Continuous Improvement Toolkit

Process Redesign

Managing Risk

PDPC

FMEA RAID Logs

Fault Tree Analysis

Risk Assessment* Decision Tree

Traffic Light Assessment

Deciding & Selecting

Pros and Cons

Importance-Urgency Mapping

Break-even Analysis

Cost -Benefit Analysis

Force Field Analysis

Voting SWOT

Pugh Matrix

QFD Matrix Diagram TPN Analysis

Kano Analysis Prioritization Matrix

Critical-to Tree Paired Comparison

Planning & Project Management*

RACI Matrix Stakeholders Analysis

PEST PERT/CPM Activity Diagram

Roadmaps Project Charter Gantt Chart

PDCA Control Planning

Gap Analysis

Hoshin Kanri Kaizen

How-How Diagram

Tree Diagram** Standard work

Identifying & Implementing Solutions***

Simulation TPM

Mistake Proofing

Pull Systems JIT Ergonomics

Work Balancing Automation

Bottleneck Analysis Visual Management

Flow 5S

Value Analysis

SMED

Understanding Performance

Lean Measures KPIs

OEE Capability Indices

MSA RTY Descriptive Statistics

Cost of Quality

Reliability Analysis Graphical Analysis

Run Charts

Control Charts

Benchmarking Sampling

Understanding Cause & Effect

Cause & Effect Matrix Pareto Analysis

Confidence Intervals

Probability Distributions ANOVA

Hypothesis Testing Design of Experiments

Scatter Plot Correlation Regression

5 Whys Chi-Square Test Multi-Vari Charts

Relations Mapping*

Fishbone Diagram

Data Collection

Focus groups Interviews

Photography Check Sheets

Measles Charts Surveys

Critical Incident Technique

Observations

Creating Ideas**

Brainstorming Analogy SCAMPER***

Nominal Group Technique Mind Mapping*

Affinity Diagram Attribute Analysis

TRIZ***

Lateral Thinking Visioning

Designing & Analyzing Processes

Wastes Analysis

Time Value Map Process Redesign

IDEF0 Value Stream Mapping SIPOC

Flow Process Chart Process Mapping

Flowcharting Service Blueprints

Continuous Improvement Toolkit . www.citoolkit.com

- Process Redesign

❑ A practice of rethinking and redesigning the way work is done.

❑ Used to better support the mission and goals of the organization.

❑ It eliminates the need of downsizing, reengineering, reorganization, and big technological innovation projects.

Strategic Visioning

Business Process Reengineering

Business Process Redesign

Continuous Process Improvement
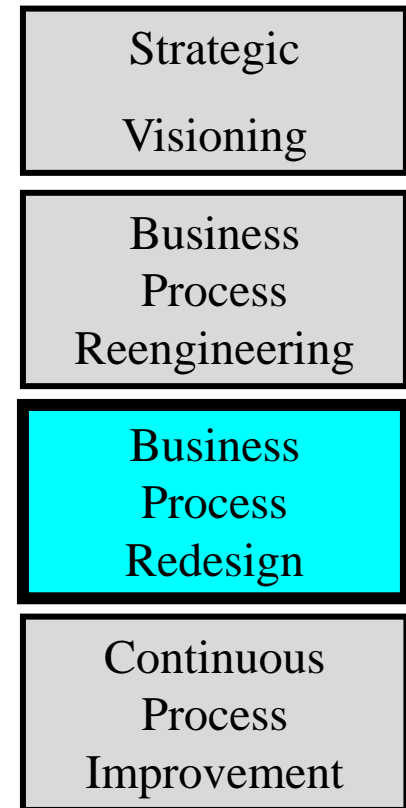
- Process Redesign

❑ It identifies the changes needed that give the best payoffs.

❑ Expected payoffs and risk are carefully estimated.

❑ Business processes that can be redesigned range from manufacturing and production, to sales and customer service.

❑ **Benefits:**

- Improve quality.
- Improve productivity.
- Reduce waste and costs.
- Enhance services and customer's satisfaction.

