TBM LeanSigma® Institute
welcomes You to the

Transforming Government - the challenge and opportunity of the 21st century

January 7, 2008

Who Is TBM / Guidon?

TBM: Who We Are

Change agents for rapidly improving responsiveness and increasing value in the new economy for all stakeholders

Using time-based strategies, we help government agencies establish a competitive advantage, which contributes to the economic growth and an efficient & effective utilization of resources while improving quality of life for all the state's constituents.

Transforming Government for Improved Responsiveness

Focused Capabilities

LeanSigma Manufacturing

- Achieve unprecedented new efficiencies and performance improvement in quality, cost, delivery and service – on the shop floor and in critical business processes

LeanStrategy™

- Convert your operational excellence into sales growth and market share, through world-class strategic breakthroughs, implemented at the speed of Kaizen

LeanSigma Institute

- Conducting interactive workshops that give your business teams the necessary tools for increasing Lean awareness and skills, at every level of your organization

Focused Capabilities

GUIDON PERFORMANCE SOLUTIONS
a TBM Company

- **LeanSigma®**

  Streamline and simplify complex business processes and quickly pull dramatic new efficiencies to the bottom line

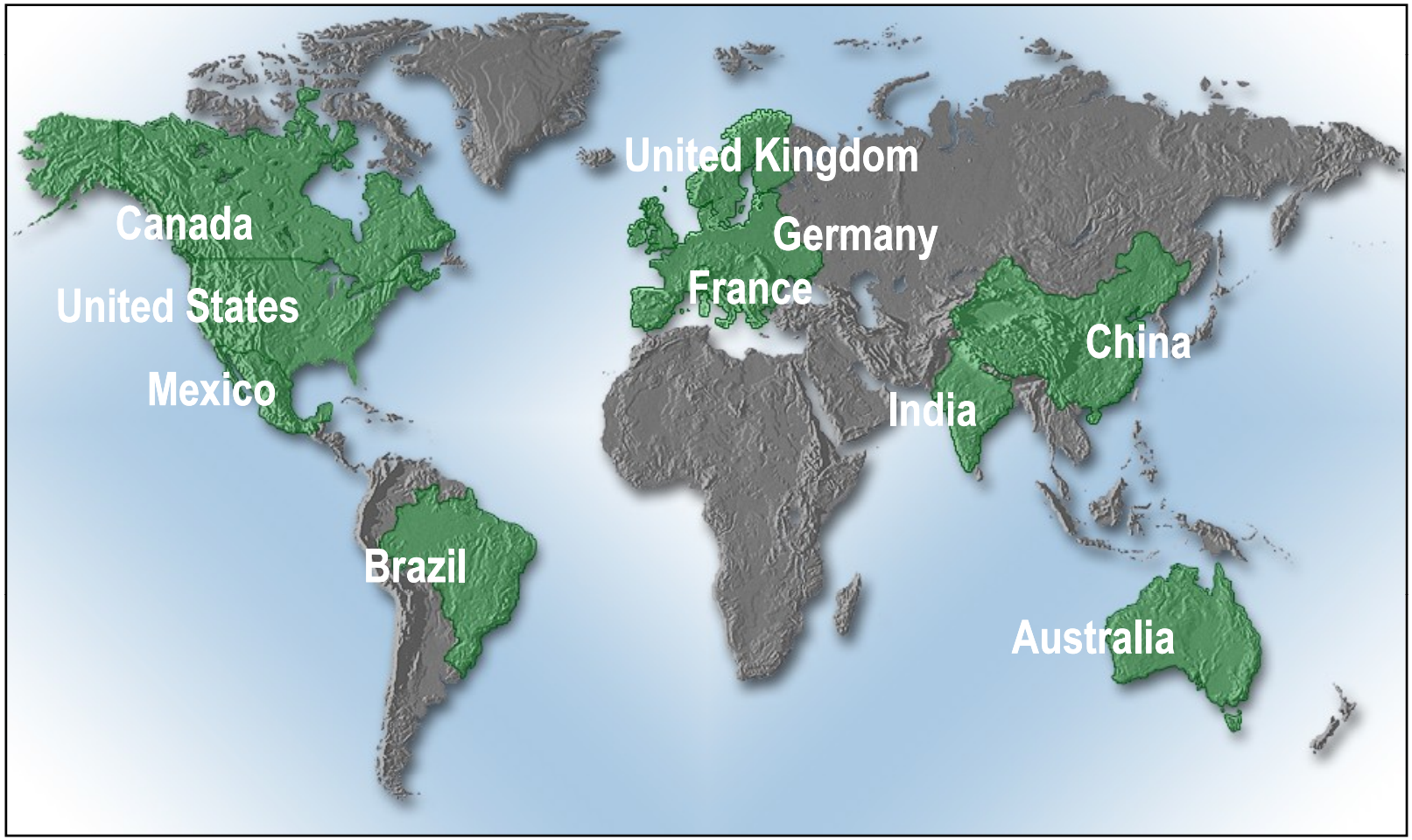
- **LeanSigma® Information Technology**

  Streamline and simplify software development and implementation; improved processes and platform performance

- **GuidonHPC™**

  Translate strategies into plans, monitor execution and provide insight to manage and improve financial and operational performance

Global Implementation & Transformation Support



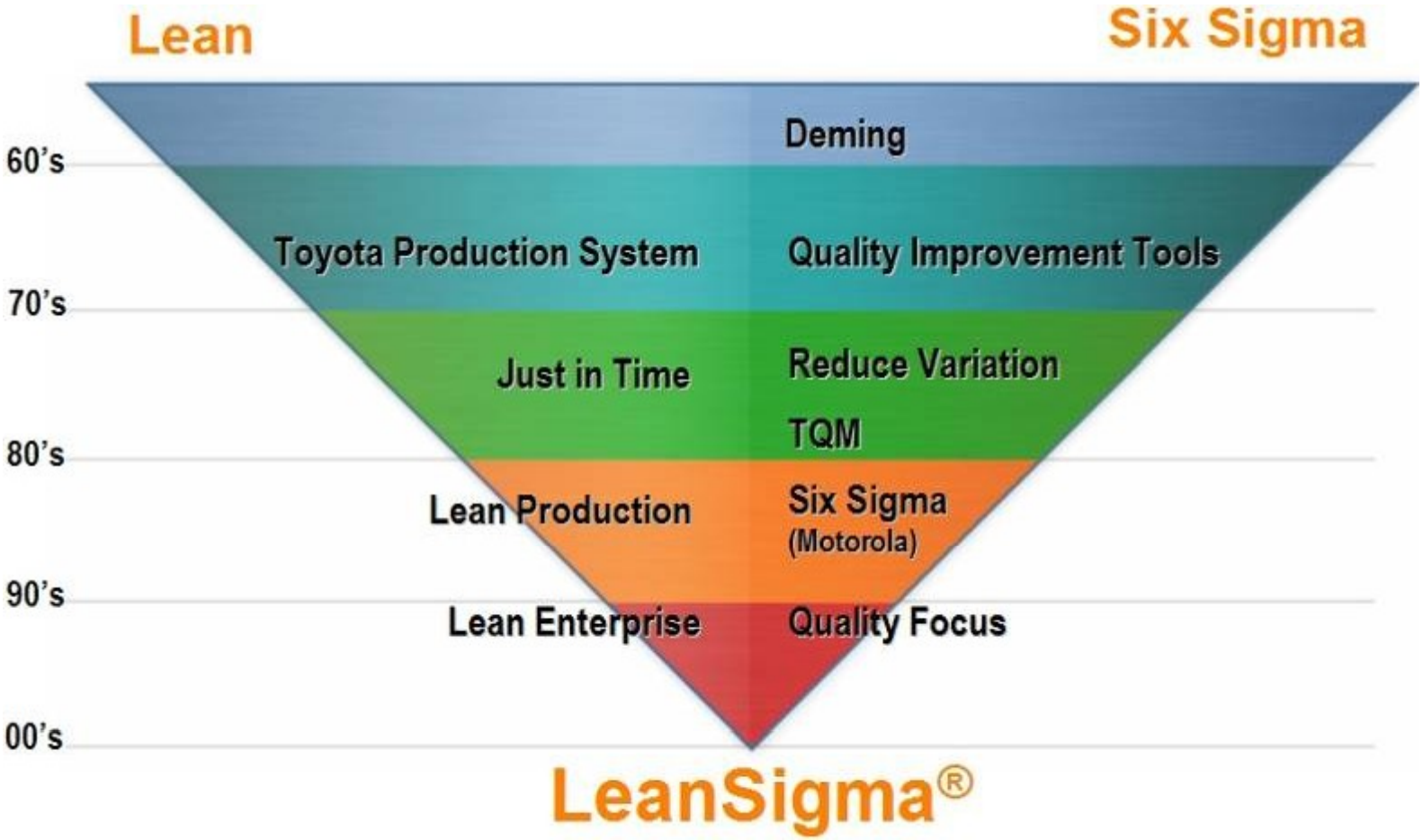
Workshop Objectives

- Recognize your potential to create a more efficient and effective organization
- Introduce the basic tools of business process improvement
- Demonstrate how you and your leadership team can transform your organization to better meet customer needs

***** *LeanSigma®: the fusion of Lean and Six Sigma, today's most powerful business improvement tools*

Evolution of LeanSigma®

TBM's fusion of today's most powerful improvement programs



Today's Agenda

8:00am – 12:00pm

- Introductions
- The "Corporate Challenge"
- LeanSigma® Overview
- Simulation #1

12:45pm – 5:00pm

- Lunch (12pm)
- Introduction to Lean concepts
- Simulation #2 – run and recap
- What's Next?
- Summary

TBM's Toyota Roots

Toyota Production System

Taiichi Ohno

Shigeo Shingo

Yoshiki Iwata with Anand

"One thing you can't recycle is wasted time."

Taiichi Ohno

Introductions

1. TBM

2. You

- Your organization?
- Your position and your Lean experience?
- Your expectations from this workshop?

What is World Class Government?

