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# Lean Six Sigma A Methodology To Improve Performance

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*MQQ Certified Lean Master*



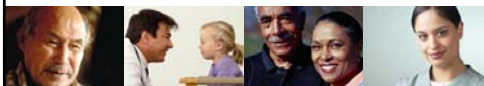
CPSQA  
Member's Event  
2010-11-24

Canada 

## Lean Six Sigma

### Presentation Plan

09:15 to 09:30	Introduction
09:30 to 10:00	Why & What of Lean Six Sigma
10:00 to 10:30	Reduce Cycle Time & Backlog
10:30 to 10:45	Group discussion & questions



## Lean Six Sigma Paradigms Shift

### Government vs Private Sector Organizations

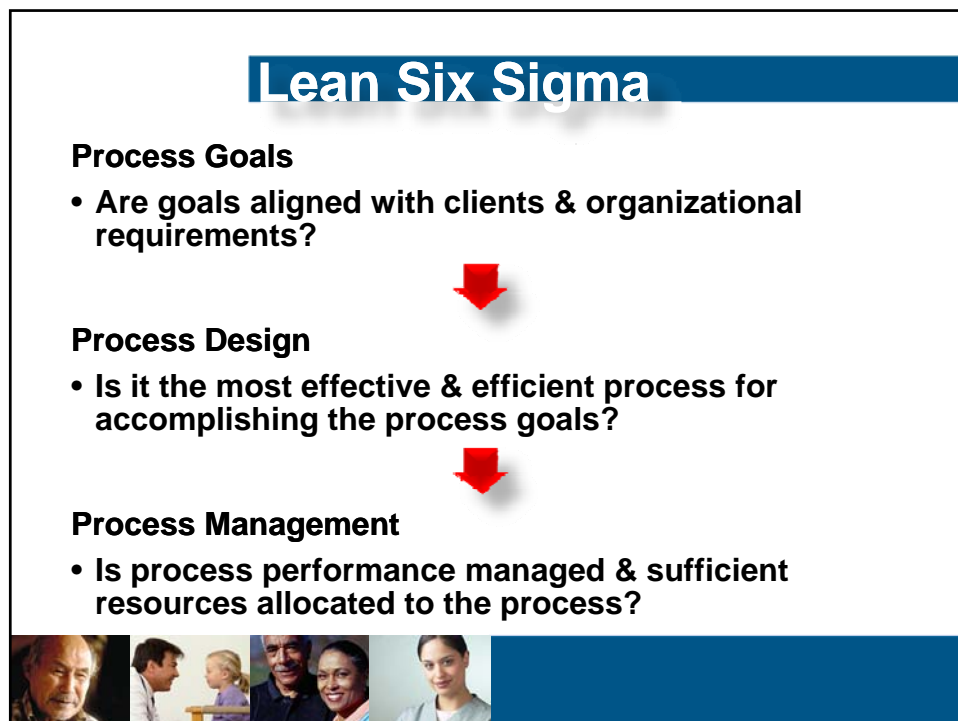
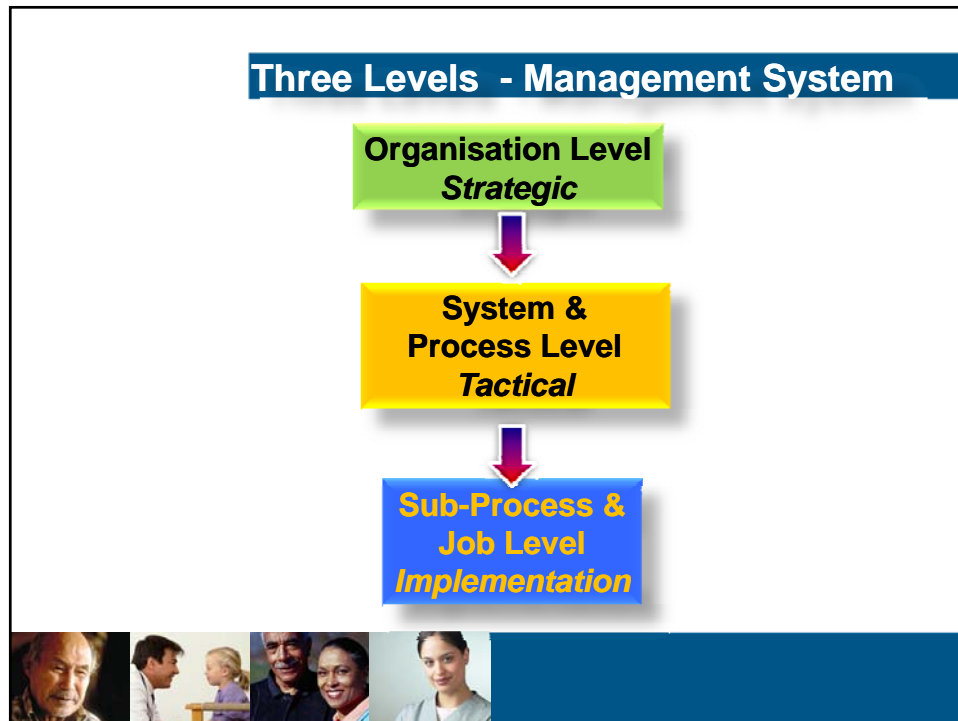
- Popular misconceptions in Government
  - Widgets
  - Clients
  - Profits

