

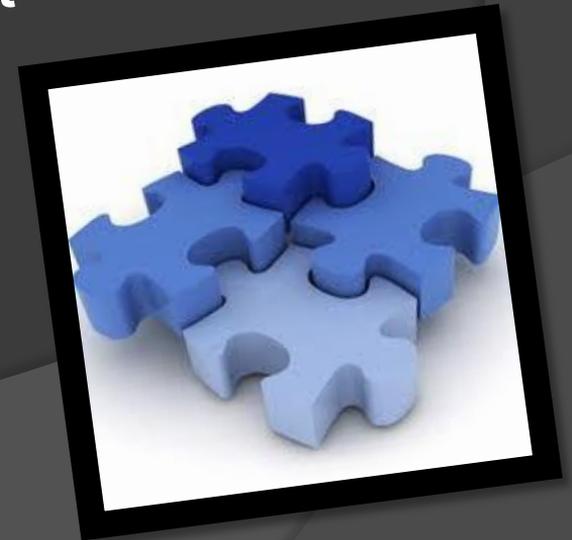
RESEARCH PROJECT: SIX SIGMA, BPM, BPI

Team eBAD

January 28, 2012

Introduction

- ⦿ Process Improvement approaches
 - Lean/ Kaizen/ Six Sigma
- ⦿ Systems vs. Projects vs. Processes
- ⦿ Business Process Management
- ⦿ Business Process Improvement



What is Six Sigma?

- ⦿ A comprehensive and flexible **system** for achieving, sustaining, and maximizing business success.
 - A measure, approach, and philosophy
 - Lean manufacturing prerequisite
- ⦿ Sigma: standard deviation
 - Measure of variance/ spread of a process
- ⦿ Empirical Rule of statistics
 - (68 / 95 / 99.7 rule)
- ⦿ Probability & statistical significance

6σ

Where is Six Sigma used?

- ⦿ Fact-based decision making
- ⦿ Works in manufacturing or service

- ⦿ Notable Six Sigma systems:
 - Microsoft
 - Paccar
 - Providence Healthcare
 - General Electric
 - Motorola
 - Boeing

Role Players

- ⦿ White Belt
- ⦿ Lean Belt
- ⦿ Yellow Belt
- ⦿ Green Belt
- ⦿ Brown Belt
- ⦿ Black Belt
- ⦿ Master Black Belt
- ⦿ Champion

