Enterprise Transformation & the Evolution of BPM

Paul Harmon

Executive Editor
Business Process Trends
Business Process Management (BPM)

• A comprehensive, strategic approach to organizing company change
• At the high-level, a management philosophy that emphasizes focusing on processes and process performance
• At the lower-level, a set of new tools and technologies that can facilitate better processes and more agile change
We Have Lots of Technologies to Use

<table>
<thead>
<tr>
<th></th>
<th>1980s</th>
<th>1990's</th>
<th>2000s</th>
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</thead>
<tbody>
<tr>
<td><strong>Management</strong></td>
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<tr>
<td>Business Process Redesign</td>
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<td>Performance Improvement</td>
<td>Activity Based Costing</td>
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<td>Quality Control</td>
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<td>Information Technology</td>
<td>SEI's CMM for IT</td>
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<td>Business Rule</td>
<td>EAI</td>
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<td></td>
<td>Management Systems</td>
<td>Packaged Software (ERP, CRM)</td>
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<td>Software Modeling Tools and Methodologies (CASE, UML, MDA)</td>
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Today: Horizontal & Vertical Alignment

Executive Management

Strategy Committee

Horizontally Integrated Processes
From Suppliers to Customers

Vertically Integrated Measures, Managers, and Resources

Employees & IT Applications and Infrastructure
An Aside on the Meaning of *Process*

- Value Chain
  - Business Process
    - Process
      - Sub-Process
        - Sub-Sub-Process
          - Activity
    - Process
      - Sub-Process
        - Sub-Sub-Process
          - Activity
  - Business Process
    - Process
      - Sub-Process
        - Sub-Sub-Process
          - Activity
  - Business Process
    - Process
      - Sub-Process
        - Sub-Sub-Process
          - Activity

Architecture
- SCOR Framework

Process Redesign Projects
- Business Rule Projects

Six Sigma Projects
- IT Automation Projects
- SAP Process Models
A Process-Centric Model

- **Strategy Level**
  - Plans & Goals
- **Business Process Level**
  - Value Chain
    - Specific Process
    - Process Performed by Employees
    - Process Automated by IT Systems
- **Implementation Level**
  - Physical Plant and Hardware Used.
Three Critical Areas

Strategy and Goals

Strategy Level

Business Process Level

BP Architecture

BP Management

Lean Six Sigma

Organizational Performance

Management and Measurement Issues Involved in Executing Actual Business Processes and Activities

BP Architecture

BP Analysis & Redesign

Business Process

Specific Activity

Implementation Level

Logical Level

Physical Level

Human Resource Architecture

IT Architecture

Network Architecture

Data Architecture

Database Management Systems

Technology Architecture

Hardware Architecture

Application Architecture

Application Designs and Code

Screens and Reports

Human-IT Interface Models

Job Designs

Job Aids, Training Programs, Knowledge Management Systems

Activity/Performance Monitoring Systems

Activity Measurement Plan

Data Management

Plans, Budgets, Hiring, Resource Allocation, Feedback, Consequences

Physical Plant and Hardware Used.
The Process Management Alignment Process

Ongoing Business Strategic Process

Business Process Architecture

<table>
<thead>
<tr>
<th>Business Model</th>
<th>Management Plan</th>
<th>Performance Measures</th>
</tr>
</thead>
</table>

Organizational Alignment

See that models, measures and management plans are aligned with those above and below

Process Hierarchy

Management Hierarchy

Value Chain

CEO

Line Managers

Middle Managers

Supervisors

CEO
BP Management

- The Senior Management BP Team
- A Business Process Architecture
- Process-Based Performance Measures
- Managers Trained to Use the Tools
- A Management System that Rewards Managers for Using the Tools
The Business Process Architecture

Strategy and Goals

Specific Activity

Management and Measurement Issues Involved in Executing Actual Business Processes and Activities

Business Process

Specific Activity

Physical Plant and Hardware Used.