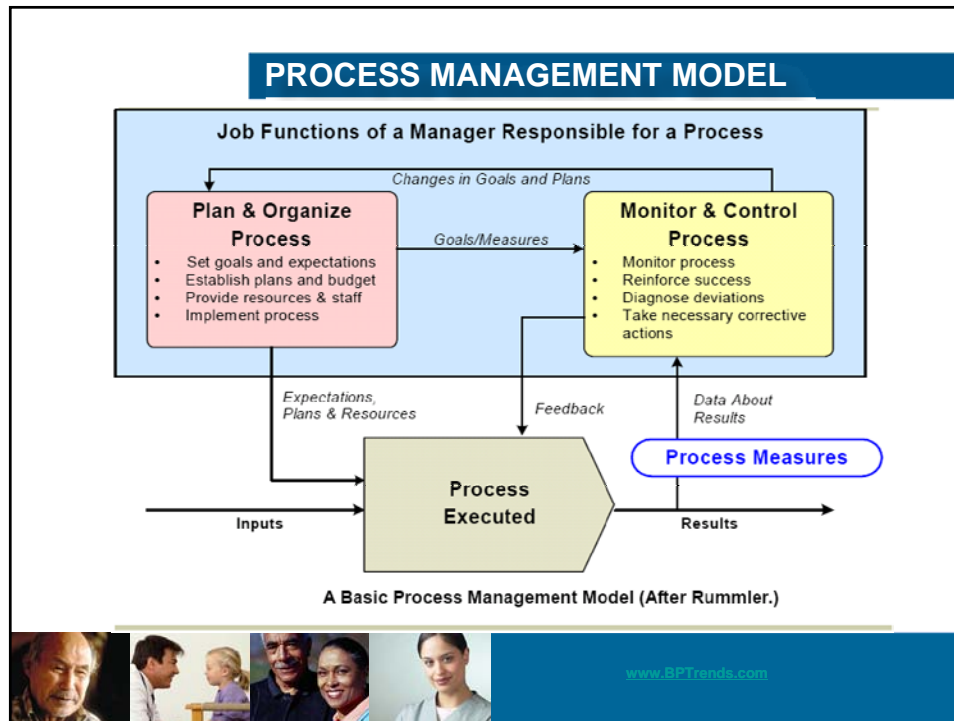


## Lean Six Sigma Target Areas

- Licensing
- Policy development
- Strategic plan
- Drug programmes
- Inspections
- Accounting
- Product Safety Assessment
- Budget Reports
- Epidemiology

