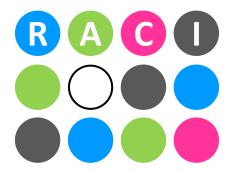
# **Continuous Improvement Toolkit**

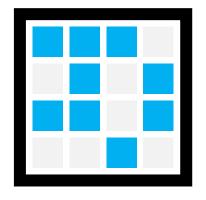
### **RACI Matrix**

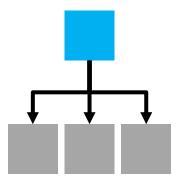


#### The Continuous Improvement Map

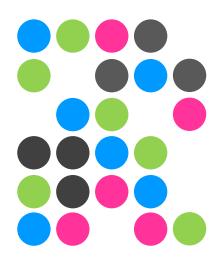
Managing **Selecting & Decision Making** Planning & Project Management\* Risk **PDPC** Break-even Analysis Importance-Urgency Mapping **Daily Planning** PERT/CPM Quality Function Deployment Cost Benefit Analysis RAID Log\* **FMEA MOST RACI Matrix Activity Networks** Payoff Matrix Delphi Method **TPN Analysis** Risk Analysis\* **SWOT Analysis** Stakeholder Analysis Decision Tree Pick Chart Voting Four Field Matrix Fault Tree Analysis **Project Charter** Improvement Roadmaps Critical-to Tree Force Field Analysis Portfolio Matrix Traffic Light Assessment **PDCA** Policy Deployment Gantt Charts Decision Balance Sheet Paired Comparison Kano **DMAIC** Lean Measures Kaizen Events Control Planning OEE Cost of Quality\* Pugh Matrix **Prioritization Matrix** Standard work Document control A3 Thinking **Process Yield Matrix Diagram** Pareto Analysis Earned Value **KPIs Cross Training Implementing Understanding** Capability Indices Chi-Square ANOVA **Descriptive Statistics** TPM Automation Solutions\*\*\* Cause & Effect Gap Analysis\* **Probability Distributions** Hypothesis Testing Mistake Proofing Ergonomics Design of Experiment **Bottleneck Analysis** Multi vari Studies Histograms Just in Time 5S Simulation **Confidence Intervals** Reliability Analysis Scatter Plots Correlation **Graphical Analysis** Quick Changeover Visual Management Regression **Understanding** MSA 5 Whys Root Cause Analysis Data Mining Product Family Matrix Pull Flow Run Charts Performance\*\* Spaghetti \*\* Process Redesign **Control Charts** Fishbone Diagram **Relations Mapping** SIPOC\* Benchmarking\*\*\* Waste Analysis\*\* Value Stream Mapping\*\* Data collection planner\* Sampling How-How Diagram\*\*\* Tree Diagram\* Time Value Map\*\* Value Analysis\*\* **Brainstorming Check Sheets** SCAMPER\*\*\* Attribute Analysis Interviews Flow Process Charts\*\* Service Blueprints Affinity Diagram Questionnaires **Focus Groups** Morphological Analysis IDEF0 **Process Mapping Flowcharting** Data Mind Mapping\* **Lateral Thinking Observations** Collection **Group Creativity Designing & Analyzing Processes** Suggestion systems Five Ws

- □ There are many ways to help clarify roles and responsibilities within a project, business process, or change initiative.
- Some prefer to use a hierarchical structure.
- Others prefer to use a matrix-style format.





- A RACI Matrix is a tool that brings clarity to the roles people play within a team.
  - Working towards achieving a common goal.
- □ It describes the participation of the various roles in completing the required activities and deliverables.



- □ When several people work on a project, it is easy to assume that someone else is taking care of a particular work.
- You may hear complaints such as:
  - "I didn't know I was supposed to do it".
  - "I though he was working on it".

#### This will lead to:

- Inefficient team operation.
- Increased communication complexity.
- Undesired final results.