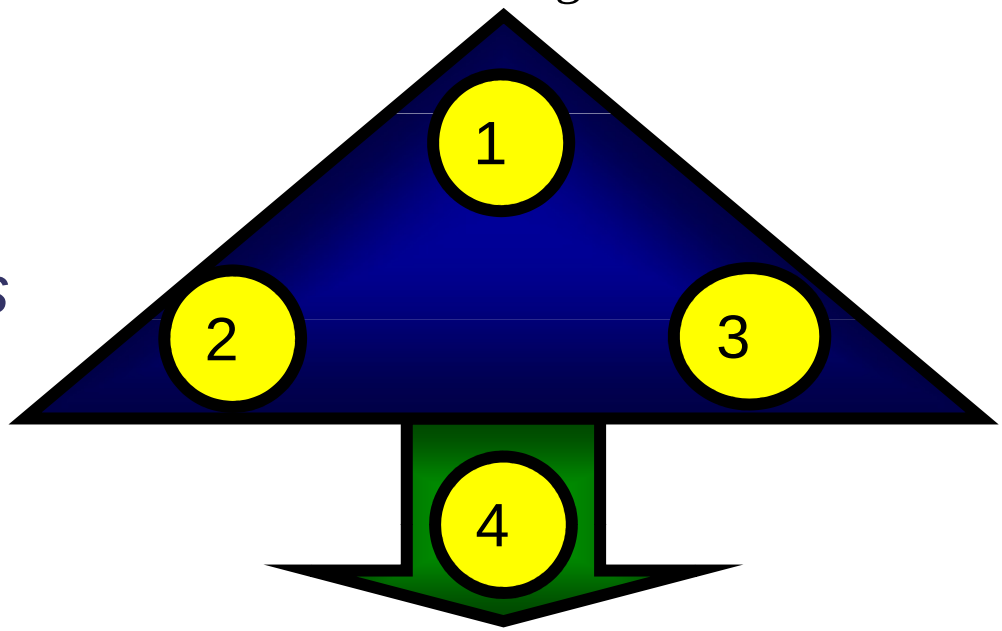
A organization that is:

- Lean, agile & connected to the actual constituents demand
- Responsive to the constituents needs for new programs & services
- Improving continuously to enhance all stakeholder values
- Transforming culture to sustain improvements

The New Government Challenge

Constituents

Quality
Responsiveness
Cost advantage



Employees

Job security
Self esteem
Recognition
Rewards

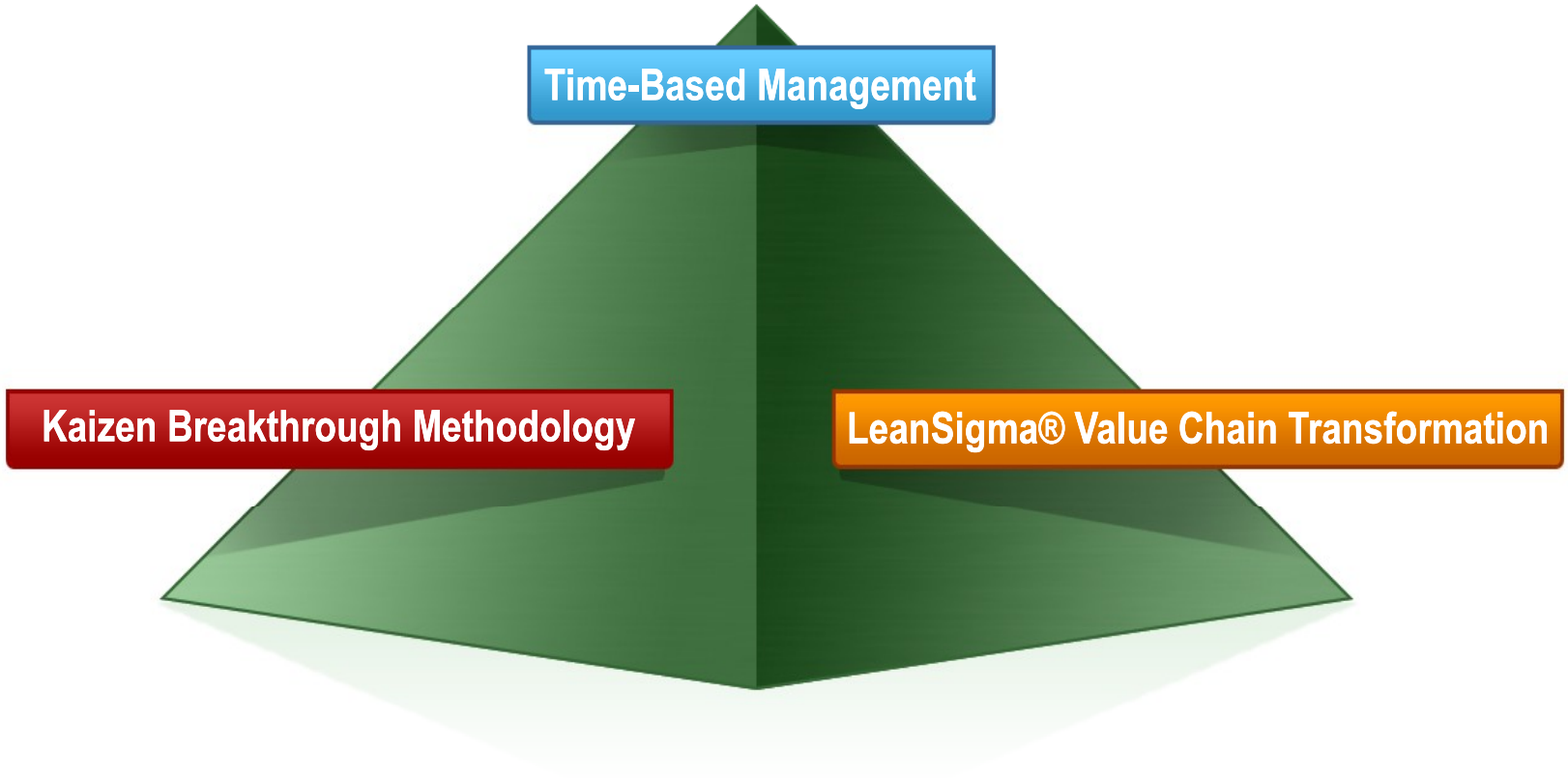
Partners

Involvement
Stability

Stakeholders

Financial return • Reliability
Income growth • Survival

Our Consistent Focus



Time: Today's Most Powerful Competitive Advantage

Lean = speed

Lean tools and techniques are the most effective way to speed up every part of your operations

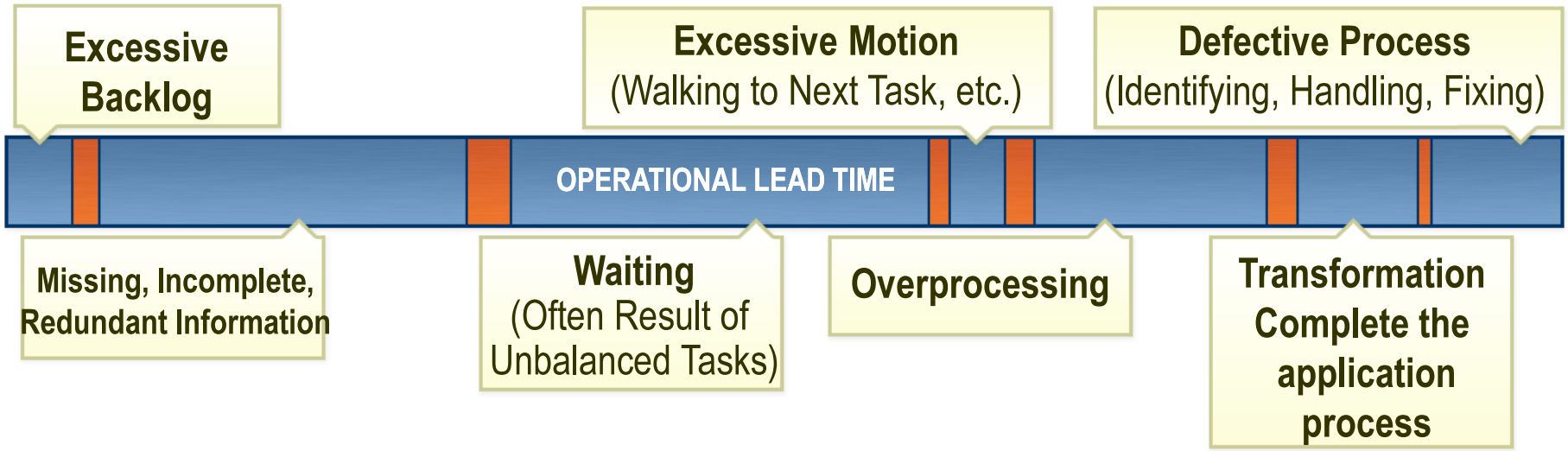
"Today, it's all about speed."
Tom Peters

Lead-Time Reduction

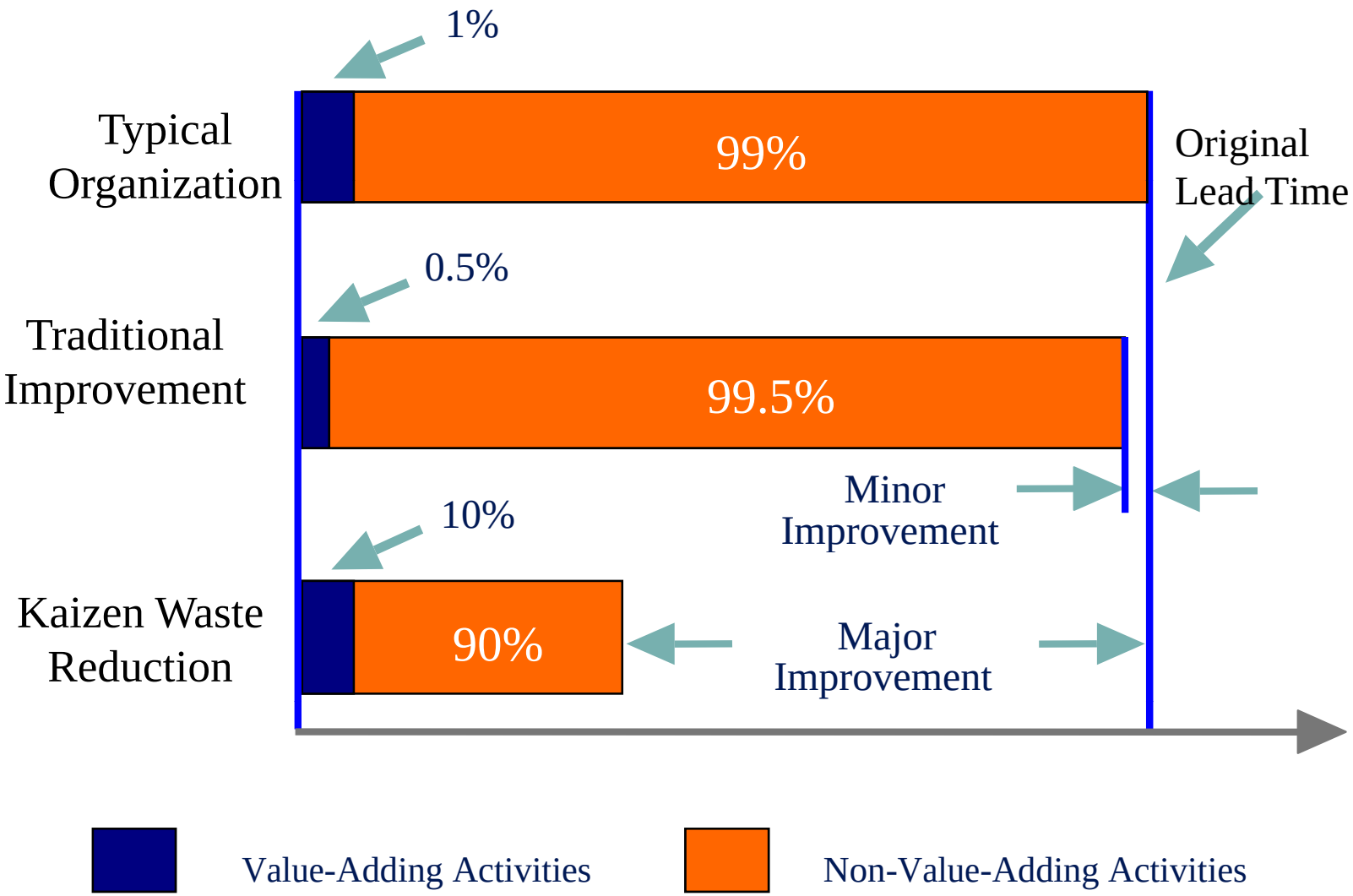
The Key is to Reduce Your Processes to Core Value