- ⦿ Certification

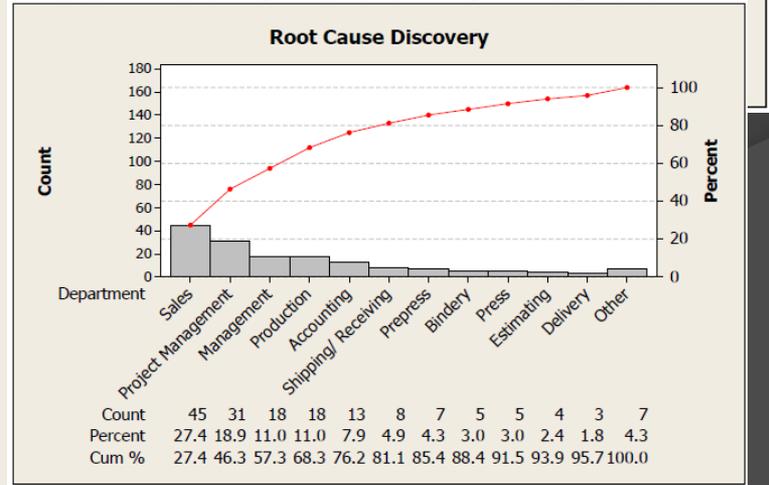
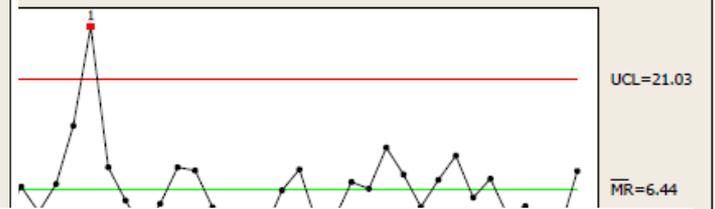
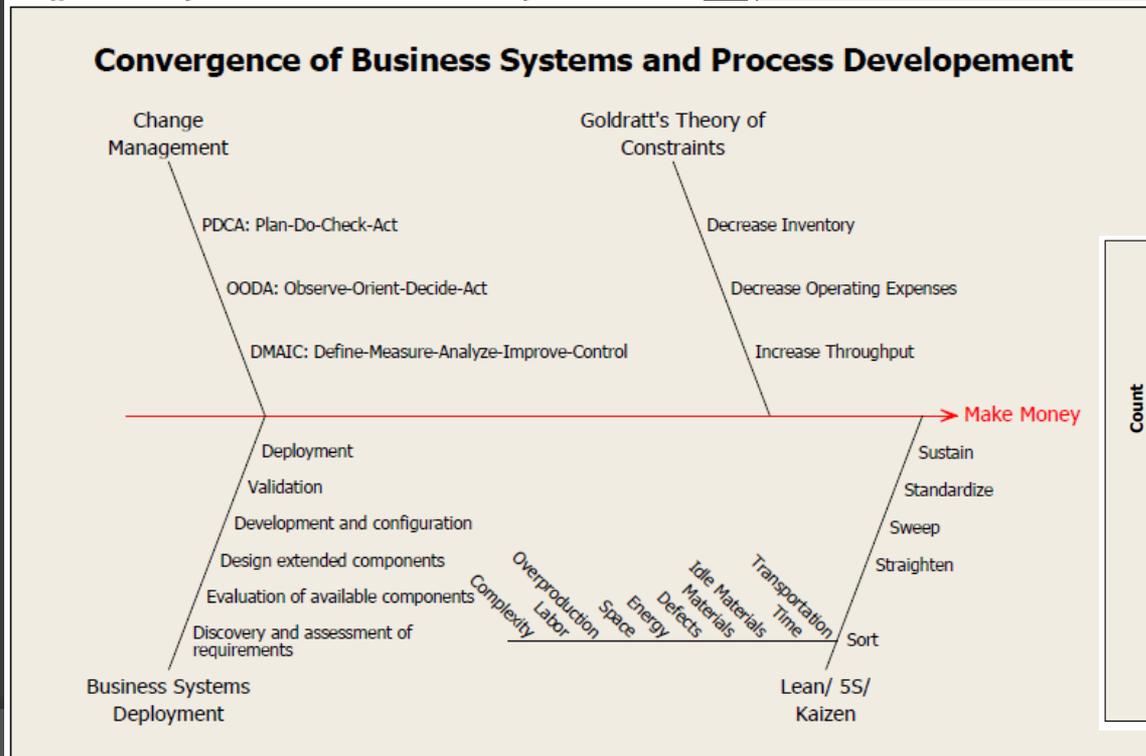
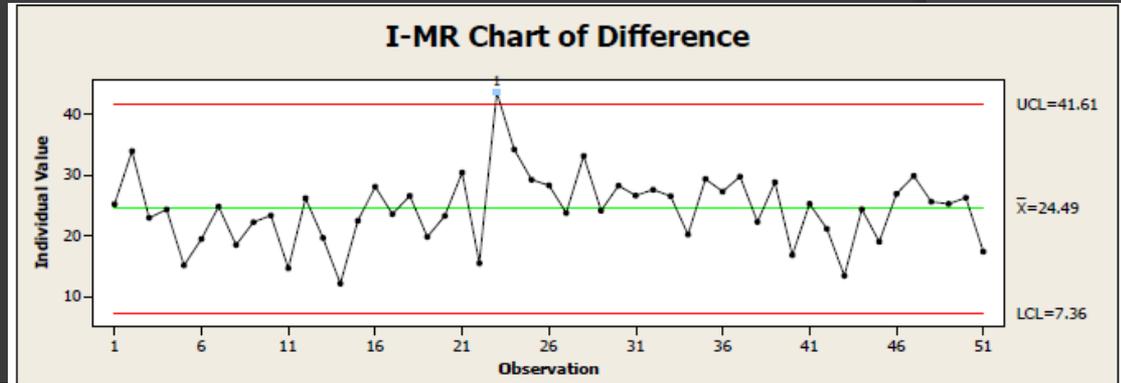
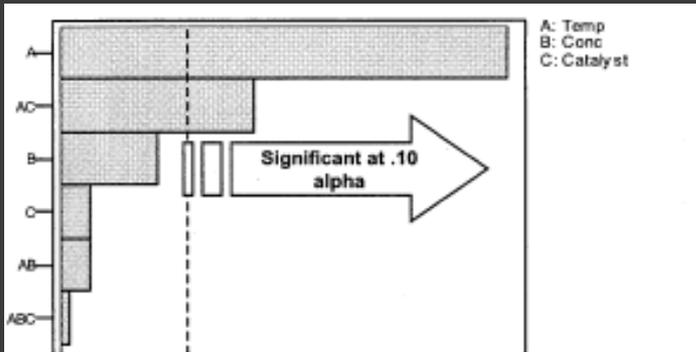


How does Six Sigma work?