Strategy Level

Business Process Level

Implementation Level

Logical Level

Physical Level

Lean Six Sigma

BP Management

BP Architecture

Organization Performance

BP Analysis & Redesign

Human Resource Architecture

IT Architecture

IT

Activity Management Plan

Activity Measurement Plan

Job Design

Human-IT Interface Model

Application Architecture

Data Architecture

Network Architecture

Technology Architecture

Hardware Architecture

Data Management Systems

Available Designs and Code

Database Designs and Code

Screens and Reports

Knowledge Management System

Training Programs

Performance Monitoring System

Plans, Budgets, Hiring, Resource Allocation, Feedback, Consequences

Job Aids, Training Programs, Knowledge Management System

Application Designs and Code

IT Architecture

Physical Plant and Hardware Used.
The Business Process Architecture

- A key **tool** for process management
- A high-level overview of the value chains and key processes that make up the organization
- An alignment of strategic goals, value chains and key processes
- A clear-cut way to monitor the performance of the value chains and processes (KPIs)

- A BP Architecture is NOT an IT EA Architecture
BP Frameworks

• A BP Framework is a template for a BP Architecture
• It includes an process vocabulary, domain process models for at least 2-3 layers of processes, measures for processes, and best practices.
• BP Frameworks are set to revolutionize BP Architecture Development
The Supply Chain Council’s SCOR

• The best example of the good horizontal BP architecture is provided by the Supply Chain Council’s SCOR framework
• Created in past 5 years by consortium of some 700 companies
• Defines a top-down approach to organizing the BP architecture of a corporate supply chain process
SCOR MODEL: Level 1

- Plan
- Source
- Make
- Deliver
- Return

Supply Chain
One Value Chain Framework

Level 0.
Organization
Divided into 4 Major Domains

Level 1 Processes
Level 2 Variations
Level 3 Subprocesses
Level 4 Activities Specific to Particular process and company

Metrics and Best Practices for Subprocesses

Tables for Each Process and Subprocess
Information on specific metrics and best practices to implement this subprocess
OR Frameworks and 6 Sigma

- There are already efforts aimed at aligning SCOR and Lean Six Sigma
- They fit very naturally, since both are very oriented towards measurement and SCOR provides an ideal way to help Lean Six Sigma teams identify areas to focus on
- Several consulting companies are focusing on this effort
Another Aside: Frameworks and BP Maturity

Organizations with an mature mastery of their processes.

Combining a Framework with Six Sigma is a good way to deal with 5.

A Framework Provides all of the basic structure and documentation to move an organization from 2.5 to 4.5

1. Initial

The process is ad hoc. Few activities are explicitly defined and success depends on individual effort and heroics.

2. Repeatable

Basic project management processes are established to track cost, schedule, and functionality. The necessary discipline is in place to repeat earlier successes

3. Defined

The process for both management and engineering is documented, standardized and integrated by an organization methodology

4. Managed

Detailed measures of the process and product quality are collected. Both the process and products are quantitatively understood and controlled.

5. Optimizing

Continuous process improvement is enabled by quantitative feedback for the process and from piloting innovative new ideals and technologies.

Extending a Framework to support Packaged Applications, BPMS, or BAM will provide even stronger packages.

Organizations with an immature mastery of their processes.
The Process-Centric Company Today

- Most companies want to move toward a more process-centric organization, but
- They are overwhelmed with changes
- With technologies that don’t integrate
- With management and measurement systems that aren’t designed for process
- They simply don’t have the time and people to achieve a process-centric company if they approach it with first generation methods
What Is Needed?

- We need to move faster - Otherwise we get lost in the day-to-day details
- We need a comprehensive approach – Otherwise we don’t achieve enough alignment between the different technologies
- We need an approach that can appeal to both business and IT managers
Enterprise Transformation

- The challenge is to manage the enterprise using processes.
- To do that, we need to have an architecture that provides a complete picture of the enterprise and enterprise performance measures.
- And we need a new methodology for Enterprise Transformation that combines all the tools we have into a new, more powerful approach.
For More Information

www.bptrends.com

pharmon@bptrends.com
Enterprise Transformation

Integrating Business Process Management (BPM) with Lean/Six Sigma Deployment

by

PRO-Ex™

Velocity Consortium

Advanced Integrated Technologies Group Incorporated
The Need for Change
Must We Change?

