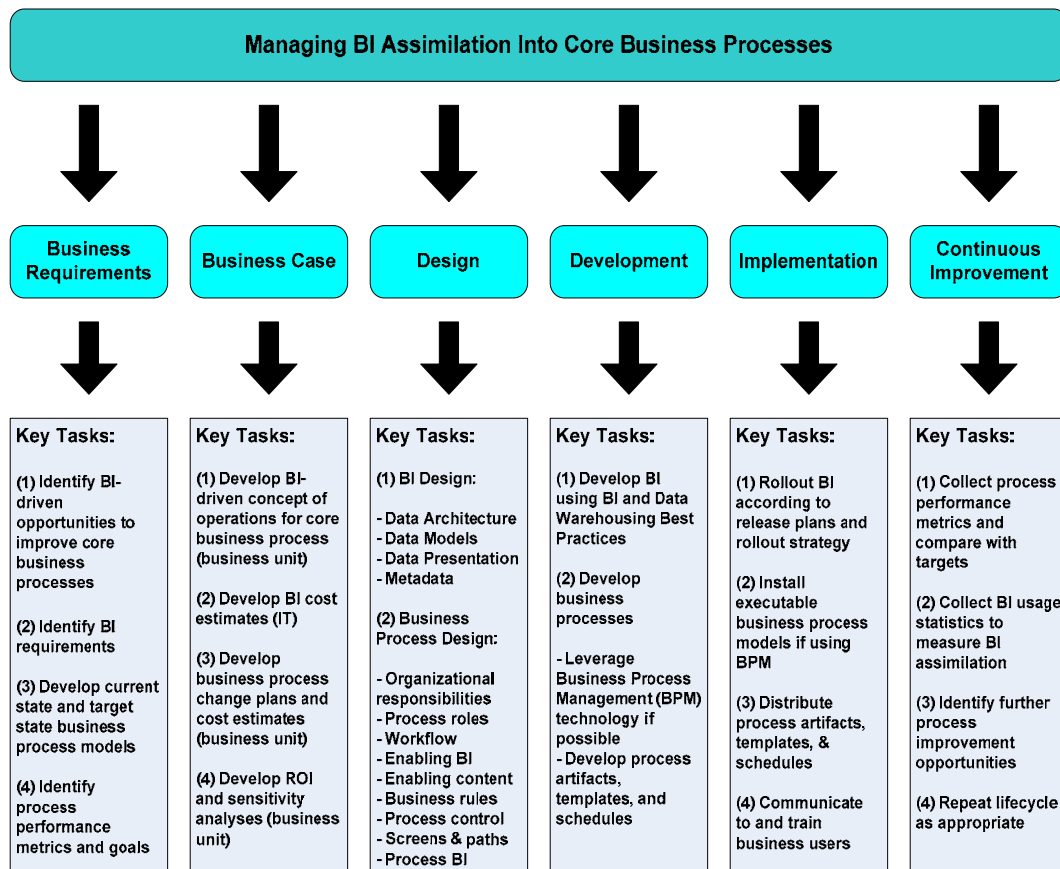# Achieving BI Impact: Integrating BI with Core Business Processes

Many companies in a wide range of industries have struggled with the challenge of achieving a return on their BI investments. In previous articles, we have discussed some key contributing factors, including the *BI Leadership Gap* and ineffective BI program management (see *BI Program Management: Why it Matters, and How to Do It*). Another key factor that we've discovered through our consulting experience is that many companies do not manage BI programs and projects in a way that ensures effective integration of BI into the core business processes that make a difference in business performance and profit. In other words, companies do not manage the BI lifecycle to ensure that they achieve BI Impact. To overcome this common failing, DecisionPath has developed an advanced lifecycle design and development method that combines key elements of our business-driven BI Pathway Method with fundamentals of business process management system design to effectively integrate BI with core business processes. We call this the BI Impact Method, an overview of which is shown in Figure 1 below.