Wasted Time and Activity

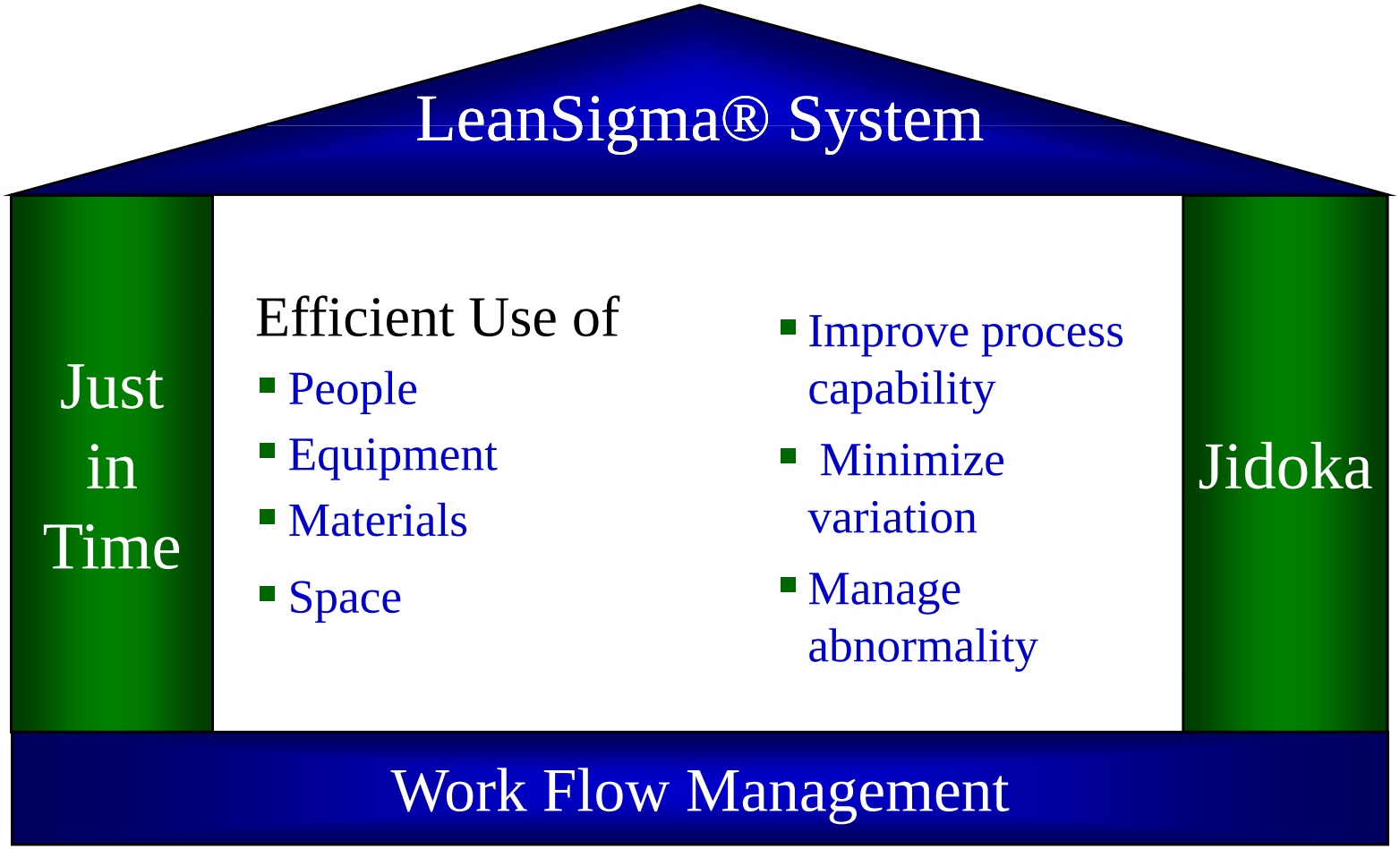
Core Process Value



The key is to reduce your processes to "core value"

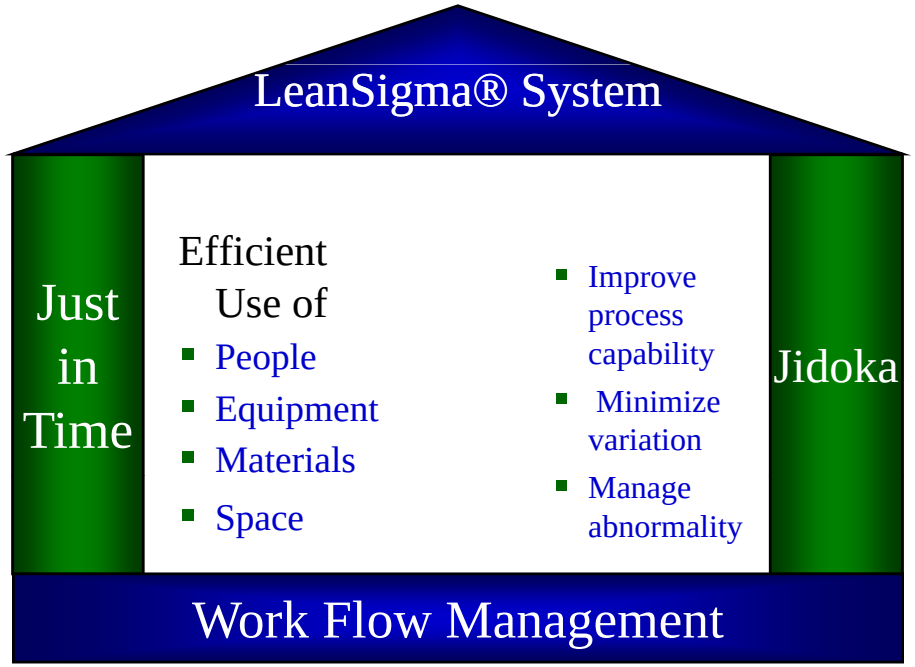


LeanSigma® System



JIT Principles

- One-piece flow
- Standard WIP
- Takt time/cycle times
- Pull system



What is the Kaizen Breakthrough Methodology?

- **A cross-functional team based process for rapid improvement with:**
  - Bias for action
  - Creativity before capital
  - Focus on results

- **Focusing on physical transformation**
  - Learn by doing
  - Overcome resistance
  - Instill change culture

Promote Rapid Change Through Involvement!

Step One – Pre-Kaizen "Preparation"

- Select project area
  - Process / program focus
  - Strategic needs
  - Large improvement potential
- Establish project objectives
  - Collect base-line data, set quantitative improvement goals
- Select team members
  - Enthusiastic Team Leader and Sub Team Leader
  - Team makeup 1/3, 1/3, 1/3
- Pre-event communication
  - Full-time, five-day participation
  - Communications session with program team

Kaizen Breakthrough Experience

Team-based energy and creativity drives immediate process improvement

Day 1	Day 2	Day 3	Day 4	Day 5
Conceptual training on: - LeanSigma® Transformation - LeanSigma® System - Kaizen Breakthrough Methodology - Standard Operations • Cross-functional teams	Determine current state process • Team designs new process • Team close gaps between new and old process • One-piece flow implementation	Continue hands-on workplace improvement • Conduct Point Kaizen • Additional process improvements	Establish standard work results • Simulate new process • Create implementation & communication plan • Document new standard operation	Present results and celebrate

At the end of the week, each Kaizen team has achieved dramatic operational improvements

Step Two - Kaizen Implementation

Key Principles

- Clear objectives
- Team process
- Tight focus on time (one week)
- Quick and simple, action first
- Necessary resources available right away
- Immediate results (new process designed by end of week)

Step Three – Post-Kaizen "Sustainment"

- 30-day home work requires part-time involvement by team leader and selected team members
- Management must provide adequate resources to complete all homework items
- Train area leaders and staff
  - Standard work
  - Visual controls
  - Countermeasures for abnormality and problem resolution
- Post suggestion board in the work area and make sure that they are attended to

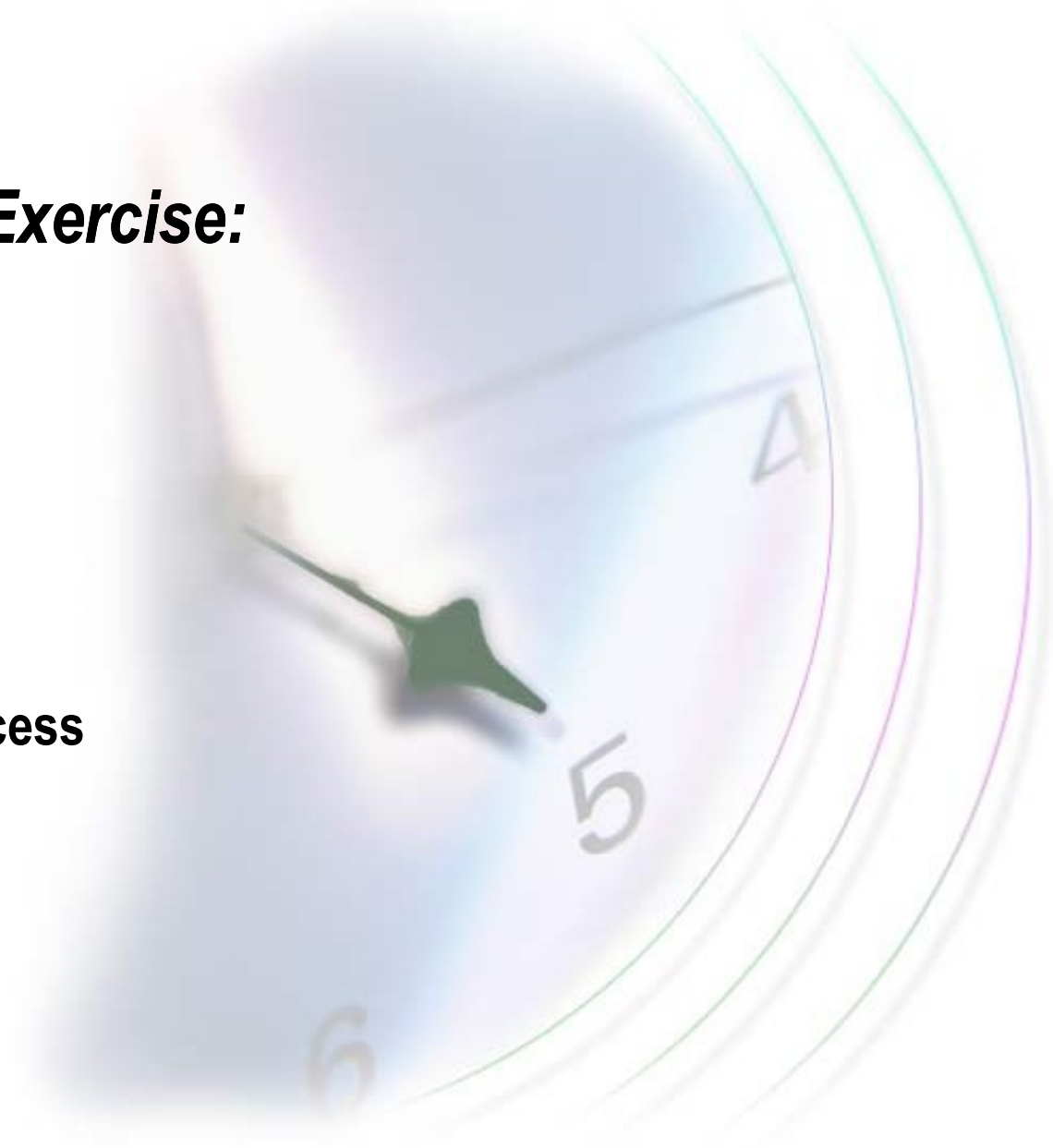
Rapid, Sustainable Improvements

Productivity	↑	20 - 30% +
Defects	↓	40 - 50% +
Lead Time	↓	70 - 90% +
Backlog	↓	70 - 90% +
Floor Space	↓	30 - 50% +

