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.
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**

- Just-in-Time Manufacturing
- Total Quality Management
- Respect for People
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
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!
BIBLIOGRAPHY