- Process Redesign

Performance Measures:

❑ A measurement system should be in place to monitor key metrics over time.

❑ **Key metrics include:**

- Return on investment.
- Cost reduction.
- Quality of service.
- Customer satisfaction.

- Process Redesign

Approach:

❑ Identify Process to be redesigned.

❑ Review/develop process map "As is".

❑ Identify bottleneck/waste.

❑ Seek opportunities for improvement (benchmarking, etc.).

❑ Redesign process map "Should be".

❑ Implement planning.

❑ Streamline.

❑ Monitor performance.

❑ Evaluate the new design.
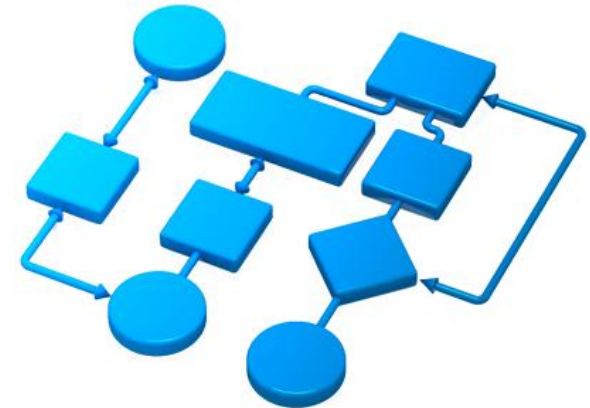
- Process Redesign

Future State Questions:

❑ How can we remove bottlenecks?

❑ How can we remove waste?

❑ How can we create flow?

❑ How can we deal with the different levels of complexity.

❑ Where there are opportunities to implement mistake proofing?

❑ How can we reduce the risks identified in the FMEA?

❑ What about customer demand?

❑ Who may be the best performing organization for that particular process? How do they do it?

Process Mapping:
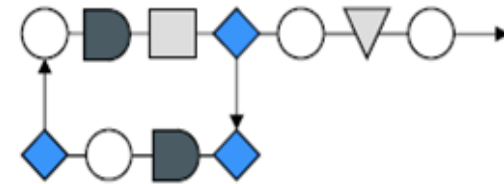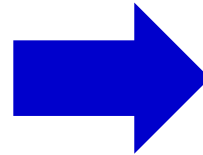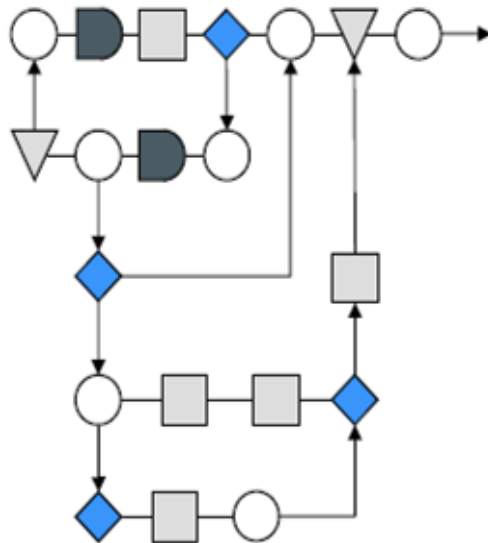
As Is Process Map   Should Be Process Map

- Process Redesign

Design for Six Sigma:

❑ A systematic methodology to enable the design of processes that meet customer expectations at a Six Sigma level.

❑ Used for already optimized processes that still fall short of expectations.

❑ **Uses of tools such as:**

  • Quality Function Deployment.
  • FMEA.
  • Benchmarking.
  • Simulation.
  • Error proofing.
  • Robust Design.

- Process Redesign

Further Information:

❑ Sound project management skills and practices are required.

❑ For changes involve investments, the time value of money must be considered.

❑ The impact on people must also be factored into the evaluation of the new design, such as:

- Skills.
- Training requirement.
- Resistance to change.

❑ The redesigned process is documented once again as the "after" view of the process.