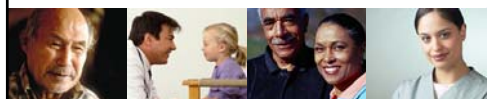






## Lean Six Sigma Benefits

- ✓ Better management of operational workload
- ✓ Increase productivity
- ✓ Better planning
- ✓ Increase client satisfaction
- ✓ Cost reduction
- ✓ Performance indicators
- ✓ Management dashboard

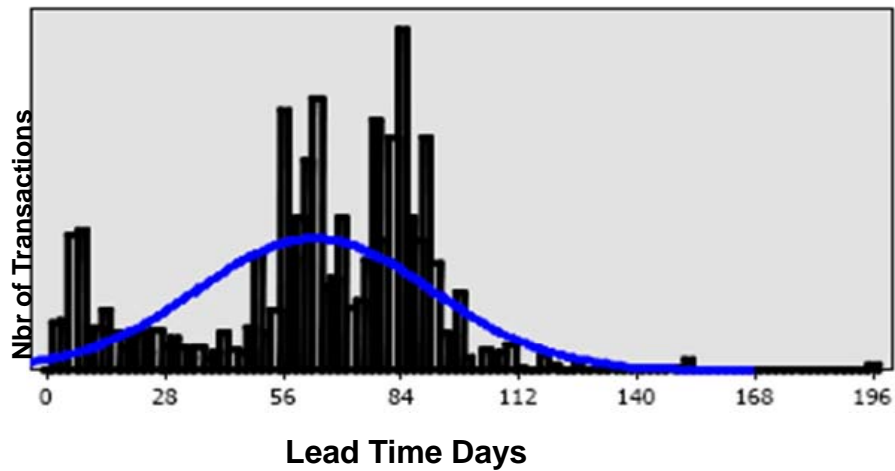


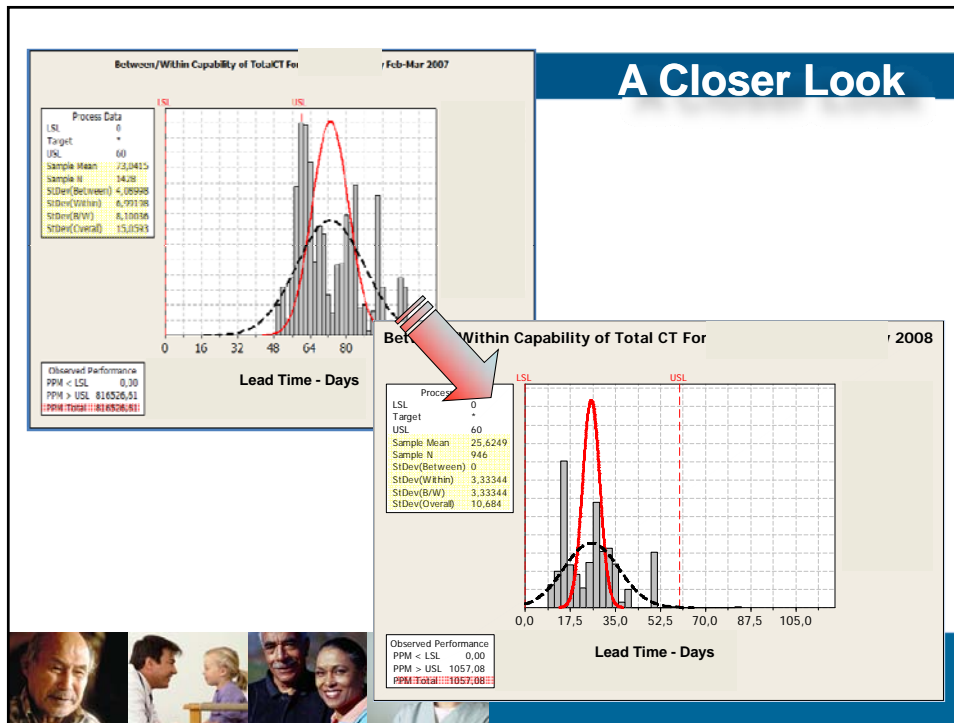
# Six Sigma

## Identifying the cause



### Typical Process Profile





## Lean Six Sigma

Other factors to investigate include:

- Completeness of client request
- Type of transaction
- Office layout
- Balancing workload
- Email, web, fax, phone and postal service



## Lean

### Reducing non-value added activities



## 'Lean' at its Best

### SYNCHRONIZED PIT STOP

Timing is everything for the six-member pit crew. Their roles in a typical 11-second pit stop:

- Counting starts** ⌚ Car stops in pit box. The crew is already over the wall.
- 1 second** ⌚ Crew in position. Car lifted on airjack.
- 6 seconds** ⌚ All four tires changed.
- 7 seconds** ⌚ Drop car off airjack.
- 10 seconds** ⌚ Finish fueling and make any adjustments to the car (assumes a 35-gallon fill).
- 11 seconds** ⌚ Car leaves pit box.



## Parallel Between Lean Management Traffic Management

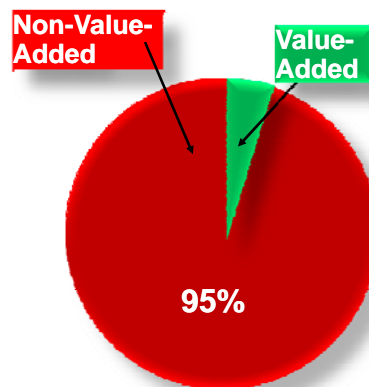


<http://www.oti.dot.gov/index.htm>



## Typical Non-Value-Added Activities

1. Overproducing, Not Needed
2. Waiting
3. Excess Inventory
4. Extra-processing
5. Defects & Errors
6. Motion
7. Transport & Distribution