Figure 1. Managing for BI Impact Across the System Development Lifecycle

Managing BI Assimilation Into Core Business Processes

Business Requirements	Business Case	Design	Development	Implementation	Continuous Improvement
Key Tasks: (1) Identify BI-driven opportunities to improve core business processes (2) Identify BI requirements (3) Develop current state and target state business process models (4) Identify process performance metrics and goals	**Key Tasks:** (1) Develop BI-driven concept of operations for core business process (business unit) (2) Develop BI cost estimates (IT) (3) Develop business process change plans and cost estimates (business unit) (4) Develop ROI and sensitivity analyses (business unit)	**Key Tasks:** (1) BI Design: - Data Architecture - Data Models - Data Presentation - Metadata (2) Business Process Design: - Organizational responsibilities - Process roles - Workflow - Enabling BI - Enabling content - Business rules - Process control - Screens & paths - Process BI	**Key Tasks:** (1) Develop BI using BI and Data Warehousing Best Practices (2) Develop business processes - Leverage Business Process Management (BPM) technology if possible - Develop process artifacts, templates, and schedules	**Key Tasks:** (1) Rollout BI according to release plans and rollout strategy (2) Install executable business process models if using BPM (3) Distribute process artifacts, templates, & schedules (4) Communicate to and train business users	**Key Tasks:** (1) Collect process performance metrics and compare with targets (2) Collect BI usage statistics to measure BI assimilation (3) Identify further process improvement opportunities (4) Repeat lifecycle as appropriate

The BI Impact Method is designed to ensure effective integration between BI and business processes. To accomplish this, business processes need to be explicitly considered at each stage of the system development lifecycle. Toward that end, we can leverage proven methods and tools for business process engineering and reengineering. Further, there is an exciting opportunity to exploit business process management systems (BPMS) to take integration of BI and business processes to a whole new level. With advanced BPMS platforms, we can dynamically design and rapidly implement business processes that flexibly enforce specific insertions of business information and business analyses into business processes – including structured decision-making processes for complex recurring business decisions. To achieve this, we have to design BI using business-driven methods and then explicitly consider:

- organizational responsibilities in the targeted business processes
- individual roles in the targeted business process or processes
- the specific workflows associated with the processes
- the type of BI needed by the processes and the points of insertion
- the type of content (documents, forms, e-mails, etc) needed by the processes
- business rules to implement the processes
- process control mechanisms
- computer screens and paths
- the kind of process BI that is needed to manage and improve the processes

All of the above business process design factors are well-established through experience since the mid-1980s. The critical advancement is the availability of BPMS technology that allows business analysts to become process designers and that orchestrates business processes in a way that ensure conformance, flexibility, and the availability of real-time process performance information.

To illustrate this merger between BI and BPMS, we can use a disguised real-world example of a multi-step direct marketing process aimed at cross-selling and up-selling to the millions of customers of large financial services firm. The basic process consists of the following steps:

1. Segment customer data repository based on criteria such as account balance, financial attitude, years-to-retirement, type of investor, previous responses to direct marketing offers, and so forth.

2. Select target list for campaign aimed at selling additional investment and insurance products to customers who are already making maximum contributions to 401(k) plans.

3. Develop marketing content – message, call-to-action, collateral, etc

4. Inform call center of pending e-mail blast, goals of the direct marketing campaign, and content particulars

5. Prepare vanity web site for potential responses to campaign

6. Launch e-mail blast

7. Capture customer actions at web site and call center.

8. Measure campaign effectiveness and adjust tactics.

9. Update customer data repository and account records.

As we can see from the above steps, there is a workflow that requires access to business information and business analytics. A BPMS can orchestrate that workflow, and the required BI – customer data, campaign effectiveness results – can be inserted by the BPMS at the appropriate points in the process. In essence, BI and business processes are effectively merged, and this ensures BI Impact as long as the BI and the business process are aligned with the company's business strategy (and the strategy is appropriate).

