#### Do you need ERP? The answer is in your business process.

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### Agenda

• What and why process improvement?

What is a process?

- How to link the vision / mission with the processes?
- How to perform Business Process Improvement (BPI)?
- How to budget for new systems?
- How to develop an ROI for new systems?

What and why process improvement?

### Business Process Reengineering vs. Business Process Improvement

The <u>fundamental</u> rethinking and <u>radical</u> redesign of business processes to achieve <u>dramatic</u> improvements in contemporary measures of performance such as: cost, quality, speed, service, flexibility.
–Hammer and Champy

### BPI vs. BPR

Severity / Complexity of the Problem Focused vs. Enterprise-wide Redesign The Starting Point ♦ "As-Is" Processes Clean Sheet of Paper Organization's Tolerance for Change Scope / Cost of the Effort Immediacy of Payback Relationship to Information Technology

### Why BPI?

Most processes were never truly "designed"... they evolved over time:

- Initiated with the inception of the organization
- Developed initially to address a specific problem
- Modified and enhanced over time
- Added controls as errors occurred
- Divided among departments as the organization grew
- Generally lost external focus over time

### Principle of BPI

Integrates Strategy, Process, Technology and People



### The Objective of BPI is to Enhance Business Performance

#### **Business Performance**

- Market Entry Barrier
- Productivity
   Improvement
- Market Share
- Sustain Growth
- Cost Reduction
- Cost Containment
- Value Added Services
- Revenue Enhancement

Business Process Improvement

#### Process Performance

- Product Quality
- Service Quality
- Throughput
- Cycle Time
- Resource Utilization
- Flexibility
- Variability

### Business Process Improvement



### Advantages of BPI

- Processes were never "truly" designed, they evolved over time
- Get the team thinking out-of-the-box, not a replacement of the current system
- Better understanding of why a new system is needed (ROI) = Consensus
- Learn Best Practices
- Short Term Process Improvement = Cost Savings
- Regain Customer Focus

## How to link vision / mission with the processes?

### Step #1: Document Executive Management Interviews

Mission... What is your business?
Vision... Where is your business going?
SWOT Analysis:

- ♦ Strengths
- ♦ Weaknesses
- Opportunities
- ♦ Threats

### Porter Analysis or Benchmark Your Supply Chain

- Strength and Uncertainty of the Supply Chain
  - Competitors
  - ♦ Suppliers
  - ♦ Barriers to Entry
  - Risk of Demand (Innovation)
  - Risk of Supply (Natural Resources)

### Performance Path



**Key Performance Measures** 

### What is a process?

### What is a Business Process?

A set of logically related tasks performed to achieve a defined business outcome

- Processes have customers:
  - Internal
  - External

 Processes cross organizational boundaries
 Processes typically have some value connotation to their customers



### Customer - Supplier Model

Everyone is a customer (receives inputs from someone);
everyone owns at least part of a process (is responsible to add value to the input received), and everyone is a supplier (passes information, product / material to someone else).



### Extended Customer – Supplier Model

The Customer-Supplier Model is actually a value chain that may extend beyond departments and even enterprise boundaries.



### "Typical" Business Processes



- Macro-Level or Departmental = Define Major Hand-offs Between Organizational Units.
- <u>Mid-Level or Activity</u> = Define at a High Enough Level to Include Significant Resources and at a Low Enough Level to Isolate Related Inputs and Outputs.
- Detailed-Level or Transaction = Define at the Computer System Screen Level.

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# Step #2: Define Processes and Scope

- Define the Scope of the Process with the Beginning and Ending Points
  - Planning = Forecast to Master Schedule
  - Order Entry = Customer Call to Invoicing
  - Scheduling = MRP to Order Release (PO / SO)
  - Accounts Payable = P.O. Release to Cash Dispersement
  - Production Control = SO Release to FG Put-away
  - Accounts Receivable = Shipping to Cash Receipt

Brainstorm what is in and out of scope, which is the beginning of the individual process blocks.

### How to perform Business Process Improvement (BPI)?

### **Elements of Improving Processes**



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### Step 3: As-Is Analysis

Goals and Objectives of the Process: • What is wrong with the process? ◆ What do our customers want? Roles and Responsibilities: • What are the departments? • What do they do in the process? Drivers and Variations: ◆ What changes the process... e.g., "diamonds" ♦ Examples = Customer Category or Product Group

## Step 3: As-Is Analysis (continued)

- As-Is Flow-Chart or Maps
  - Use Visio "Cross-Functional" Flowchart
  - Define Interaction Between Departments



- Define Attributes
  - How Much, How Many, Percentages, etc.

### Step 4: To-Be Redesign

Walk-through ◆ Staple yourself to an order Verify the as-is capabilities New Organizational Roles Minimize handoffs between departments **To-Be** Maps and Attributes ♦ Use industry best practices or standards ♦ How to meet performance measures

## Step 4: To-Be Redesign (continued)

- Technology Recommendations or Gap Analysis with Current Systems
  - Order Processing (Goal = input the order while on the phone with the customer).
    - Product Configuration
    - Advanced Pricing
    - Available to Promise
    - Capable to Promise
    - On-Line Credit Check and Workflow
    - Access to Information On-Line

### BPI "Deliverables"



### How to budget for new systems?

### Simple "Rules of Thumb"

- Annual Budget for IT should be 1% of revenues in an organization which sees IT as a tool not a competitive advantage.
- Acquisition cost of a new system should be 1-3% of revenues.
  - ♦ Software
  - ♦ Hardware
  - ♦ Consulting
  - ♦ Education
- Cost Variable = Bolt-on's (CRM, APS, etc.) and Existing Infrastructure
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### Acquisition Cost Projections

 Software Cost = \$5,000 Per Concurrent User OR \$3,000 Per Named User
 Implementation Consulting + Education =

 Tier III = Software Cost x 0.75 - 1.0
 Tier II = Software Cost x 1.0 - 2.0
 Tier I = Software Cost x 1.5 - 3.0+

 Hardware Cost = Varies

## How to develop an ROI for new systems?

### Cost Savings

- Reduce People via Technology Based Process Improvements
  - Information Technology
    - If you have a mainframe you have too many people AND pay too much in maintenance.
  - New Technology Allows for Centralization
    - Accounting, Customer Service, Purchasing, Planning and Scheduling
  - Product Configuration = Less Customer Service and Engineering

### Cost Avoidance

If an organization is less than \$50 million in revenues create organization charts for the current company and the future company with and without the new ERP system.

### Softer Cost Savings

#### From the BPI processes

- ♦ Planning
  - Improve Inventory Turns
  - Less Stock Outs
- Customer Service
  - Improve Order Cycle Time
  - Reduce Bad Debt
  - Reduce Returns (accurate order entry)
- ♦ Maintenance and Repair
  - Improve Equipment Uptime
  - Reduce MRO Inventory

#### Increase Revenues

Don't bet on it unless it is true technology e.g., Internet, Direct Mail Database
Customer Satisfaction
Less Backorders and On-time Shipment (improves A/R)
Better Understanding of the Pipeline (CRM)

### Questions?

