

# Continuous Improvement Toolkit

## Questionnaires



**Managing Risk**

PDPC  
FMEA RAID Logs  
Fault Tree Analysis  
Risk Assessment\*  
Traffic Light Assessment

**Deciding & Selecting**

Pros and Cons  
Break-even Analysis  
Force Field Analysis  
Decision Tree  
QFD  
Kano Analysis  
Critical-to Tree  
Cause and Effect Matrix  
Confidence Intervals  
Probability Distributions  
Graphical Analysis  
Run Charts  
Control Charts  
Sampling  
Brainstorming  
Nominal Group Technique  
Affinity Diagram  
Lateral Thinking

**Planning & Project Management\***

Importance-Urgency Mapping  
Cost Benefit Analysis  
Pugh Matrix  
SWOT  
TPN Analysis  
Prioritization Matrix  
Paired Comparison  
Pareto Analysis  
Simulation  
TPM  
Mistake Proofing  
Pull Systems  
JIT  
Ergonomics  
Work Balancing  
Automation  
Bottleneck Analysis  
Visual Management  
Flow  
Value Analysis  
5S  
Waste Analysis  
SMED  
Time Value Map  
Process Redesign  
IDEF0  
Value Stream Mapping  
SIPOC  
Flow Process Chart  
Process Mapping  
Flowcharting  
Service Blueprints

**Understanding Performance**

OEE  
MSA  
RTY  
Descriptive Statistics  
Cost of Quality  
Reliability Analysis  
Benchmarking  
Focus groups  
Photography  
Observations  
Data Collection

**Understanding Cause & Effect**

Tree Diagram\*\*  
Standard work  
Cause and Effect Matrix  
Pareto Analysis  
ANOVA  
Hypothesis Testing  
Scatter Plot  
Correlation  
5 Whys  
Chi-Square Test  
Fishbone Diagram  
TRIZ\*\*\*  
SCAMPER\*\*\*  
Mind Mapping\*

**Identifying & Implementing Solutions\*\*\***

How-How Diagram  
Hoshin Kanri  
Kaizen  
Standard work  
Mistake Proofing  
Pull Systems  
JIT  
Ergonomics  
Work Balancing  
Automation  
Bottleneck Analysis  
Visual Management  
Flow  
Value Analysis  
5S  
Waste Analysis  
SMED  
Time Value Map  
Process Redesign  
IDEF0  
Value Stream Mapping  
SIPOC  
Flow Process Chart  
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Service Blueprints

**Creating Ideas\*\***

Brainstorming  
Analogy  
SCAMPER\*\*\*  
Mind Mapping\*  
Attribute Analysis  
Visioning

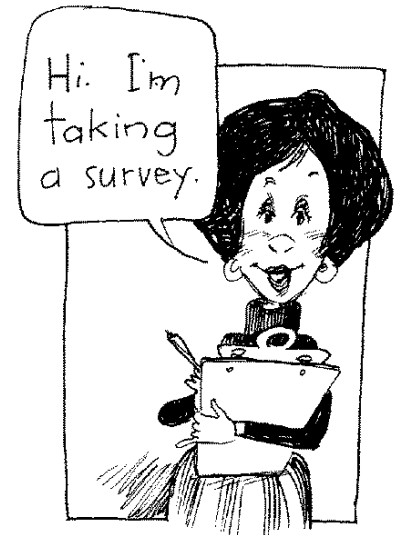
**Designing & Analyzing Processes**

Questionnaires

# - Questionnaires

## Surveys:

- ❑ A **survey** is a research method used to gather information from a selected group of people.
- ❑ They are used to collect written or verbal information.
- ❑ The information is collected in an organized manner.
- ❑ A survey involves all aspects of the research process, including:
  - Survey design and construction.
  - Data collection planning.
  - Sampling method.
  - Response analysis.



## - Questionnaires

### A Questionnaire:

- ❑ Often used in research and statistical studies.
- ❑ Consists of a set of printed or written questions.
- ❑ Used to collect and record information about a particular issue of interest.
- ❑ Used to gather qualitative and quantitative information.
- ❑ Allows to capture:
  - A large amount of information.
  - In a short period of time.
  - From a large number of individuals.
  - Without spending much effort.



## - Questionnaires

### ❑ Questionnaires are commonly used in:

- Marketing research.
- Organizational behavior research.
- Academic research.
- Quality and process improvement initiatives.

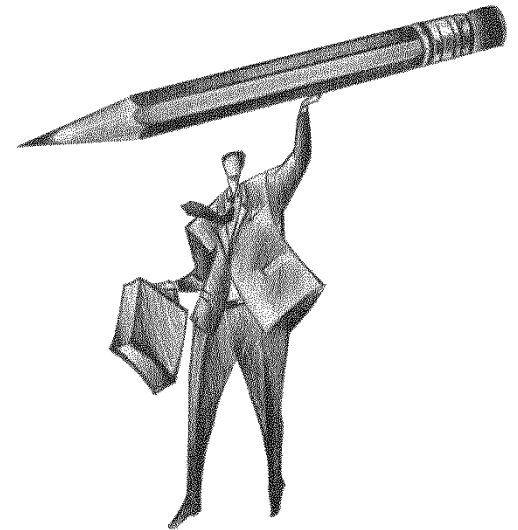


- ❑ Service industries (such as hotels, restaurants and training centers) often rely on questionnaires to determine their customer satisfaction levels.
- ❑ Questionnaire can be conducted via the web, email, phone, or in person.

## - Questionnaires

### Typical Applications:

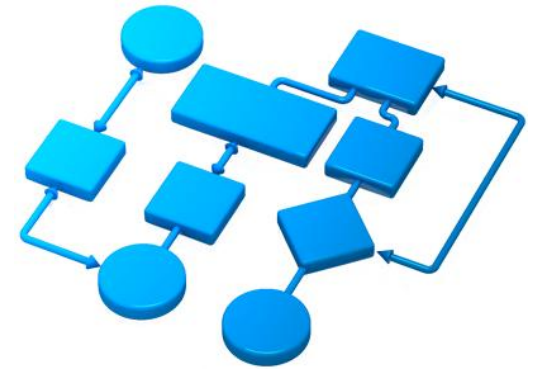
- ❑ Verifying customer/employee satisfaction levels.
- ❑ Measuring customer perception of quality on products or services.
- ❑ Measuring performance against organizational goals.
- ❑ Solving a problem or pursuing an opportunity.
- ❑ Acquiring benchmarking information.



# - Questionnaires

## Approach:

- ❑ Clearly define the goal of the questionnaire.
- ❑ Identify the specific information need to be collected.
- ❑ Identify the target respondents.
- ❑ Determine the relevant sampling method.
- ❑ Choose the questions type and the measurement scales.
- ❑ Draft the questionnaire and sequence the questions.
- ❑ Conduct a pilot test then finalize the questionnaire.
- ❑ Send out the questionnaire to the respondents.
- ❑ Collect, compile then analyze the results.



## - Questionnaires

### **Basic Rules:**

- ❑ Avoid making assumptions about the respondents.
- ❑ Use short questionnaires.
- ❑ Use clear understandable wording for all educational levels.
- ❑ Use positive statements and avoid asking emotional questions.
- ❑ Questions should not be biased or leading the participant towards an answer.
- ❑ Remember to include contextual questions.
- ❑ Avoid questioning more than one question per item.

