



# **JUST-IN-TIME BUSINESS POLICY- CHALLENGES IN NEW MILLENNIUM**

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# PHILOSOPHY OF JUST-IN-TIME

- JIT originated in Japan, post WWII
- Driven by a need survive after the devastation caused by the war
- JIT gained worldwide prominence in the 1970s
- Toyota Motor Co. developed JIT



# SEVEN BASIC TYPES OF WASTE

- Transportation waste
- Process Waste
- Inventory Waste
- Waste of motion
- Waste from product defects
- Waiting time
- Overproduction



# COMMON CAUSES OF WASTE

- Layout (distance)
- Long setup time
- Incapable processes
- Poor maintenance
- Poor work methods
- Lack of training
- Inconsistent performance measures
- Ineffective production planning
- Lack of workplace organization
- Poor supply quality/reliability



# JUST-IN-TIME

- JIT philosophy means getting the right quantity of goods at the right place and the right time
- JIT exceeds the concept of inventory reduction
- JIT is an all-encompassing philosophy found on eliminating waste
- Waste is anything that does not add value
- A broad JIT view is one that encompasses the entire organization



## JIT - CONTINUED

- Often termed “Lean Systems”
- All waste must be eliminated- non value items
- Broad view that entire organization must focus on the same goal - serving customers
- JIT is built on simplicity- the simpler the better
- Focuses on improving every operation- Continuous improvement - Kaizen
- Visibility – all problems must be visible to be identified and solved
- Flexibility to produce different models/features

# THREE ELEMENTS OF JIT



## THREE ELEMENTS OF JIT - CONTINUED

- JIT manufacturing focuses on production system to achieve value-added manufacturing
- TQM is an integrated effort designed to improve quality performance at every level
- Respect for people rests on the philosophy that human resources are an essential part of JIT philosophy





# BENEFITS OF JIT

- Reduction in inventories
- Improved quality
- Shorter lead times
- Lower production costs
- Increased productivity
- Increased machine utilization
- Greater flexibility



# IMPLEMENTING JIT

- Starts with a company shared vision of where it is and where it wants to go
- Management needs to create the right atmosphere
- Implementation needs a designated “Champion”
- Implement the sequence of following steps
  - Make quality improvements
  - Reorganize workplace
  - Reduce setup times



# IMPLEMENTING JIT - CONTINUED

- Reduce lot sizes & lead times
- Implement layout changes
  - Cellular manufacturing & close proximity
- Switch to **pull** production
- Develop relationship with suppliers



# JIT IN SERVICES

- Most of the JIT concepts apply equally to Service companies
  - Improved quality such as timeliness, service consistency, and courtesy
  - Uniform facility loading to provide better service responsiveness
  - Use of multifunction workers
  - Reduction in cycle time
  - Minimizing setup times and parallel processing
  - Workplace organization



# JIT ACROSS THE ORGANIZATION

- JIT eliminates organizational barriers and improves communications
  - Accounting changes or relies on activity-based costing
  - Marketing by interfacing with the customers
  - Finance approves and evaluates financial investments
  - Information systems create the network of information necessary for JIT to function



# CRITIQUE OF JIT

## *Problems*

- System of beliefs and collection of methods
- Successes due to genius of Ohno and Shingo (of Toyota) – they did make tradeoffs
- Moves inventories to suppliers but does not reduce overall
- Workers in JIT environments under high levels of pressure – burn out!



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