More broadly, the BI Impact Method can be used with or without a BPMS as long as the organization has the will to make business process changes to leverage BI and the means to ensure compliance with the prescribed process. Figure 2 shows a matrix that reflects organizational choices around the degree of use of process automation and the degree of business process change desired or required.

Figure 2. Business Process Development Tasks Depend on Scope of Change and Degree of Automation
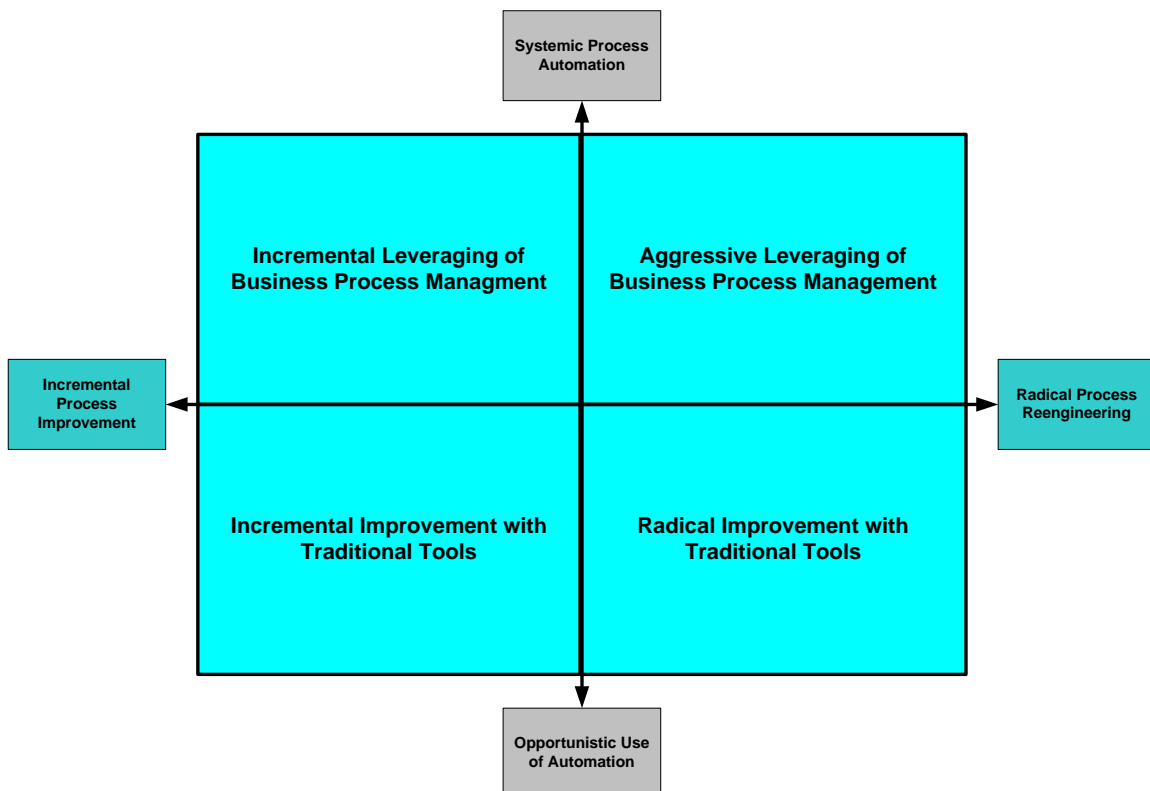
Essentially, companies in the upper-right quadrant pursue radical process reengineering by systematically leveraging BPMS tools, whereas companies in the lower-left quadrant pursue incremental process improvement using traditional tools such as Six Sigma and perhaps some use of process automation. Whatever the choice on these dimensions, BI can be used to improve the core processes if it is successfully inserted into the processes. The combination of the BI Pathway Method and the BI Impact Method ensures that your BI investment results in BI Impact.

For More Information:

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