- Define
- Measure
- Analyze
- Improve
 - Practical > Analytical
 - Analytical > Practical
- Control
 - Measurement Tools
- Design for Six Sigma (DFSS)
 - Define, Measure, Analyze, Design, Verify



Six Sigma Tools



When is Six Sigma Useful?

- Continuous measurement of processes
- Health and safety
- Cost reduction
- Customer satisfaction



99% Accurate

- Mail:
 - 20,000 lost articles per hour
- Airlines:
 - 2 long/ short landings per day
- Pharmacy:
 - 200,000 wrong prescriptions per year

99.9997% Accurate

- Mail:
 - 7 lost articles per hour
- Airlines:
 - 1 short/ long landing per 5 years
- Pharmacy:
 - 68 wrong prescriptions per year

Business Process Management (BPM)



BPM: What it is

- ⦿ Planned management approach to improve business processes*
- ⦿ Collaborative effort between users and IT
- ⦿ A method to create new applications
- ⦿ An ongoing, continuous exercise of process evaluation and improvement

*A business process is a set of activities broken down into identifiable steps in an established sequence that achieve a common goal

BPM: Where it is used

- ◉ Wherever a business process may need to be improved
- ◉ Wherever there is potential to enhance value-added products and services to clients
- ◉ Wherever a new process or application needs to be developed



BPM: Why it is used

- Define, execute, manage, and refine processes
- Align an organization's processes with the needs of its clients
- Integrate information, people & processes
- Promote joint process development to minimize errors
- Improve process efficiency and product quality
- Increase profitability



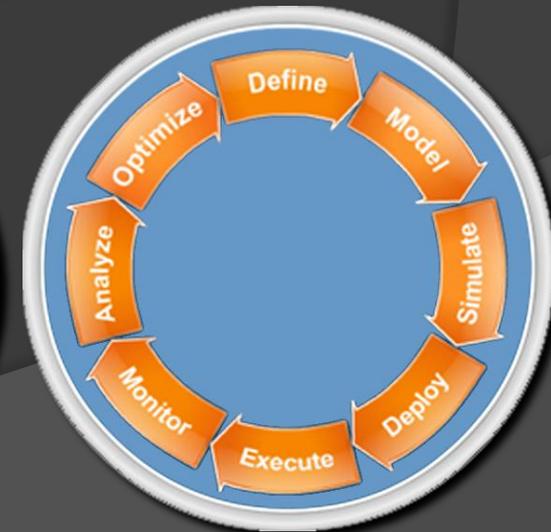
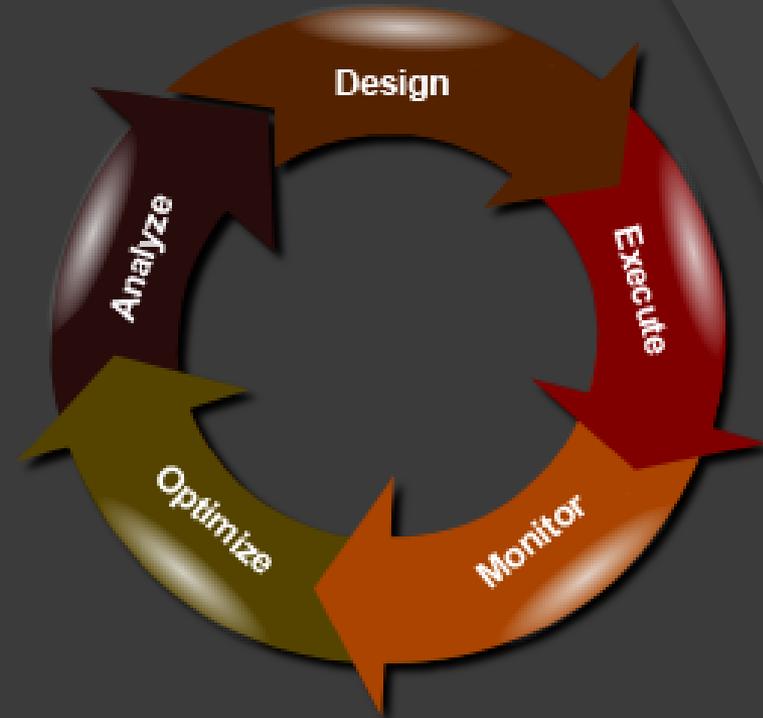
BPM: Who it affects

