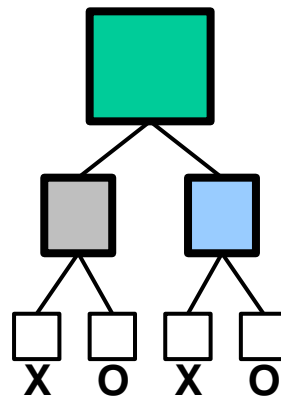# Continuous Improvement Toolkit

Process Decision Program Chart (PDPC)

Managing Risk

PDPC

FMEA | RAID Logs

Fault Tree Analysis

Risk Assessment*

Traffic Light Assessment

Deciding & Selecting

Pros and Cons

Importance-Urgency Mapping

Break-even Analysis

Cost -Benefit Analysis

Force Field Analysis

Voting

SWOT

Decision Tree

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

Wastes Analysis

Time Value Map | Process Redesign

Value Stream Mapping | SIPOC

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

Lateral Thinking | Visioning

TRIZ***

Designing & Analyzing Processes

IDEF0

Flowcharting | Service Blueprints

Flow Process Chart | Process Mapping

Process Redesign

Continuous Improvement Toolkit . www.citoolkit.com
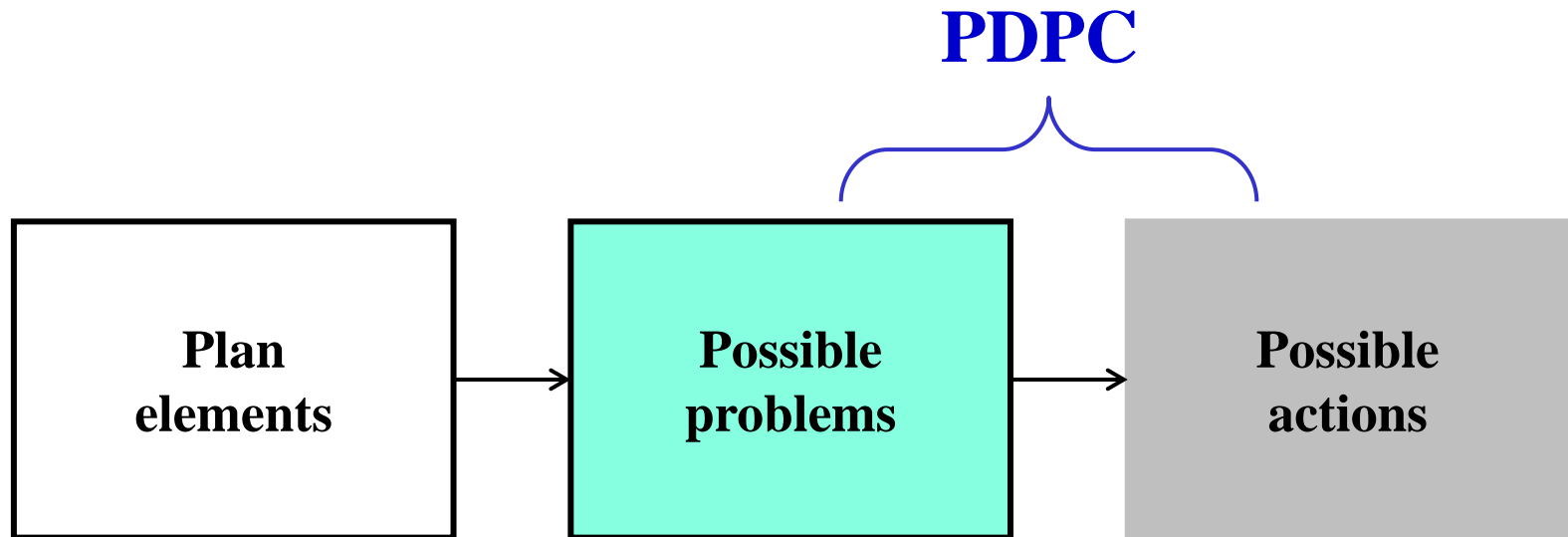
- Process Decision Program Chart (PDPC)

❑ Two approaches to coping with deviation from plans:

- firefighting & risk management.

❑ Provides a simple method to identify both risks and countermeasures.

❑ If the plan is displayed diagrammatically, then identified risks and countermeasures are added in subsequent boxes.

