ITT and Process technology

- Matching the process to strategic needs
- Sources of improvement
- Standardization and automation
PROCESS TECHNOLOGY: IN SERVICE COMPANIES
Concept: Match process to life cycle

Image by MIT OpenCourseWare.
Sources of improvement: ITT example

- (a) Learning in a centralized process-development context
- (b) Learning by front-line workers in a facility
Factors in automation

- Business issues such as flexibility and fit with strategy
- Operational issues such as repeatability and precision and effect on performance drivers such as time to market (e.g. Pharmaceutical)
- Regulatory issues
- Social issues such as technological environment and workforce implications
- Labor costs
- Sources of improvement and performance drivers
Intel and copy exactly

- Run multiple sites identically to lead plant
  - Process parameters
  - Equipment sets
  - Maintenance
  - Training
  - Specifications/documentation
- Started when fab start-up yields lagged behind development fabs
Copy exactly requires additional structure

- Structure
  - Joint engineering teams and control boards
  - Senior management review
  - Problem is problem for entire team

- Issues?
Standardization factors

- Product standardization (does it vary by market)
- Stability of technology (do new technologies leapfrog or evolve)
- Basis for learning (technology or worker based)
- Levels of volume (e.g., cars in Brazil)
- Ranges of technologies and impact of labor (can you use manual at low volumes)
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