- Change is not useful
- It is just an intellectual exercise to try to be different
- Customers don’t care about change as long as we provide good service and quality, on time and for a reasonable, controlled price
- Employees will resist change

Change is challenging, but necessary!
What Does the Economy & Environment Tell Us About Change?

- 75% of the product sold in a supermarket did not exist 7 years ago
- The time to launch a car (from conception to sale) has been reduced from 6 years to 36 months
- Internet sales were representing less than 2% in Europe 5 years ago, now it is covering 15% of the transactions
- The importations of textile from China have increased by 300% in Q1 2005

Changes impact day to day life as well as our business, We must adapt to these changes to stay competitive!
Is Your Business Changing?

On the template:

1 – list the names of the 5 main customers you had 5 years ago
2 – list the top 5 products & services contributing to your sales or revenue numbers 5 years ago
3 – list the 5 main regions / countries you supplied 5 years ago
4 – Do the same for the current situation (2004/5)
5 – Calculate the % of change
## Your Company’s Evolution

<table>
<thead>
<tr>
<th>Main Customers</th>
<th>Main Products</th>
<th>Main Regions</th>
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</thead>
<tbody>
<tr>
<td>5 years ago</td>
<td>Today</td>
<td>5 years ago</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Today</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 years ago</td>
</tr>
<tr>
<td></td>
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<td>Today</td>
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\[
% \text{ change} = \frac{\text{(nb items in ≠ order)}}{15} = \]
Enterprise Transformation

Program Deployment Emphasis

Tactical
- "Content" Focus
- Known Opportunities
- Proof-of-Concept Pilots
- ROI Justification

Value Optimization
- Business "Context" Focus
- BPM Value Chain Opportunity Prioritization
- Program Expansion
- Value Realization

Strategic
- "Competitive" Focus
- Enterprise Value Optimization
- Program Integration with the Business
- Competitive Advantage

Redefine the Industry
Optimize Value Chains
Leverage Best Practices
Improve Process Efficiency

Business Process Reengineering
Process Redesign "Value Expansion"
Process Improvement "Value Capture"

Tactical

Value Optimization

Strategic

Breadth of Change
Function Specific Projects
Core Business Processes
Primary Value Chains
Extended Value Chains
Evolving Organization Design to Support Program Maturity

Phase 1 – Pilot Program
Phase 2 – Program Value Expansion
Phase 3 – Value Chain Optimization
Phase 4 – Enterprise Transformation!
Enterprise Transformation Road Map

Supply Chain Excellence
- Supplier Management Infrastructure
  - Internal Network
  - Sourcing Benchmarking & Selection
  - Commodity Management
  - Traditional Cost Reductions
- SCOR Deployment
  - SCORcard Measurement
- SCOR Deployment Program Infrastructure
- Program Infrastructure
- Preparing the Culture
  - Cross Training
  - Reward & Recognition
  - Incentives
- Lean Sigma Enterprise
- Skills Development
  - Leadership Training
  - Management Training
  - Lean Black Belt Training
  - Greenbelt Training
  - Kaizen Training
  - Personnel Training
- Foundational Changes
  - 5S
  - Standard Work
  - Change Over Reduction
  - TPM

SCOR Deployment
- Pull System Adoption
- S/C Business Process Simplification
- Supplier Quality & Delivery Improvements
- Logistics Optimization

Streamlined Business Ops
- Supplier Certification
- Pull System Penetration 60%+
- Enabling System Solutions
- Supplier Joint Business Process

Supplier Rationalization
- Internal Network
- Sourcing Benchmarking & Selection
- Commodity Management
- Traditional Cost Reductions
- Supplier Certification
- Data Driven Decision Making