#### It Answers:

- Who is responsible?
- Who is accountable?
- Are there stakeholders who can be consulted about the activities?
- □ Are there stakeholders needs to be informed about the activities?
- □ Is there a stakeholder who has too much responsibility?



#### **Benefits:**

- Clarifies roles and responsibilities.
- Avoids duplication and confusion.
- Reveals issues such as:
  - Not enough communication.
  - Too many chiefs.
- Identifies who should be approached at any given situation.
- Provides a clear view of what are we expecting from each stakeholder and how are we going to communicate with them.



- RACI is an acronym for the four roles that stakeholders might play in any project or change situation:
  - Responsible.
  - Accountable.
  - Consulted.
  - Informed.



### Responsible

The actual doer

### **Accountable**

Sign off work

### **Consulted**

Can tell more

#### **Informed**

Kept in the picture

### **Responsible:**

- Refers to the person who should actively participate to accomplish a particular activity.
- This person owns the activity and actually doing the work.
- There can be a number of people doing each activity.
- However, there should be at least one responsible to avoid confusion and underperforming.
- Others can help the responsible to accomplish the required work.

#### **Accountable:**

- The person who should ensure that the work is completed:
  - On time.
  - Within budget.
  - Within the required quality standards.
- He may be the direct manager of the responsible.
- Or the same responsible person when the team is small.
- There must be only one accountable person for each activity.
- □ It is also important that few accountable stakeholders exist on matrix to avoid confusion over where the authority resides.



#### **Consulted:**

- The person who can provide valuable information and guidance to complete the work.
- He has the knowledge, skills and experience that may be needed to complete the required work.
- His opinion should be taken into account in decision making.
- However, he should not have the authority to change the work unless explicitly given.



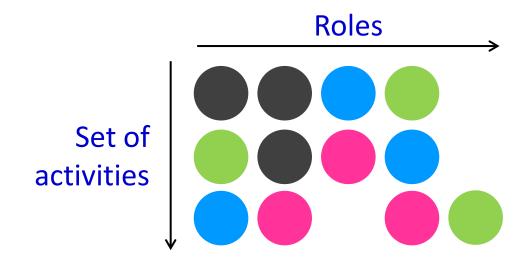
#### Informed:

- Refers to person who should be notified of a decision or result.
- His work depends on the activity and might be affected by the changes in some way.
- He has no control over how the work is implemented.
- He does not need to take part in the decision-making process.
- □ Keeping him informed is a good way to get their attention and support.



#### The Matrix:

- The roles are often plotted along the top of the matrix.
- □ The **set of activities** are plotted along the left side.
- Each activity in a RACI matrix should be analyzed to determine the role each stakeholder plays for the activity to be completed.



#### The Matrix:

□ The assigned resources can be shown as individuals, teams or roles.

	Role 1	Role 2	Role 3	Role 4
Activity 1	R	С	I	Α
Activity 2	С	I	A/R	

	Team 1	Team 2	Team 3	Team 4
Activity 1				
Activity 2				

	Person 1	Person 2	Person 3	Person 4
Activity 1				
Activity 2				

#### **How to Create a RACI Matrix:**

- With your team, clearly explain the purpose for creating the RACI matrix.
- Identify the stakeholders who should be involved and the main activities that need to be carried out.
- Construct a two-dimensional table.
- Insert the main activities on the left hand column and the roles of stakeholders on top row of the table.
- For each activity, identify the responsible, accountable, consulted and informed stakeholders by placing the appropriate symbol (R,A,C or I) at the intersecting cell of the matrix.
- Ensure that there is an accountable and responsible for each activity.
- Discuss the RACI matrix with key stakeholders to verify accuracy.