Without spending major resources

Simulation Exercise:

Permitting Process



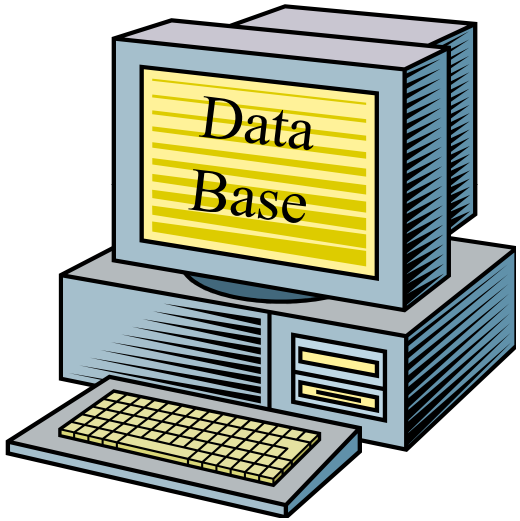
Air Permit Process Implementation

- **Service:**
  - Provide air permits
- **Service composition:**
  - Receipt of application, categorize application, review for accurate and completeness, grant permit
- **Current service load:**
  - Average of 20 Applications per day
- **One day equivalent**
  - 300 seconds or 5 minutes
- **Service operation:**
  - Departmentalized according to function
- **Process/Information transactions:**
  - Mail picked up & delivered twice per day and computer

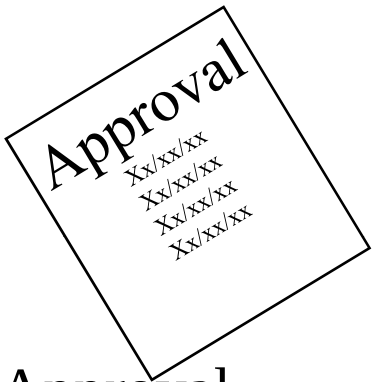
Air Permit Process – Components

Receive Application

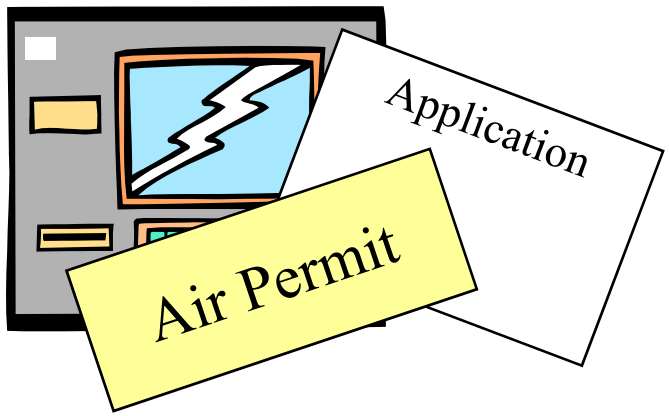
Check if application is complete



Enter applicant Data



Approval Notification

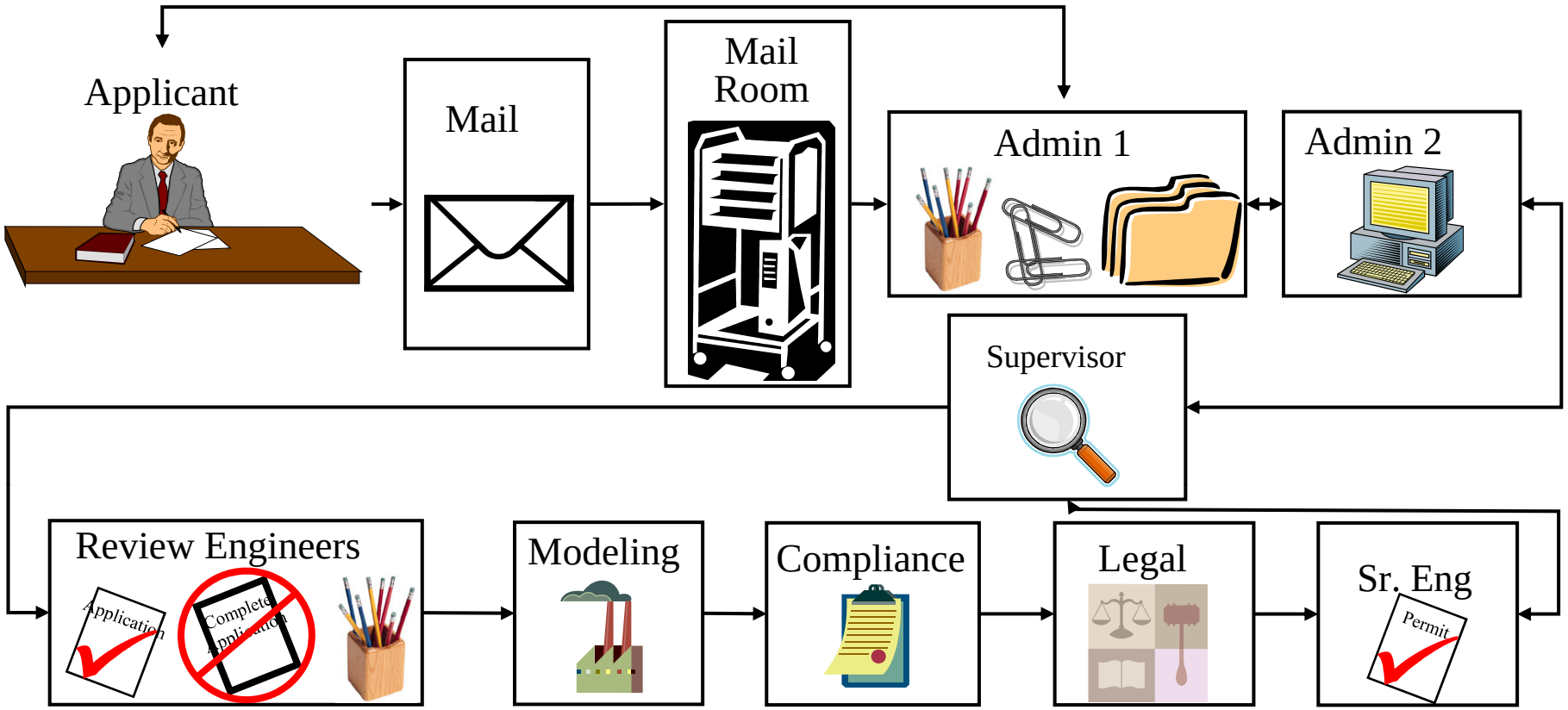


Finalize

Air Permit Process – Layout

Purpose:

To demonstrate the flow of information from the customer through the service line.



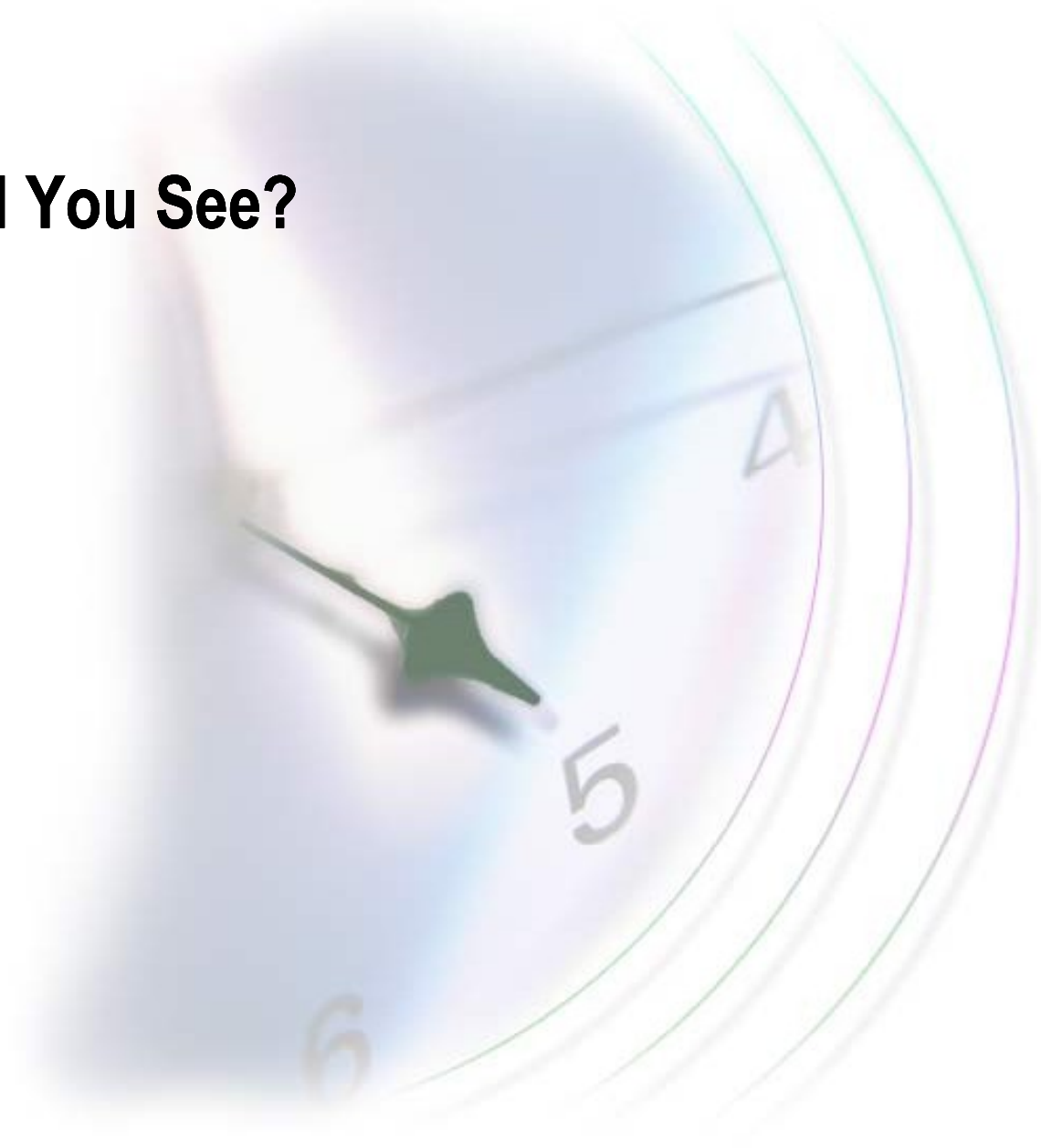
Air Permit Application – Goals

Our Goals Today:

- Complete each process step with the highest quality standard possible
- Each department must be as efficient as possible
- Everyone must follow their standard work
- Everyone must be customer focused to achieve a high level of customer satisfaction

Air Permit Processing

What Did You See?



Summary of Observations

- *Many non-value added steps*
- *Inefficient transfer of information*
- *No flow or sensitivity to customer needs*
- *Not able to respond effectively to errors / missing information*
- *Long lead time*

"You can observe a lot by just watching" - Yogi Berra

Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- Identify value adding and non-value adding activities and set new performance targets
- Create process flow
- Pace work to customer demand
- Reduce variation and improve quality
- Intense focus on daily performance management and visual control

Steps to Implementing LeanSigma

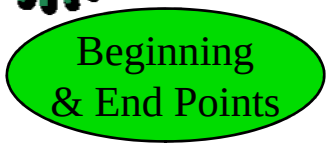
- **Create a business process map to identify areas of opportunity**

What is a Business Process Map?

A tool used to:

- Display the current process and information flow from the customer request through the delivery of the service to the customer
- Identify opportunities and establish project priority
- Identify and set the vision for the future state Business Process Map.