Enabling System Solutions
- Self managed teams
- System Wide Bottom-line impact

Supplier Joint Business Process
- Kaizen
- Cross Functional Teams
- Focus Factory Projects
- Product Rationalization
- Develop Lean Model Areas
- Variation Reduction
- Key Enabling Variation / Cost reduction Projects

Integrated Product Development Teams (IPDT)
- Integrated Product Development
- Standard Measurements
- Definitions & Methods
- Knowledge Capture

Streamline Design Process
- Waste analysis
- Stage gates

Product Development Steering Team
- Product Development Rationalization
- Skills Development
  - DFSS Training
  - Innovation

Product Development & Innovation Excellence

Phase 1: Pilot Program
- Product Development Infrastructure
- SCORcard Measurement
- Supplier Rationalization

Phase 2: Program Value Expansion
- SCOR Deployment
- Pull System Adoption
- S/C Business Process Simplification
- Supplier Quality & Delivery Improvements
- Logistics Optimization

Phase 3: Value Chain Optimization
- Streamlined Business Ops
- Supplier Certification
- Pull System Penetration 60%+
- Enabling System Solutions
- Supplier Joint Business Process

Phase 4: Enterprise Transformation
- Cultural Change
- Lean Six Sigma Organization

Year 1
- Focus Factory Projects
- Product Rationalization
- Develop Lean Model Areas
- Variation Reduction
- Key Enabling Variation / Cost reduction Projects

Year 2
- Product Development Steering Team
- Product Development Rationalization
- Skills Development
  - DFSS Training
  - Innovation

Year 3
- Integrated Product Development Teams (IPDT)
- Integrated Product Development
- Standard Measurements
- Definitions & Methods
- Knowledge Capture

Year 4
- Cultural Change
- Lean Six Sigma Organization

Driving the Evolution to a World Class Enterprise!
Company Specific Enterprise Transformation Roadmap

**Customers/Markets**
- Product Focus
  - Target Markets
  - Target Profitability and Pricing
  - Improved Customer Retention through harvesting strategies
  - Clear RACI for customer interaction
- Business focus on internal performance
  - External Business Process Focus

**Processes**
- Focal Point for Enterprise Transformation
  - Introduce Lean/Flow concepts
  - Develop common process definition using Business Process Management
- Multiple Processes
  - End to End Process Focus
- Functional Focus
  - Elimination of legacy systems
  - Customer / supplier system interface

**Systems**
- Limited ability to support one system implementation
- Multiple Site Specific Installations of the same system
  - No commitment to a common planning system - many legacy applications

**Culture**
- Team Recognition vs. Individual
  - Performance standards & expectations established

**People**
- HPWO
  - Reward systems aligned with company objectives

**World Class Process Performance**
- Routine performance metrics drive process improvement priorities
- Continuous Improvement is a way of life
  - Career Development supports company strategy
  - Lean competency
    - Internal Lean Six Sigma Expertise

**Performance Management**
- Supplier / customer interaction through e-portals
  - Real time Process performance data available

**Learning Organization**
- Cross Functional Project Teams
  - Target Markets
  - Target Profitability and Pricing

**Market Leader/Preferred Solutions Provider**
- One common planning system
  - Routine performance metrics drive process improvement priorities

**Vision 200X**
- World Class Customer Service Level & Enterprise Performance
  - Improved Customer Loyalty
  - Market focused World class service levels
  - Lean concepts generally applied across all processes
  - Seamless process integration
  - HPWO
  - Reward systems aligned with company objectives
  - Process improvements through Project Teams

**Time 1**
- Reward systems aligned with company objectives
  - Standard work and RACI clearly defined

**Time 2**
- Appropriate metrics to drive desired behavior
  - Strong Customer Relations
  - Performance standards through Project Teams

**Time 3**
- Clear RACI for customer interaction
  - Lean competency
    - Internal Lean Six Sigma Expertise
  - Standard work and RACI clearly defined

