

Quality Management

Quality Assurance

Total Quality Management

Quality Management

- Progressively developed since end WW II
- Popular in Australia since mid 1980s - coinciding with economic internationalisation
- Influence now mainstream, declining as management trend
- Competitive strategy - price & quality

Quality Management

- TQM - management philosophy of production & organisation culture
- Quality Assurance - 'building in' quality during production, ISO accreditation, operator emphasis
- Quality Control - post-production error correction, inspection

Quality Management

- Works within existing system
- Evolutionary process
- Incremental innovation - 'step change'
- Appropriate pace of change?

Business Process Reengineering

- Revolutionary, not evolutionary
- Complete redesign of business operations & work organisation
- ‘Paradigm shift’ based on information & communications technologies

Management of change

- Capacity of systems & people to create & absorb change
- Position in change - change agent or change target?
- Systemic gains & consolidation before rethinking again
- Continuous improvement
- Change fatigue & systemic breakdown

Pareto Principle

- Vilfredo Pareto - Italian economist
- 80:20 principle - 80% of issues caused by 20% of factors
- Attention to the 'significant few' to improve overall effectiveness

TQM

- Change to production process & management culture
- Increase product conformity within defined specification
- Decrease cost of reworking faulty product
- Enhances worker role in process

Quality costs =
Failure costs + Appraisal costs +
Prevention costs

TQM

- Key to success of Japanese manufacturing post WW II
- Influence of Dr W E Deming

Deming's Philosophy

- Universal system variability
- High quality saves \$ long term
- People work within a system
- Everyone serves a customer - internal, external
- Proactive, not reactive improvement - plan not event driven
- Systems thinking - control processes, not outputs

Quality Assurance

- Establishing set process methods & procedures
- Explicit articulation of processes
- Recognition of QA efforts - ISO accreditation
- Measuring effectiveness of processes, over time, internally & externally
- Benchmarking
- Continuous improvement

Quality Management issues

- Benchmarking - industry, process, who, for whom, for what?
- Limitations of continuous improvement
- Communications of improvements
- Change fatigue
- Future of quality management