Flow Map Shapes



Beginning and end points of the process

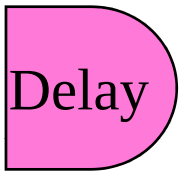
Use 3”x3” green post-its.

Any task / activity where work is performed.

Use 3”x5” yellow post-its.

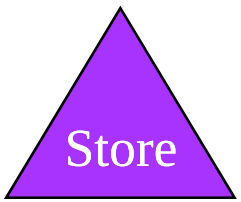
Places where information is checked against established criteria (standards) & decision made on what to do next.

Use 3”x3” blue post-its. Orient post-it as shown.



Any time information is waiting before the next process or decision (i.e. in-baskets, out-baskets, waiting to be batched).

Use 3”x3” pink post-its.

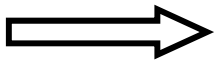


When information / product is placed in inventory (i.e. a file cabinet, directory). It may be used at some point in time.

Use 3”x3” purple post-its.

Flow Map Arrows

Single straight arrow – used between tasks performed by same person or area, but no physical movement has occurred.

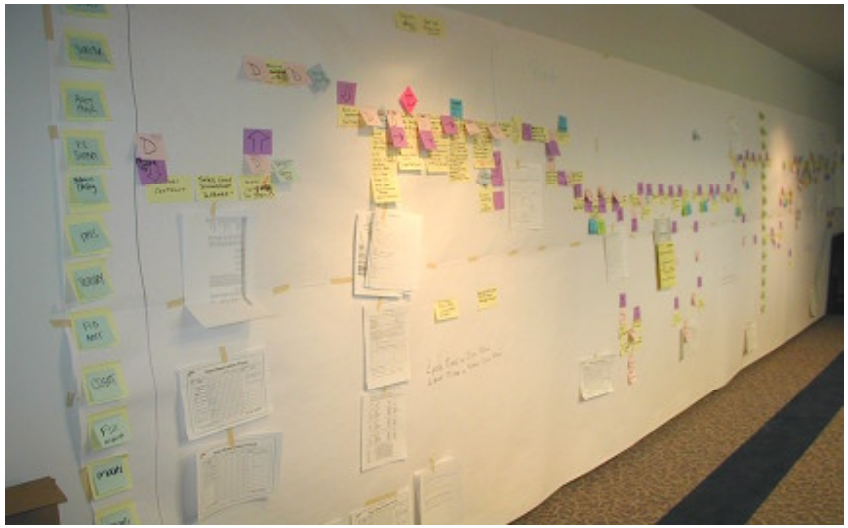


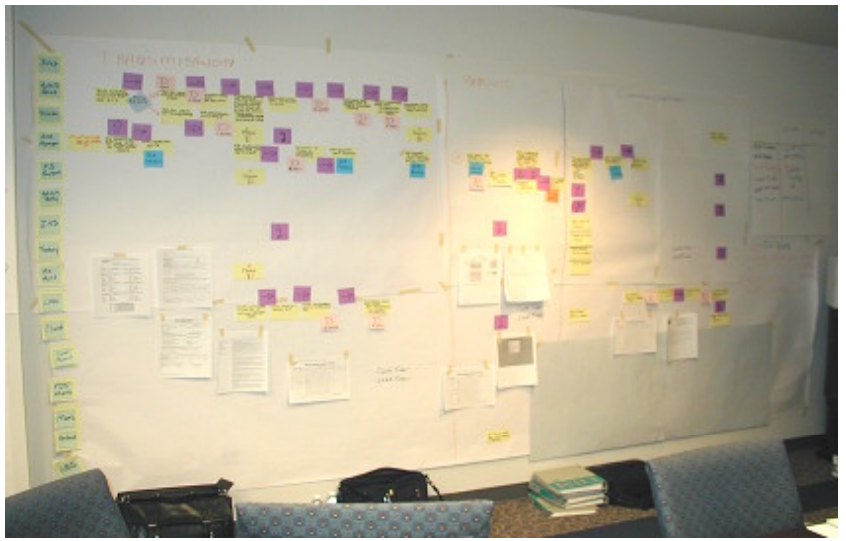
Box arrow – indicates physical movement of information / product from one person / function to another.

Jagged arrow – indicates electronic movement of information from one person / function to another.

- **Place all arrows on 3”x3” or 3”x5” purple post-its.**
- **Collect and display forms and screen shots used at each task.**
- **Draw an example of how to put in inputs & outputs.**
- **These would be important in understanding information paths and useful in the analysis and resolution of issues.**

Process Flow Map





Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- **Identify value adding and non-value adding activities and set new performance targets**

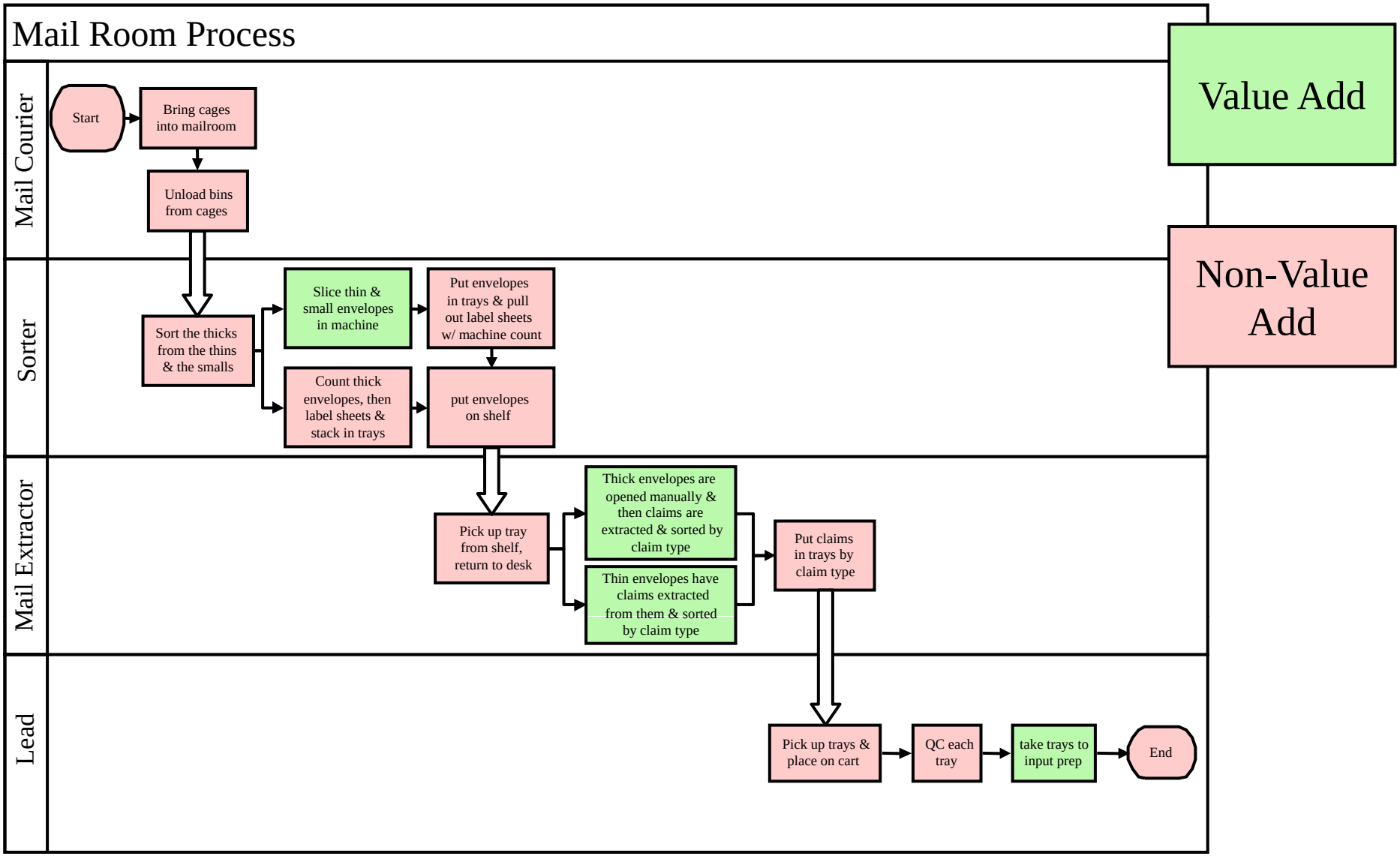
Value-Adding Activities

- *Transform materials and information into programs and services the customer wants and it is done right the first time*

Non-Value-Adding Activities

- *Consume resources, but don't directly contribute to product or service*

Process Flow Map



Lead-Time Reduction

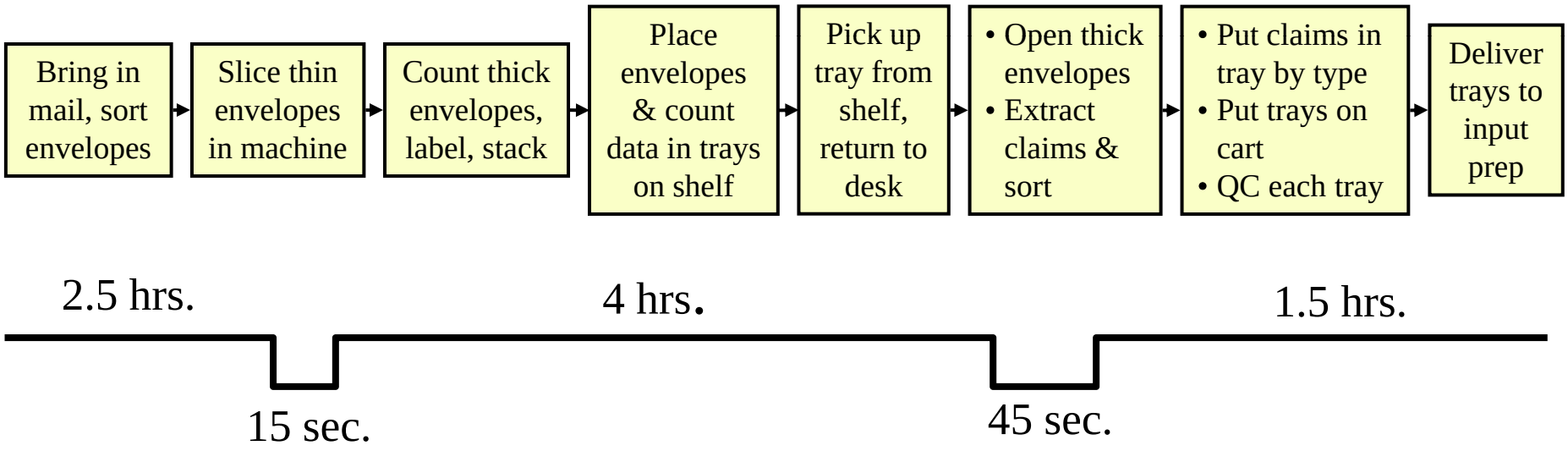
Identify and eliminate waste

- *Defects and loop-backs*
- *Hand-offs*
- *Over-producing*
- *Unnecessary processing*
- *Decisions in process*
- *Excess transportation*
- *Waiting*

Causes of Waste

- Functional Organization
- MIS Technology Gaps
- Excessive Controls
- Dated Process Design
- No Back-up/Cross Training
- Unbalanced Workload
- Computer System Batching
- Changing Management Priorities
- No Decision Rules
- Poor Visual Control
- Disorganized Workplace
- Lack of Training
- Obsolete Forms or Form Design
- Poor Layout

Value Adding by Process



Lead time = 8 hrs.