**Key Metrics Data Gathering & Reporting**
- Key Metrics Data Gathering & Reporting
  - System reported standard scorecard

**Market segmentation by competitive requirements**
- Market focused World class service levels
  - Lean concepts generally applied across all processes
  - Seamless process integration

**Improved Customer Loyalty**
- Team Recognition vs. Individual
  - Performance standards & expectations established

**Six Sigma Expertise Development**
- Focal Point for Enterprise Transformation
  - Introduce Lean/Flow concepts
  - Develop common process definition using Business Process Management

**Elimination of legacy systems**
- Customer / supplier system interface
  - No commitment to a common planning system - many legacy applications

**Data Based Decision Making**
- Key Metrics Data Gathering & Reporting
  - System reported standard scorecard

**Market research defines key growth areas**
- No commitment to a common planning system - many legacy applications
  - Limited ability to support one system implementation

**Improved Customer Satisfaction Metrics**
- Improved Customer Retention through harvesting strategies
  - Clear RACI for customer interaction

**World Class Process Performance**
- Routine performance metrics drive process improvement priorities

**Continuous Improvement is a way of life**
- Career Development supports company strategy
  - Lean competency
    - Internal Lean Six Sigma Expertise
  - Performance standards through Project Teams

**Performance Management**
- Supplier / customer interaction through e-portals
  - Real time Process performance data available
# Phases of Program Maturity

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<th>Phase 2</th>
<th>Phase 3</th>
<th>Phase 4</th>
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</thead>
<tbody>
<tr>
<td><strong>Pilot Program “Value Capture”</strong></td>
<td><strong>Program Value Expansion</strong></td>
<td><strong>Value Chain Optimization</strong></td>
<td><strong>Enterprise Transformation</strong></td>
</tr>
<tr>
<td>Program Design &amp; Preparation</td>
<td>Leadership Development</td>
<td>Opportunity Identification</td>
<td>Execution Skills Development</td>
</tr>
<tr>
<td>- What is Lean?</td>
<td>- How do we develop leadership support?</td>
<td>- How do we capture known improvement opportunities?</td>
<td>- What tools will be taught to Green Belts? Black Belts?</td>
</tr>
<tr>
<td>- What is Six Sigma?</td>
<td>- How do we manage the culture change?</td>
<td>- How can we identify &amp; prioritize projects of greater business impact?</td>
<td>- What success criteria will be associated with certification?</td>
</tr>
<tr>
<td>- What does a Lean Six Sigma Program look like?</td>
<td>- What are leadership’s roles &amp; responsibilities?</td>
<td>- What improvements can be made to the core business processes?</td>
<td>- What unique curriculums will be required for specific process areas?</td>
</tr>
<tr>
<td>- What are our goals?</td>
<td>- How do we begin to engage cross-functional projects?</td>
<td>- How do we execute value chain project?</td>
<td>- How do we leverage skilled resources across the enterprise?</td>
</tr>
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**Content Focus**

**Context Focus**

**Competitive Focus**

Organizational Context Determines Program Needs!
Where Do You See Your Company 3-5 Years from now?

Highlight what is relevant, Add what is missing, etc.
Enterprise Transformation using the PRO-EX™ Program. Building the Capability to Transform the Enterprise!
Modular Approach to Build True Enterprise Transformation!
VCOR Integration with the Value-Chain Operations Reference (VCOR) Model

VCOR Implementation
(Baseline, Benchmark, Analyze, Identify & Validate)

CCOR Project Portfolio

Methodology & Resource Requirements

Design-for-Six Sigma (DFSS)
- Projects focused on minimizing Process Design and Development Risk, Uncertainty, and Variation

Lean/Six Sigma
- Projects focused on minimizing Waste, Variability and Defects in the Product Development "process"

Transactional Lean Sigma
- Projects focused on maximizing Transactional Efficiency, Timeliness and Yield to optimize information flow in the Product Development "process"
Enterprise Transformation & Information Technology

Evan J Miller, CEO
Hertzler Systems Inc.
ejmiller@hertzler.com
Enterprise Transformation Requires