### **Example –** Assigning Persons to a Project:

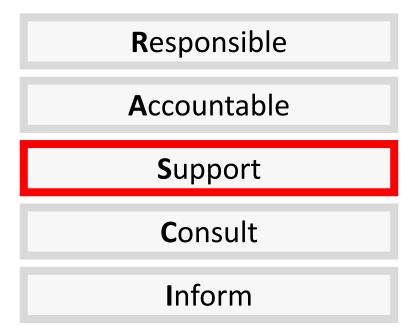
	Adam	Ali	Emir	Peter	Sara	Nermin
Collect data	A	0	C	R		0
Analyze data	A	0		R	C	
Order parts	C	A	0			R
Install parts	0	A	R	C		0
Test		A	R	0		
Document	A	0	0		C	R

### **Example** – Assigning Six Sigma Roles and Responsibilities:

	Executive team	Sponsor	Process owner	Steering committee	MBB	BB/GB
Implement roadmaps	A		R	C	0	
Identify and select projects		A	C	R		0
Implement projects		A	C		C	R
Track and monitor projects		A	0	R	C	0
Maintain operational gains	0		R	A	0	
Monitor overall progress	A		0	R	C	
Coach and mentor	A		0	C	R	

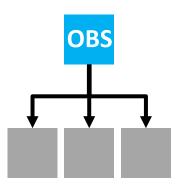
#### **Further Information:**

A variation of the RACI matrix is the RASCI matrix where "S" refers to the Supportive people who can provide resources and/or other forms of support during the project or change.



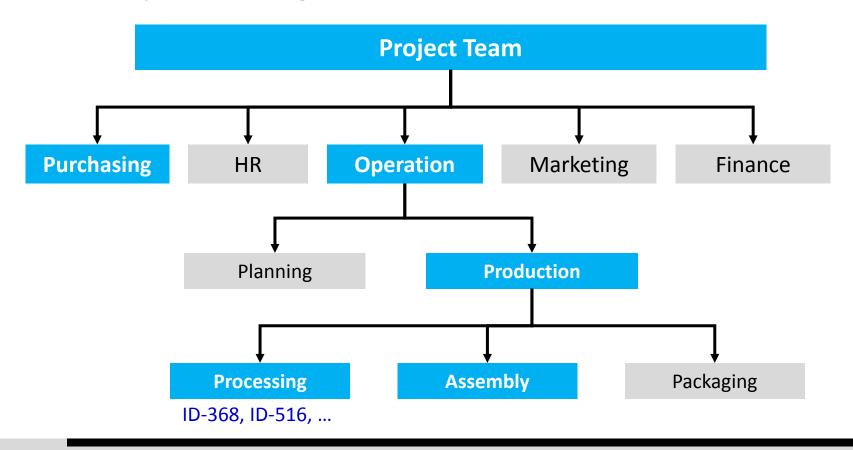
#### **Further Information:**

- An Organizational Breakdown Structure (OBS) is another way that helps clarify roles and responsibilities needed to complete a project.
- It is a hierarchical framework that helps identifying:
  - The responsible persons or departments who are involved.
  - For which activities.
  - What authority and rights they have.



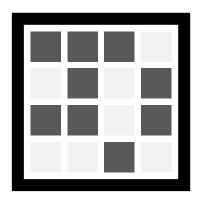
**Further Information:** 

An example of an Organizational Breakdown Structure:



#### **Further Information:**

- A Responsibility Assignment Matrix (RAM) is a table that shows the project resources assigned to each activity or work package.
- □ It is used to illustrate the connections between activities and project team members.
- It shows all activities associated with one person and all people associated with one activity.
- It can be developed at various levels on large projects.
  - A high-level RAM specifies what the team or unit is responsible for within each component of the WBS.
  - A lower-level RAM is used within the team to designate responsibilities and levels of authority for specific activities.



RACI is an example of a RAM

#### **Further Information:**

- □ The Resource Breakdown Structure (RBS) is a hierarchical list of resources that is used to facilitate planning and controlling of project work.
- detailed description of the resource until small enough to be used in conjunction with the work breakdown structure (WBS) to allow the work to be planned, monitored and controlled.

**RBS** 

- □ It is helpful in tracking project costs.
- Can be aligned with the organization's accounting system.
- It may contain resource categories other than human resources.