Value Add time = 1 minute

$$\text{Value Add \%} = \frac{1 \text{ min.}}{8 \text{ hrs. x } 60 \text{ min.}} = 0.2\%$$

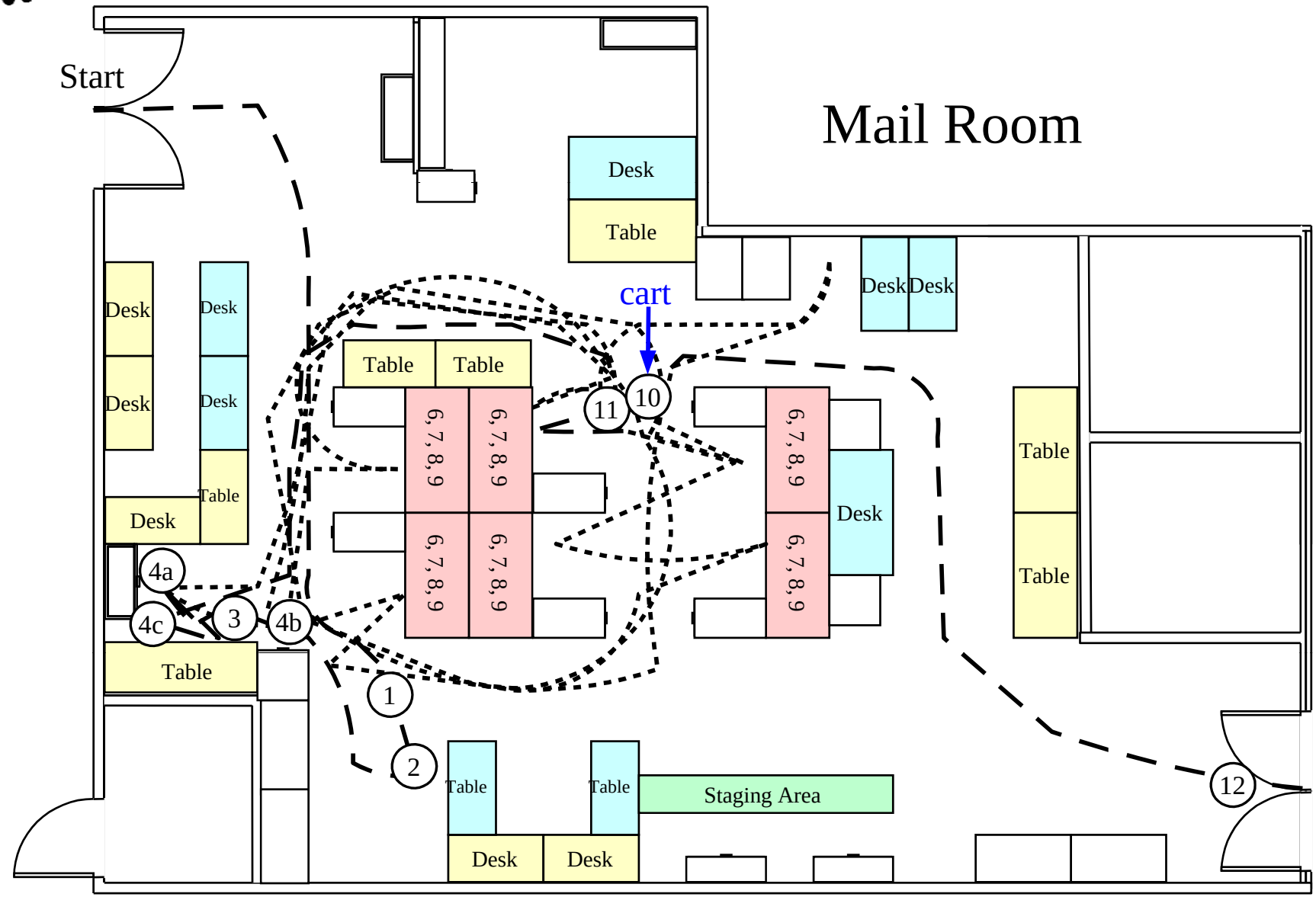
Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- Identify value adding and non-value adding activities and set new performance targets
- Identify Process Waste
- **Create process flow**

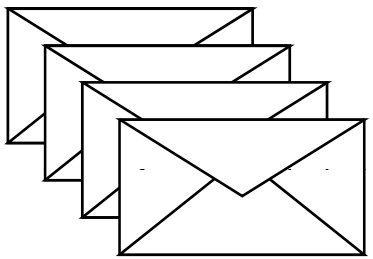
Spaghetti Diagram

- Shows information flow
- Shows staff flow
- Aids in identifying wasteful activities by viewing it from the basis of physical layout
- Shows what is actually happening versus what people think happens
- Familiarizes everyone with the process
- Identifies variations in information handling/storage

Spaghetti Diagram Example



Batch Mode

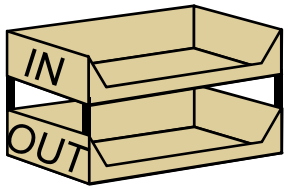


Open Mail

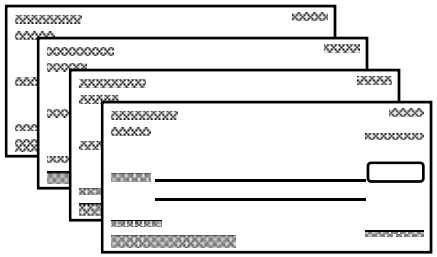
Batch Invoices

Calculate Batch Total

Enter Batch



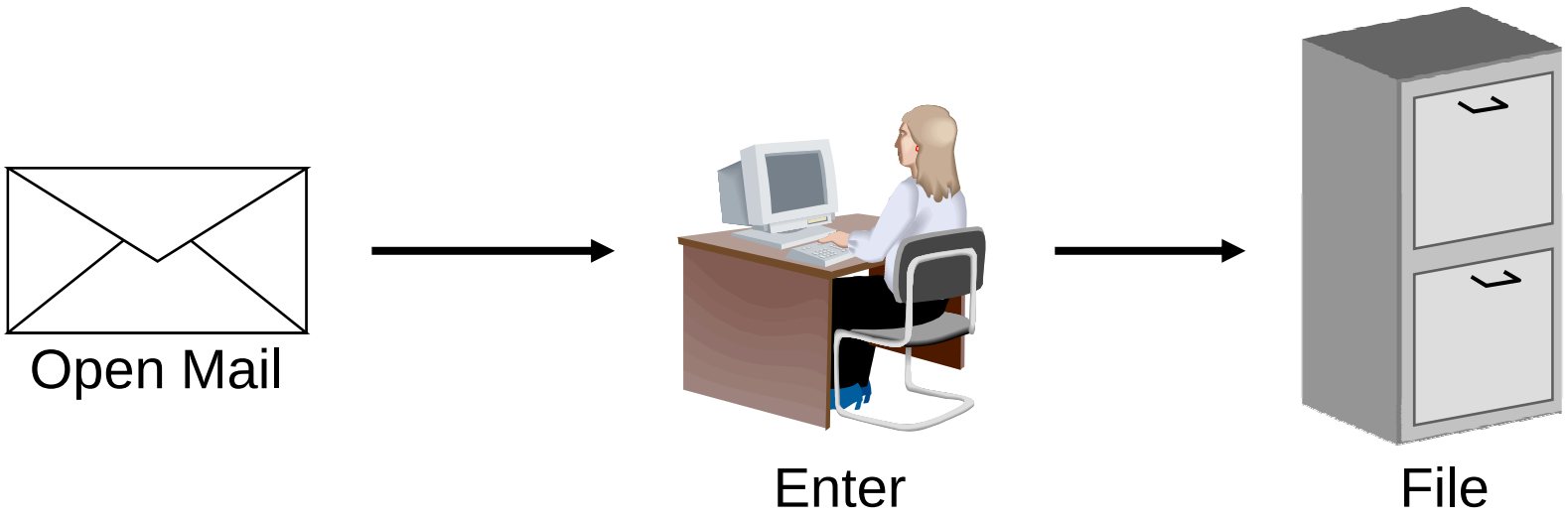
Stack & Hold



Voucher

File Batch

One Piece Flow



Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- Identify value adding and non-value adding activities and set new performance targets
- Create process flow
- **Pace work to customer demand**

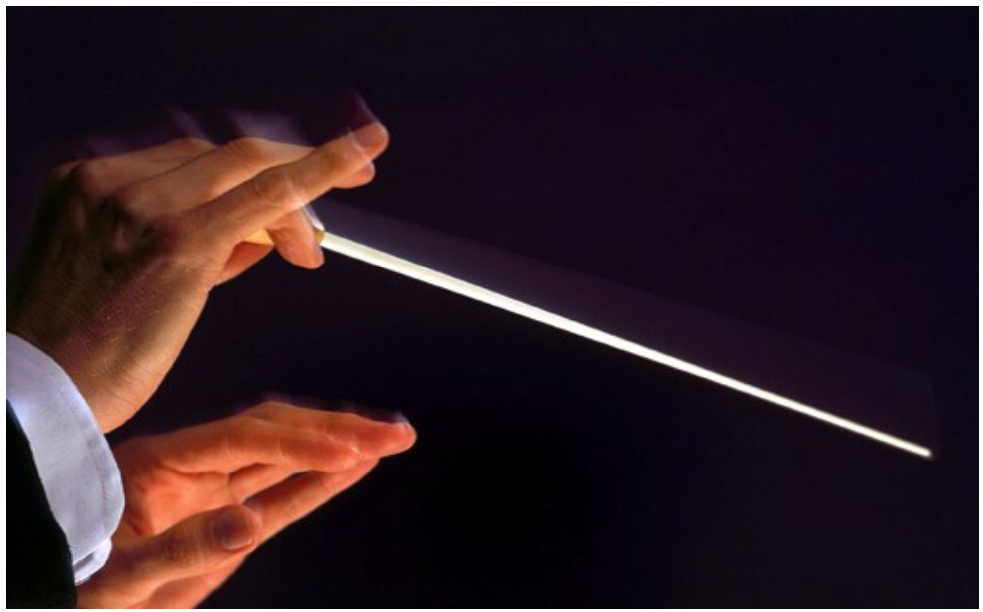
Precisely matches production to customer demand

Daily production rate (in seconds per piece)

Net Operating Time per Period*

Divided by

Customer Requirements per Period*



*** Time periods must be consistent (shift, day, week . . .)**

Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- Identify value adding and non-value adding activities and set new performance targets
- Identify Process Waste
- Create process flow
- Pace work to customer demand
- **Reduce variation and improve quality**