• Right People
• Right Projects
• Right Results – impactful
• Right Scope

• Right Strategy
• Right Resources
• Right Costs/ROI
• Right Data

The Information Infrastructure Enables the ‘Right Stuff’
Existing Information Infrastructure

Project Tools

Deployment Tools

Business Systems

Disparate Systems Leave Gaps
The Measurement System Bridges the Gaps
What the Measurement System Does

Connect => Collect & Alarm => Analyze
Measurement System Enables Because…

- Repeatable data source for Define & Measure Phases – drives multiple projects
- Appropriate level of data granularity
  - Automatically identify defects through business system
  - Ask for additional information from process owners
- Forms foundation of Control Phase data system

The Measurement System Enables Enterprise Transformation
Enterprise Transformation
Requires Access to the “Right” Data by the “Right” Tools at the “Right” Time

Hertzler / i-Solutions Integration

- ERP
- Supply Chain
- SFA
- Call Center
- GainSeeker Data Mart

Process Owners

Performance Manager

Process Manager

Program Manager

Business Performance

Business Objectives

New/Enhanced Capabilities

Advanced Statistical Tools

**Enterprise Transformation**

**Requires Access to the “Right” Data by the “Right” Tools at the “Right” Time**

**Hertzler / i-Solutions Integration**

- ERP
- Supply Chain
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Process Owners

Performance Manager

Process Manager

Program Manager

Business Performance

Business Objectives

New/Enhanced Capabilities

Advanced Statistical Tools
Enterprise Transformation is not easy… Many challenges are faced translating strategy into results:

**How Do You?**

- Systematically cascade corporate goals throughout the organization.
- Identify, prioritize and resource the thousands of strategic and operational projects needed to implement the strategy.
- Ensure that all strategic projects are driven to completion.
- Effectively embed the new/enhanced capabilities into the organization.
- Drive consistent execution of the new/redesigned business processes.
- Monitor achievement of the strategy and make changes mid-course as situation changes.
i-nexus is the leading web-based enterprise software solution for helping global companies translate strategy into results.
Define Process Model

Enterprise Transformation Requires Integration of Objective Flow-down, Process Definition, Dashboard Development and Project Selection...

Select KPIs vs. Targets (Scorecards)

Debtor Days Control Chart

Scope and Select Projects

Prioritise Causes

Project Charter
Reduce Invoice Defects

Who
What
When
How
Why

Prepare Quote, Receive Order, Plan Order, Procure, Make, Pack & Ship, Collect Cash

Quote to Cash

Cash (Profit) From Operations

Shareholder Value

Flow-down Objectives

Capital Employed

WACC

Fixed Assets

Working Capital

Inventory

Advance Payments

Prepare Invoice, Transmit Invoice, Approve Invoice, Pay Invoice

Implement Project & Update Process Model

Velocity Consortium
How do we measure the overall success of enterprise transformation?

By implementing a Deployment Dashboard...

### Financial
- Net Program Benefits (Profit & Capital Employed Impacts)
- Net Benefits/Project
- Net Benefits as % of Revenue

### Customer
- Product/Service Capability Improvement Indices
- Customer Satisfaction Indices

### People
- Leadership Capability Index
- Belt Capability Index
- Number of Certified Belts, Sponsors, and Process Owners

### Process
- Process Success Rates
- Project Lead-times
- Project Leverage Index
- Project Productivity Index

Measure relative improvement in process capability not absolute process capability
Measure customer satisfaction to validate process capability improvement
Measure the key return on Investment drivers
Measure the underlying organizational capability
Measure net benefits that impact the P&L and balance sheet only
For More Information

Industry Showcase featuring Hertzler Systems & i-Solutions
Today at 6:15 p.m.
Enterprise Transformation Booth

Leadership Circle Retreat
Aug 11-12, 2005
Lake Tahoe.

Enterprise Transformation Workshop
Aug 25-26, 2005
Tempe, AZ