- ⦿ Business professionals
- ⦿ IT
- ⦿ Customers
- ⦿ Stakeholders
- ⦿ Owners



BPM: Lifecycle

- Analyze/Define Phase
 - document As-Is
 - outline To-Be
- Design/Model Phase
 - test and document To-Be
- Execute/Manage
 - realize and go live
- Monitor
 - track and measure
- Optimize
 - refine and improve



BPM: IT



Enterprise software package

Process Engine

- model and execute process-based applications, including business rules

Business Analytics

- identify business issues, trends, and opportunities with reports and dashboards

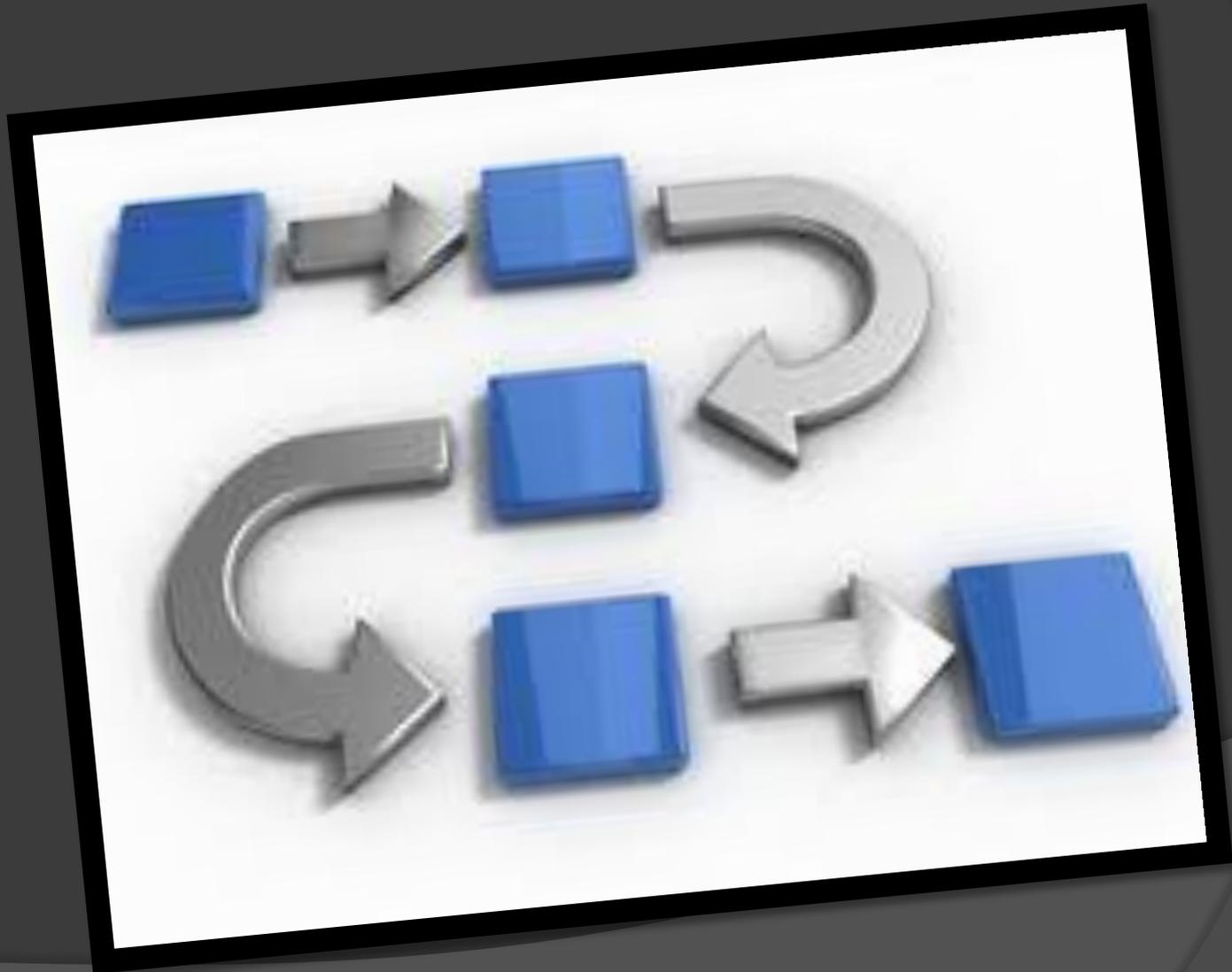
Content Management

- store and secure electronic documents, images, and other files

Collaboration Tools

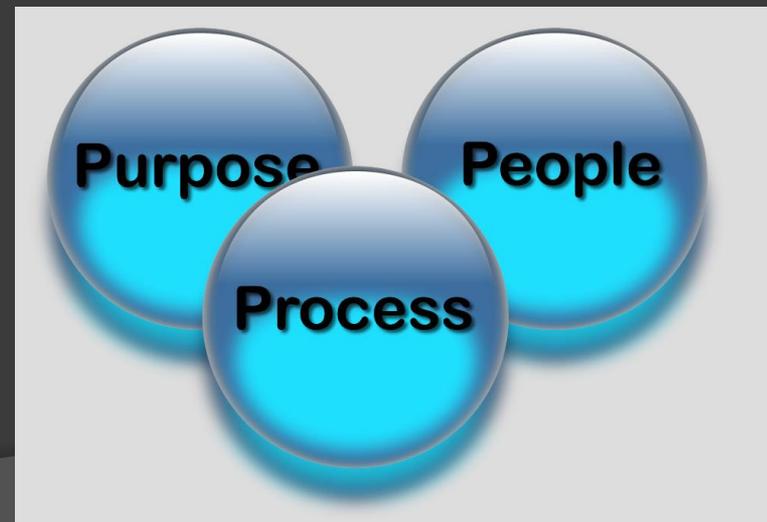
- remove departmental communication barriers

Business Process Improvement (BPI)



Business Process Improvement (BPI)

- ⦿ a systematic approach to help any organization make significant changes in the way it does business
- ⦿ radical change in the performance of an organization to achieve more efficient results.
- ⦿ The Three P's



Principles of BPI

- ⦿ Base activities around outcomes, not routines
- ⦿ Focus on the customer
- ⦿ Process first, not automation first
- ⦿ Benchmark regularly
- ⦿ Establish who are the players