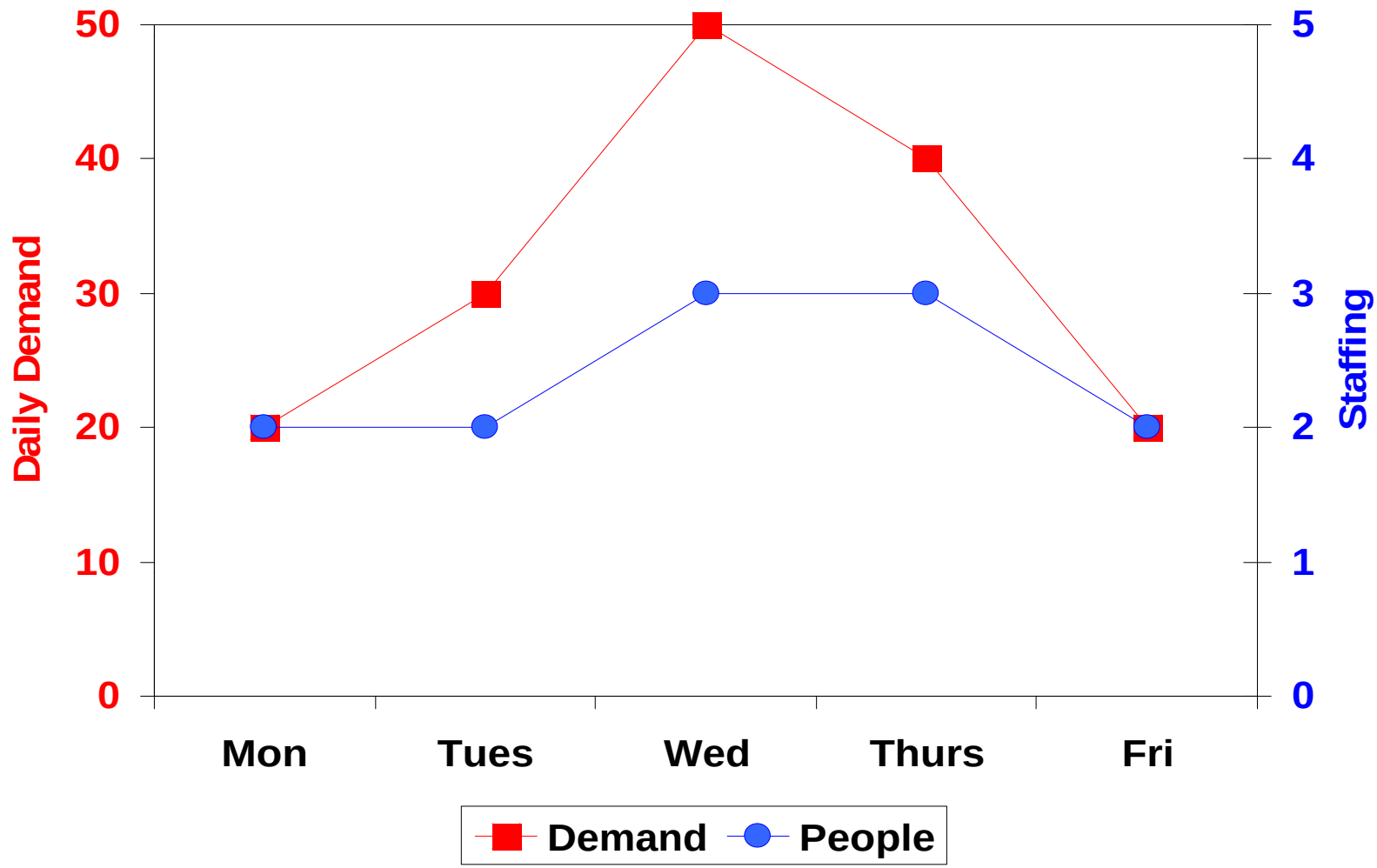
Process Must Be Repetitive

- Customer must always get the same answer no matter who they ask
- Customer must get the same answers no matter what time of the day, or day of the week they ask
- Customer must always get on-time, complete, and accurate information

Reduce Variation

- **Understand variation in volume**
  - Time of Day
  - Day of Week
  - Week of Month
  - Month of Year

Vary Staffing to Match Demand



Reduce Variation

- **Sources and causes of variation make standard business processes appear to be random, non-standard work**
  - Missing information
  - Wrong information
  - Wrong work sequence
  - Non-standard training processes
  - Non-standard decision aids

Assuring First-Time Quality Means…

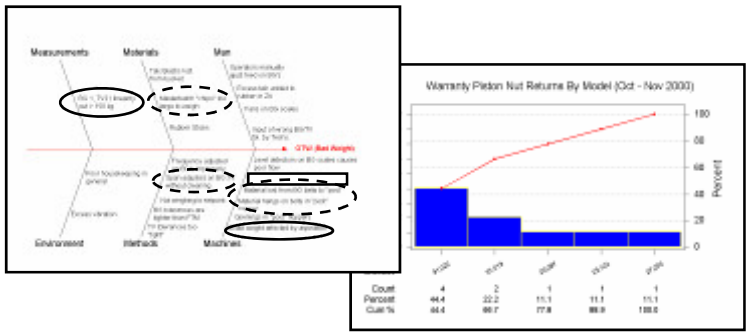
- **Build the system with appropriate information**
- **Build mistake-proofing devices for common problems**
- **Never passing a defect on to the next process;**
  - Detecting abnormalities
  - Responding immediately
  - Eliminating root causes
- **Establish clear decision rules**

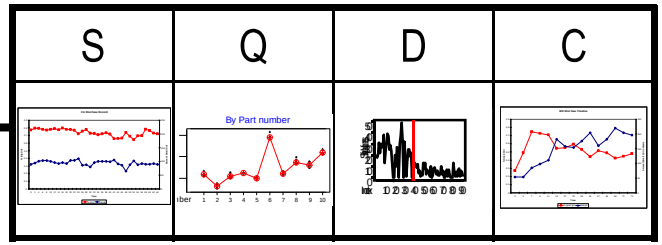
Steps to Implementing LeanSigma

- Create a business process map to identify areas of opportunity
- Identify value adding and non-value adding activities and set new performance targets
- Identify Process Waste
- Create process flow
- Reduce variation and improve quality
- **Intense focus on daily performance management and visual control**

Visual Management

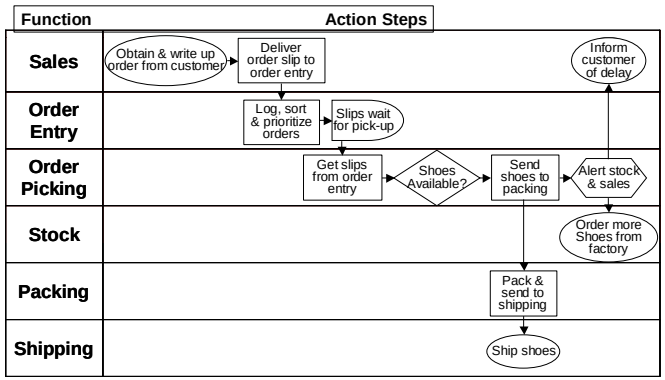
Alert



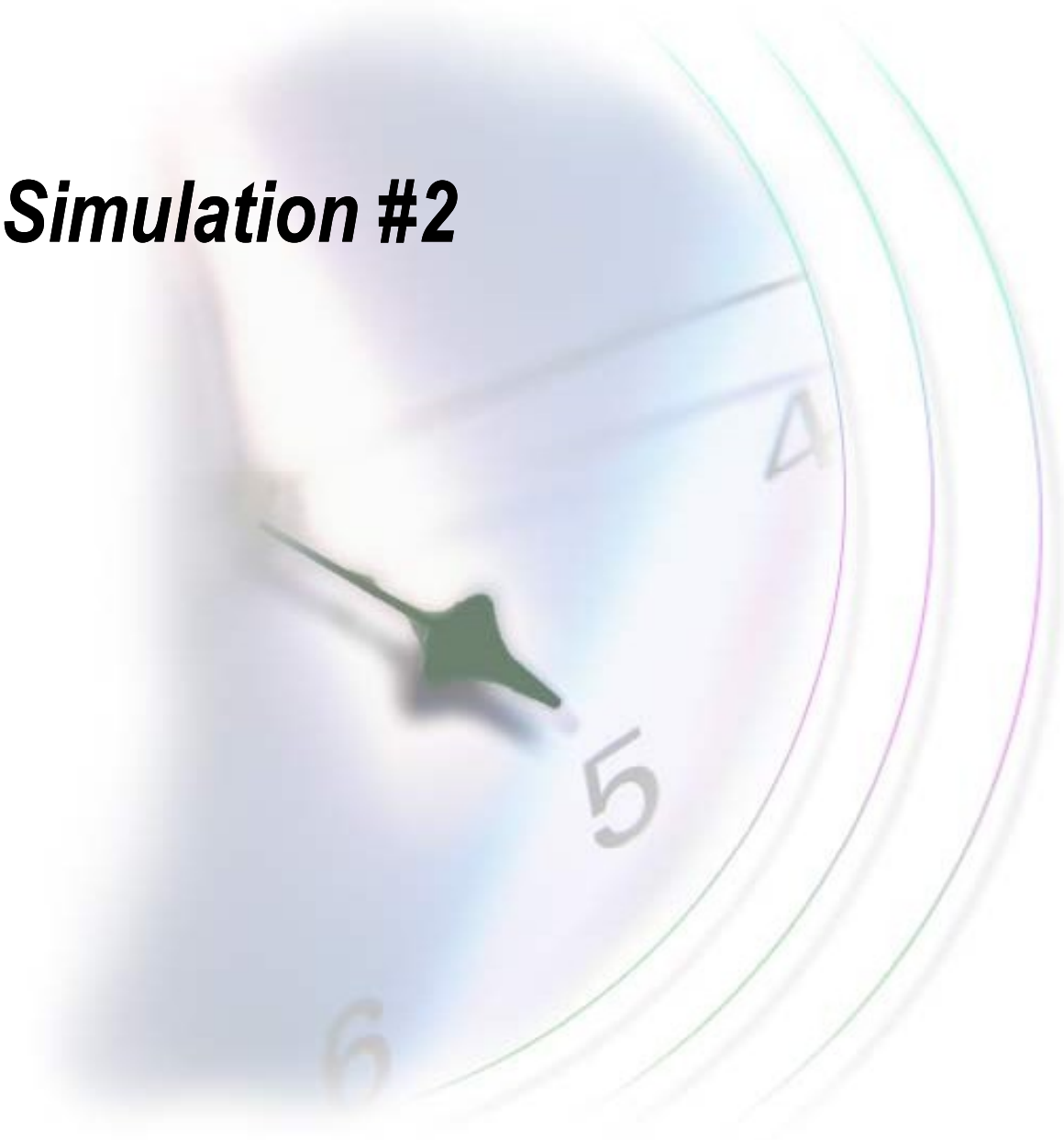


Prevent

React



Simulation #2



What Did You See?