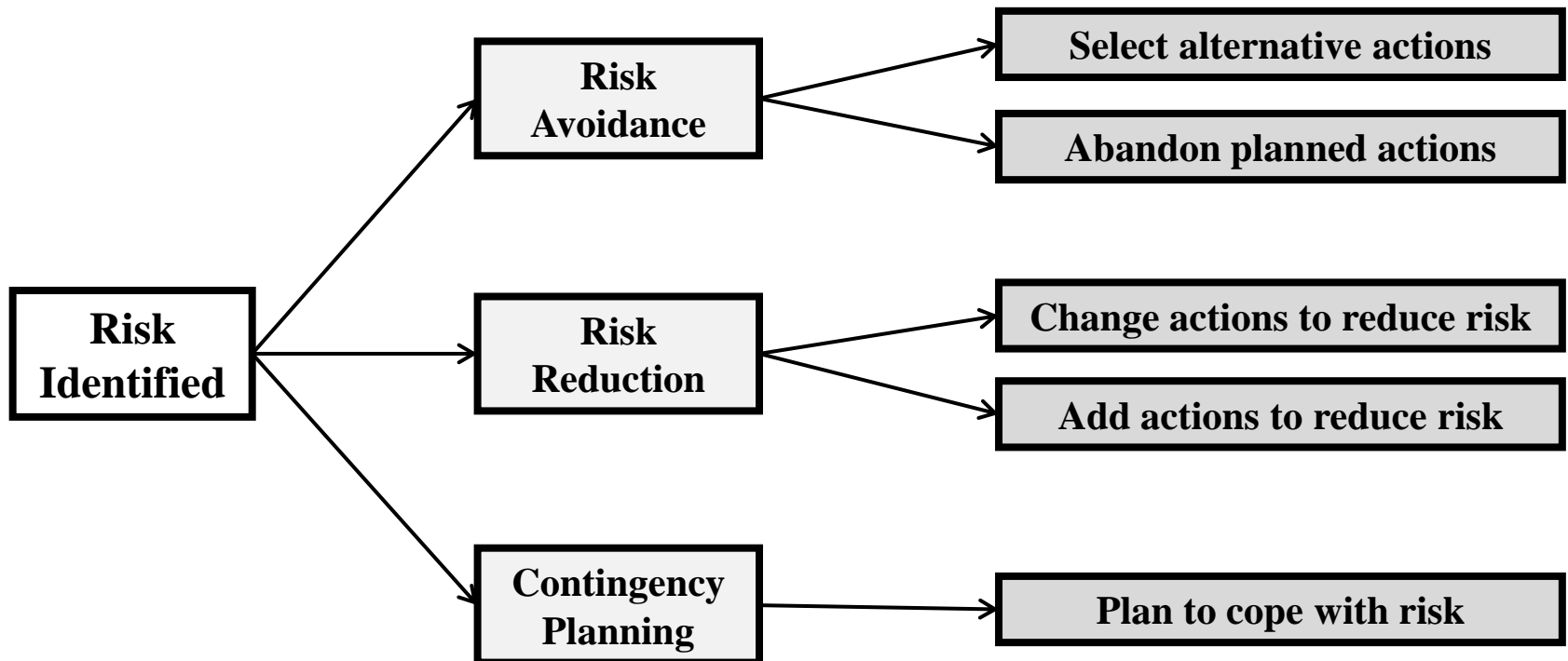❑ Two of the most common elements of risk are cost and time.

- Process Decision Program Chart (PDPC)

PDPC

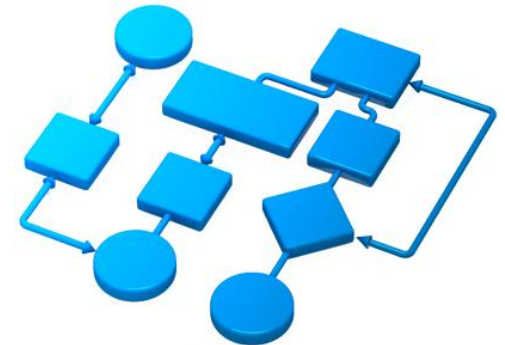| Plan elements	Possible problems	Possible actions
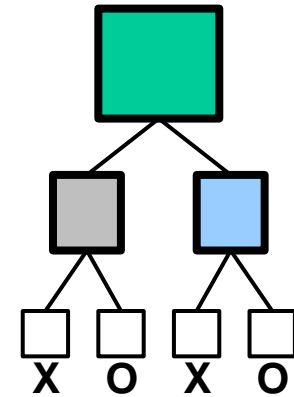
- Process Decision Program Chart (PDPC)

To Cope with Identified Risks:

- Process Decision Program Chart (PDPC)

Approach:

❑ Gather the team to work on the PDPC.
   (Invite experts in specific elements of the plan)

❑ Identify the objective of using PDPC and the criteria for making decisions. *(e.g. How to select countermeasures)*

❑ Identify the areas of the plan which need to be examined.

❑ Break down the task into a Tree Diagram.

❑ Identify potential problems that could occur per each plan item.

❑ Identify and prioritize possible countermeasures.

❑ Change the plan, add new elements to the plan.

- Process Decision Program Chart (PDPC)

Example – Planning a Holiday:

Plan   **Problem / Risk**   **Countermeasure**

Planning a holiday

- Decide when to go → **All booked up** → Cancel travel plan
- Decide how to go → **Very expensive** → Get a loan / Travel by bus
- Decide how to go → **Takes too long**
- Decide where to go → **Family disagreement** → Cancel travel plan / Choose another destination

- Process Decision Program Chart (PDPC)

Example – Planning a Holiday:

Plan	Problem / Risk	Countermeasure

Planning a holiday

- **Decide when to go** → **All booked up** → **Cancel travel plan**
- **Decide how to go** → **Very expensive** → **Travel by bus**
- **Decide where to go** → **Family disagreement** → **Choose another destination**