- ⦿ Build control points into a process
- ⦿ Standardize similar processes
- ⦿ Make changes now
- ⦿ When designing new processes, do not think of existing procedures.

How BPI is Done

- ① Defining what the organization's strategic goals and purposes are (*Who are we, what do we do, and why do we do it?*)
- ② Determining what the organization's customers (or stakeholders) are (*Who do we serve?*)
- ③ Aligning the business processes to meet the customer's requirements (*How do we do it better?*)

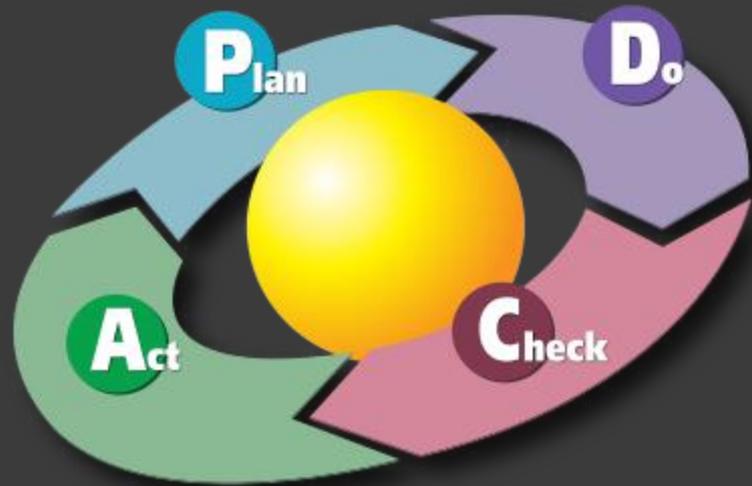
Where is BPI Used?

- For-profit business
- Non-profit organization
- Government agency
- Other establishments



BPI Implementation

- ⦿ Define the organization's mission, existing structure and processes (*AS-IS*)
- ⦿ Determine outcomes that add value (*TO-BE*)
- ⦿ BPI is a project
 - Reshape workforce
 - Set benchmarks
 - Resolve issues
- ⦿ Management and primary stakeholders must be involved
- ⦿ Follow the PDCA cycle (Plan, Do, Check, Act)



BPI Roles

- ① Business Leader
 - Creates the business plans for success
- ① Process Owner
 - Designs the process to achieve the goal
- ① Operational Manager
 - Brings the resources and processes together
- ① Process Operator
 - Learns and performs the new processes



QUESTIONS?