Summary of Observations

- Linked operations in sequence
- Reduced waiting time between process steps
- Redundant or rework process steps eliminated
- Process paced to customer demand
- “Line stop” – Internal defects are not passed on
- Paperwork reduced
- More opportunity

Change the Culture

Cultural Transformation

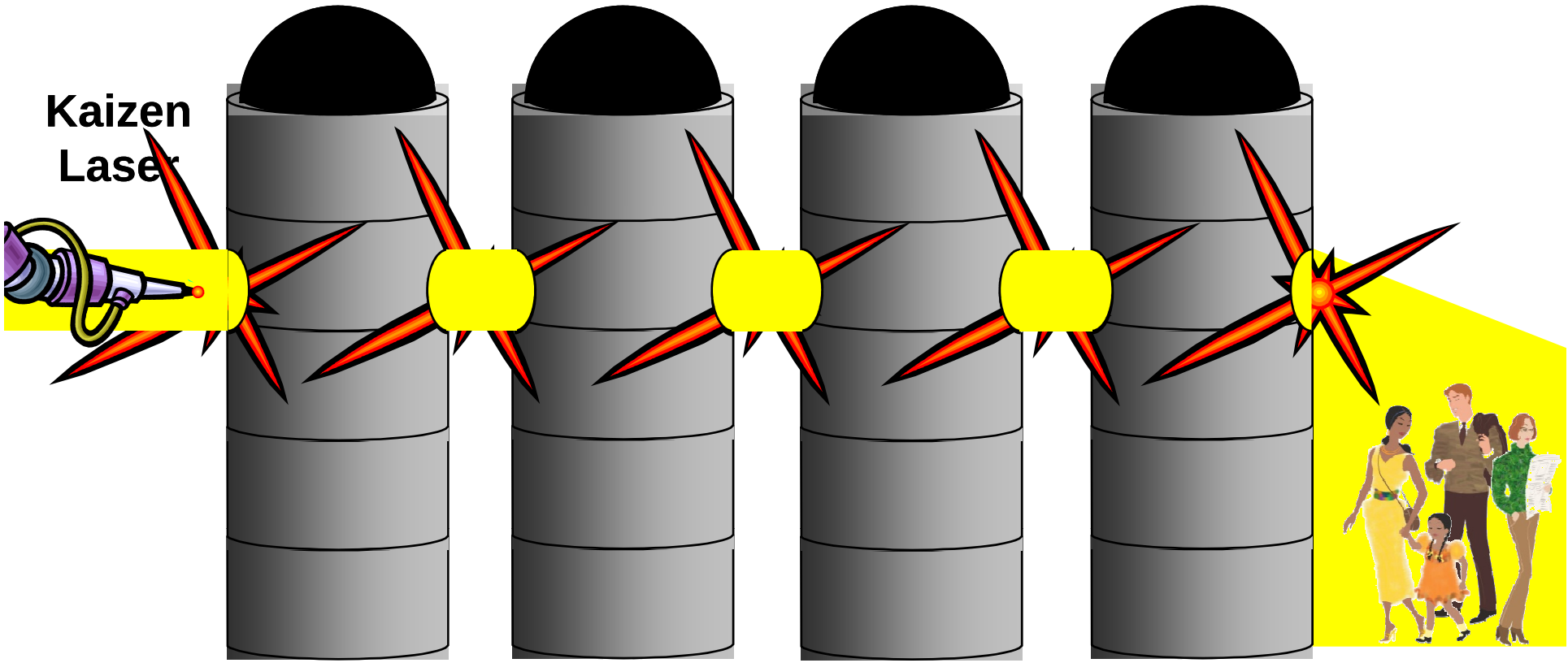
Cultural change: long-term process requiring

- Deliberate change in management attitude
- Participation and empowerment
- Fundamental policy changes

Sustaining change requires

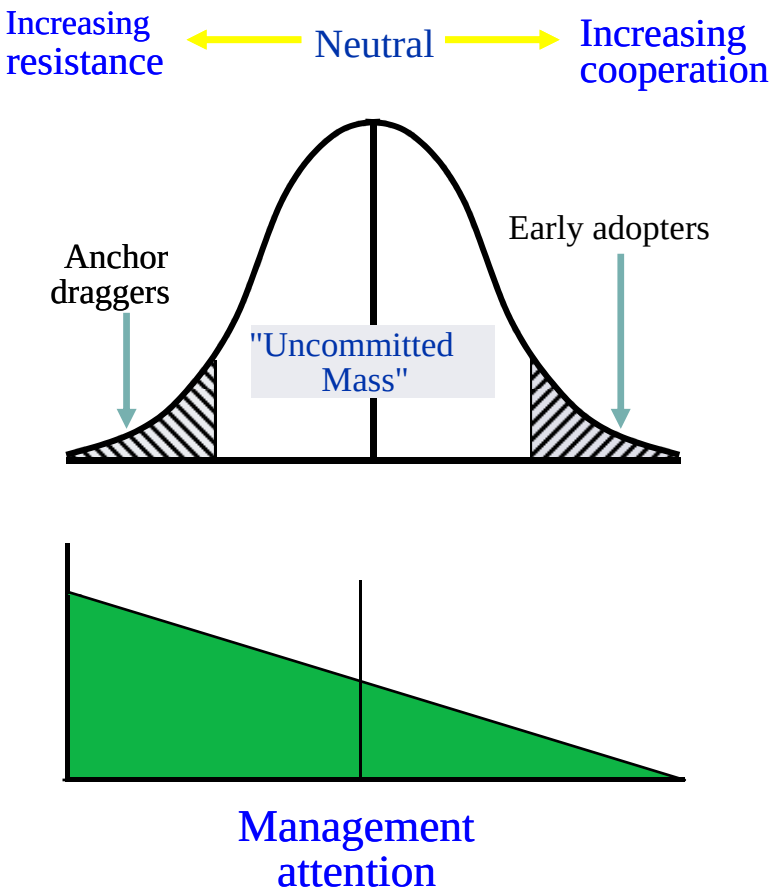
- Align performance measures
- Constant communications

Life In the Government Silo

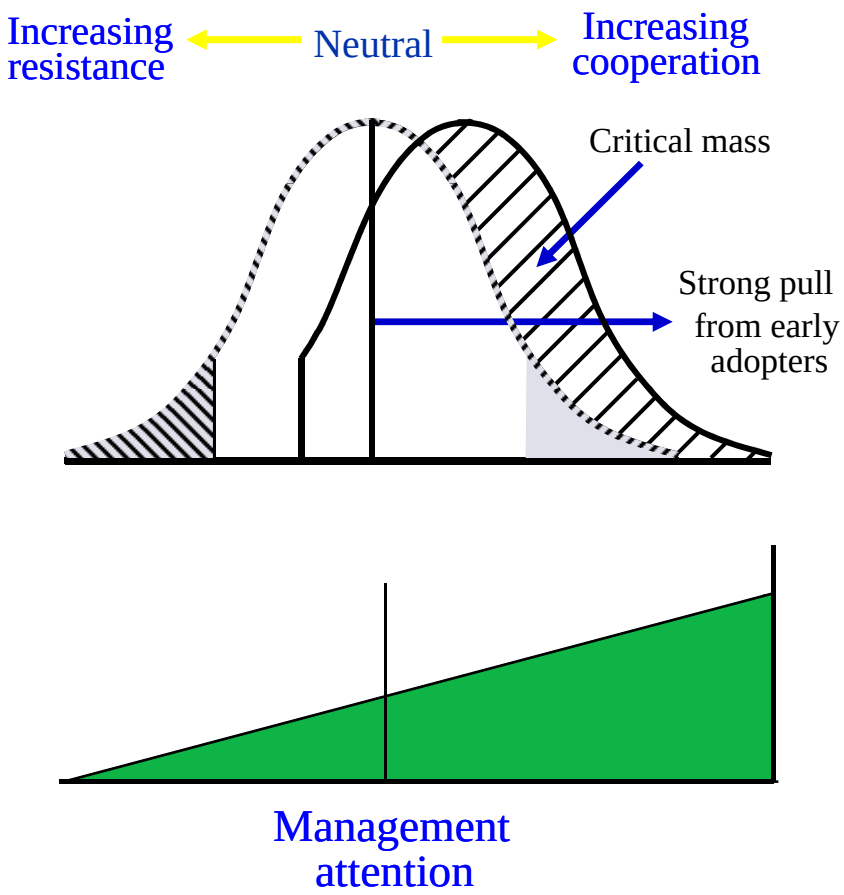


Managing Resistance

Traditional Situation



Promoting Change



Culture Change - Summary

- **Hands-on senior management involvement**
- **Link kaizen projects to agency objectives**
- **Effective performance measures**
  - Aligned to agency plan
  - Linked to kaizen results
  - Daily performance metrics with countermeasures
- **Engage the organization in the change process**
  - Kaizen participation
  - Middle management skill development
  - Communication & promotion

What's Next?

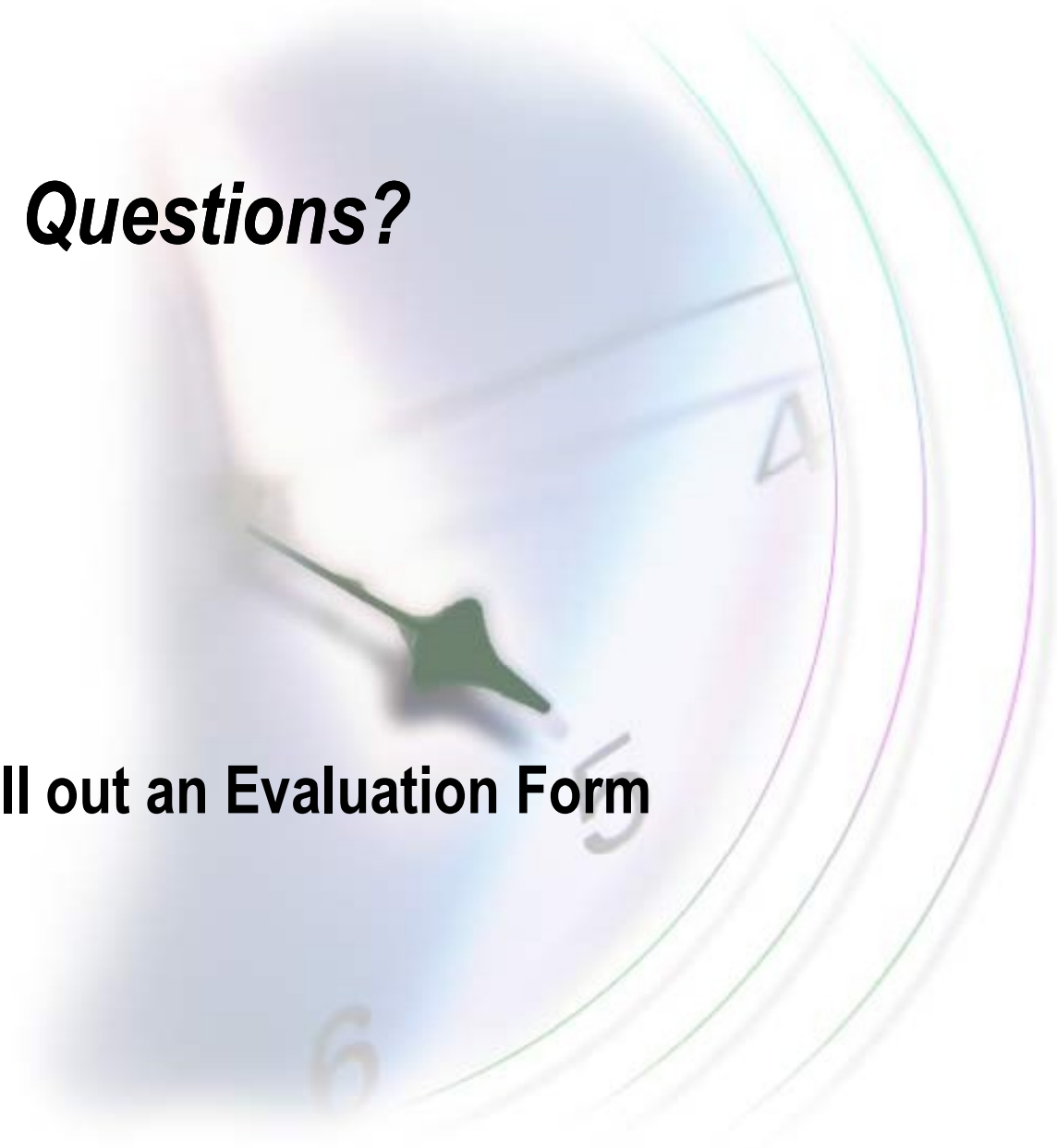
What's Next?

- **Identify areas that can benefit from process improvement**
  - What's the problem
  - What's the impact of improving the process
  - How is success measured
- **Planning the event**
  - Identify stakeholders
  - Determine scope of project
  - Determine timing of the event
  - Determine necessary support

What to Expect from Your LeanSigma Transformation

- Physical transformation that improves responsiveness, quality, cost & customer service
- Cultural Transformation that energizes the workforce, releases creativity and encourages teamwork to sustain the improvements
- Efficiency and effectiveness that delivers excellence to all stakeholders

Questions?



Please fill out an Evaluation Form