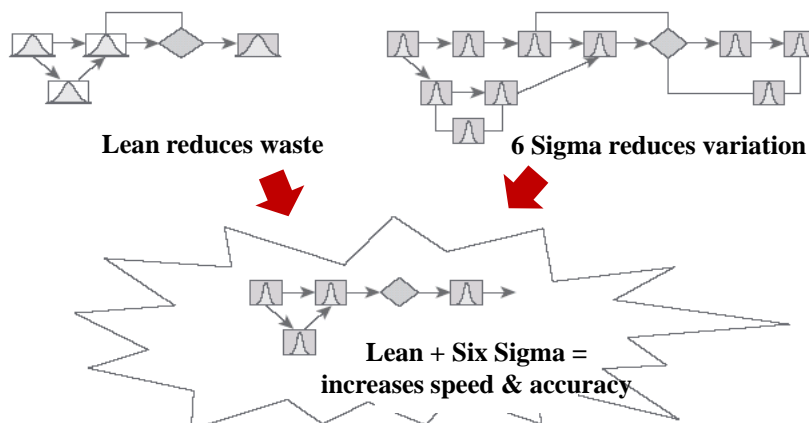




# Lean + Six Sigma = Performance Improvement

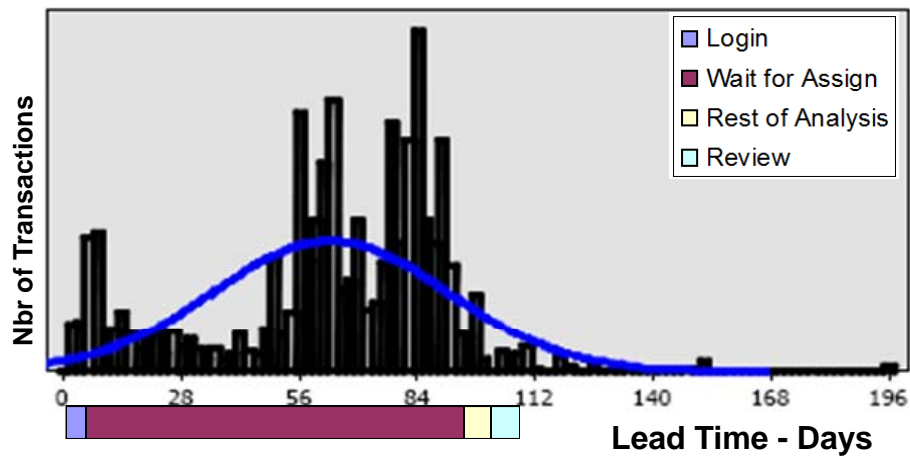


## LEAN & SIX SIGMA IN SUMMARY



Six Sigma Maurice Pillet

## Lean Six Sigma in Reality



## Success Stories

### Licensing program

- Reduce cycle time
- Reduce Costs by about \$200K per year
- Increase of consistency between employees
- Reduce process complexity
- Reduce backlog?

### Testing laboratory

- Reduce cycle time by 66% for one type of analysis process
- Reduce backlog by 99%
- Reduce cost by \$200K per year



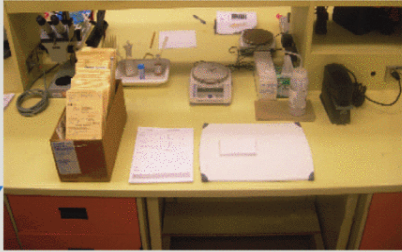
**IMPROVE** D M A I C

### Analysis Cycle Time


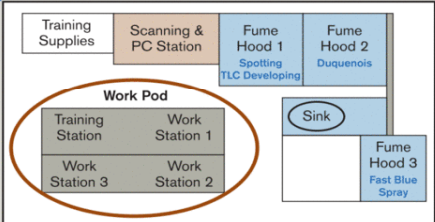
**Improved Work Design**






New work cells addressed:

- Lack of consistent, visible pattern of work
- Random batches or piles of WIP
- Island processes working independently
- Inconsistent or nonexistent flow










**Cell**

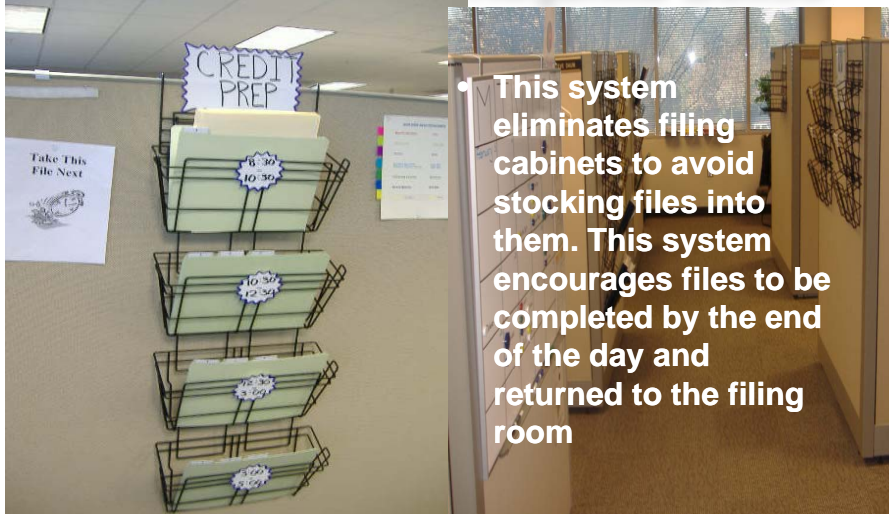
## Office Layout - Impact



## System of Heijunka Boxes



- This system eliminates filing cabinets to avoid stocking files into them. This system encourages files to be completed by the end of the day and returned to the filing room



## Lean Six Sigma

**“It is not the strongest nor the most intelligent of the species that survives, but the one that is most adaptable to change”**



**Thank you**

