Continuous Improvement Toolkit

Affinity Diagram
The Continuous Improvement Map

Managing
- Risk
- FMEA
- PDPC
- RAID Log*
- Risk Assessment*
- Fault Tree Analysis
- Traffic Light Assessment
- Lean Measures
- Bottleneck Analysis**
- Process Yield
- Capability Indices
- Gap Analysis*
- Reliability Analysis

Understanding Performance
- Benchmarking**
- Control Charts
- Run Charts
- MSA
- OPC
- Descriptive Statistics
- Probability Distributions
- Graphical Analysis
- Histograms & Boxplots
- ANOVA
- Confidence Intervals
- Design of Experiment
- Correlation
- Regression
- Data Snooping

Deciding & Selecting
- Decision Balance Sheet
- Force Field Analysis
- Break-even Analysis
- Decision Tree
- Critical-to Tree
- Kano Analysis
- Cost of Quality*
- OEE
- Pugh Matrix
- Prioritization Matrix
- Matrix Diagram
- Pareto Analysis
- ANOVA
- Chi-Square
- Hypothesis Testing
- Multi vari Studies
- Scatter Plots
- 5 Whys
- Root Cause Analysis
- Fishbone Diagram
- Tree Diagram*
- SIPOC*
- How-How Diagram**
- Attribute Analysis
- Relationship Mapping*
- Lateral Thinking
- Flowcharting
- Spaghetti Diagram
- Mind Mapping*
- Affinity Diagram

Creating Ideas
- Suggestion systems
- Brainstorming
- SCAMPER**
- Morphological Analysis
- Sampling
- Observations
- Focus Groups
- Interviews
- Questionnaires
- Data Collection
- Data collection planner*

Implementing Solutions**
- Daily Planning
- MOST
- PDCA
- RACI Matrix
- DMAIC
- Daily Planning
- Control Planning
- Executive Reports
- Project Charter
- Improvement Roadmaps
- PDCA
- Policy Deployment
- Gantt Charts
- Value Analysis
- Kaizen Events
- TPM
- Automation
- Cross Training
- Value Analysis
- Mistake Proofing
- Ergonomics
- Simulation
- Control Planning
- Pull
- Flow
- Just in Time
- Visual Management
- 5S
- Waste Analysis
- Quick Changeover
- Time Value Map
- TPM
- Process Redesign
- Quick Changeover
- Process Redesign
- Time Value Map

Planning & Project Management*
- Policy Deployment
- Gantt Charts
- Value Analysis
- Kaizen Events
- Control Planning
- Executive Reports
- Project Charter
- Improvement Roadmaps
- PDCA
- Policy Deployment
- Gantt Charts
- Value Analysis
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- Control Planning
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- Flow
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- Quick Changeover
- Time Value Map
- TPM
- Process Redesign
- Quick Changeover
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- Time Value Map

Understanding Cause & Effect
- Design of Experiment
- Confidence Intervals
- Regression
- Data Snooping
- Process Redesign
- Time Value Map
- TPM
- Process Redesign
- Quick Changeover
- Process Redesign
- Time Value Map

Relationship Mapping*
- Flow Process Charts
- IDEF0
- Process Mapping
- Service Blueprints
- Value Stream Mapping
- Flowcharting
- Spaghetti Diagram
- Mind Mapping*
- Affinity Diagram

Continuous Improvement Toolkit . www.citoolkit.com
Affinity Diagram helps categorize and organize a large number of fragmented uncertain information into logical cohesive groups.

The goal is to create a limited number of groups.

This results in better idea selection or a problem that is better understood.

Also known as **KJ Analysis**.
- Affinity Diagram

When to Use It?

- During idea-generation brainstorming sessions.
  - It stimulates creative right-brained thoughts.

- During problem-solving sessions.
  - When information is subjective or held by different people, but no clear picture of the problem is emerging yet.
- Affinity Diagram

When to Use It?

- To capture the voice of the customer.
  - Feedback from customers is a valuable source for improvement.
  - It needs to be collected, organized and analyzed to be useful.
  - Affinity diagrams are used to find messages in customer statements which might come from different sources:
    - Complaints.
    - Interviews.
    - Focus groups.
    - Telephone discussions.
How to Conduct an Affinity Session:

- Present the topic or define the problem clearly.
- Give the team index cards or sticky-notes.
- Ask them to write an idea or issue per card.
- Call out the ideas or issues and hang them on the wall.
- Lead the team to silently sort the ideas or issues into categories.
- Lead them labeling each group of cards.
- Eliminate duplicate ideas.
- Add arrows between items and groups to show significant relationships.
Three Basic Steps:

- **Capture**
- **Group**
- **Label**
Example – Identify How to Successfully Implement Change:

- **Change Obstacles**
  - Paradigms
  - Change resistance
  - A blaming culture
  - It may take longer to change
  - Some people will never change

- **Planning**
  - A vision to change
  - Sense of urgency
  - Leadership
  - A change agent
  - A change plan

- **Implementation**
  - Communicate change vision
  - Training at all levels
  - Empowerment
  - Quick wins
  - Encourage personal development
  - Performance management

- **Affinity Diagram**
- Affinity Diagram

Further Information:

- The ideas shouldn’t be discussed until the final affinity diagram is complete.
- Record the actual spoken words when data is verbal (during interviews or observations).
- The best results tend to be achieved when the exercise is implemented by a cross-functional team.