Continuous Improvement Toolkit

Traffic Light Assessment

The Continuous Improvement Map

Managing Risk
- PDPC
- FMEA
- RAID Log*
- Risk Analysis*
- Fault Tree Analysis
- Traffic Light Assessment

Selecting & Decision Making
- Break-even Analysis
- Importance Urgency Matrix
- Quality Function Deployment
- Cost Benefit Analysis
- Payoff Matrix
- Delphi Method
- TPN Analysis
- Decision Tree
- Pick Chart
- Voting
- Four Field Matrix
- Critical-to X
- Force Field Analysis
- Portfolio Matrix
- Decision Balance Sheet
- Paired Comparison
- Kano
- Pugh Matrix
- Prioritization Matrix
- Pareto Analysis
- Matrix Diagram

Planning & Project Management*
- Daily Planning
- PERT/CPM
- MOST
- RACI Matrix
- Activity Networks
- SWOT Analysis
- Stakeholder Analysis
- Project Charter
- Improvement Roadmaps
- PDCA
- Policy Deployment
- Gantt Charts
- DMAIC
- Kaizen Events
- Control Planning
- A3 Thinking

Understanding Performance*
- Lean Measures
- OEE
- Process Yield
- Cost of Quality*
- Project KPIs
- KPIs
- Capability Indices
- Descriptive Statistics
- Gap Analysis*
- Bottleneck Analysis
- Reliability
- MSA
- Benchmarking***

Understanding Cause & Effect
- Chi-Square
- Nonparametric
- Hypothesis
- ANOVA
- DOE
- Probability Distributions
- Histograms
- Normal Distribution
- Multivariate
- Multi-vari Studies
- Graphical Methods
- Scatter Plots
- Correlation
- Regression
- Run Charts
- 5 Whys
- Root Cause Analysis
- Data Mining
- Control Charts
- Fishbone Diagrams
- Relations Mapping
- SIPOC*

Implementing Solutions*
- Best Practices
- TPM
- Automation
- Standard Work
- Document control
- Mistake Proofing
- Health & Safety
- Simulation
- Just in Time
- 5S
- Quick Changeover
- Visual Management
- Product Family Matrix
- Flow
- Pull
- Spaghetti**
- Process Redesign

Data Collection
- Data collection planner*
- Sampling
- Check Sheets**
- Interviews
- Questionnaires
- Focus Groups
- Observations
- Suggestion Systems
- Five Ws

Group Creativity
- How-How Diagram***
- Tree Diagram*
- Brainstorming
- SCAMPER***
- Attribute Analysis
- Affinity Diagrams
- Morphological Analysis
- Mind Mapping*
- Lateral Thinking

Designing & Analyzing Processes
- Waste Analysis**
- Value Stream Mapping**
- Value Analysis**
- Process Mapping
- Flow Process Charts**
- Time Value Map**
- Flowcharting
- IDEF0
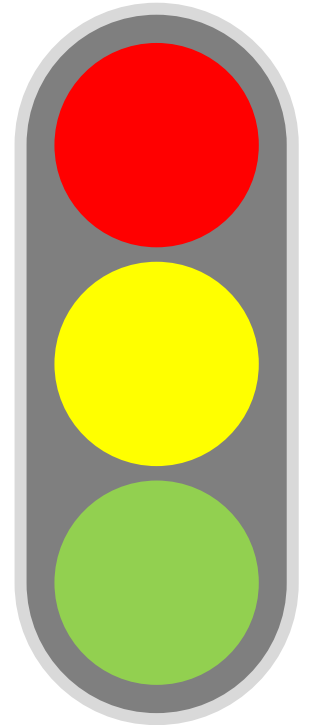- Service Blueprints

www.**citoolkit**.com

Traffic Light Assessment

A **rating system**

Evaluates the **performance** in relation to a goal

Results are expressed using the **three colors** of the real traffic lights

Traffic Light Assessment

A good way to **communicate** information

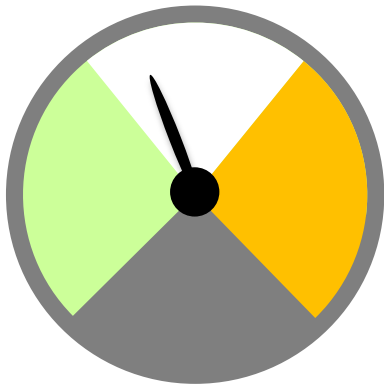Have the advantage of being **universally recognized**

Traffic Light Assessment

Good and poor performance can easily be identified
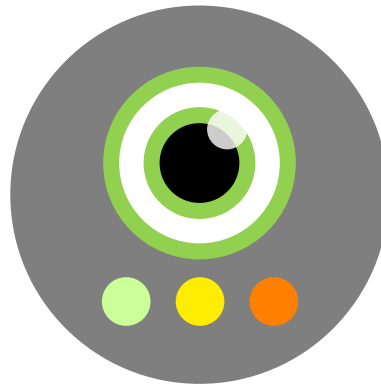
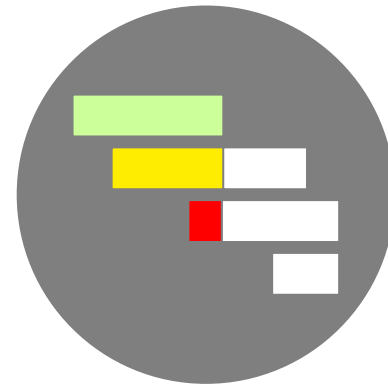The results help in **decision making**

Traffic Light Assessment

Traffic lights systems concepts are widely used in . . .

Performance Management

Visual Management

Project Management

Traffic Light Assessment

Performance Management

Helps **presenting** performance information for decision making purposes

Often used in management **review meetings**
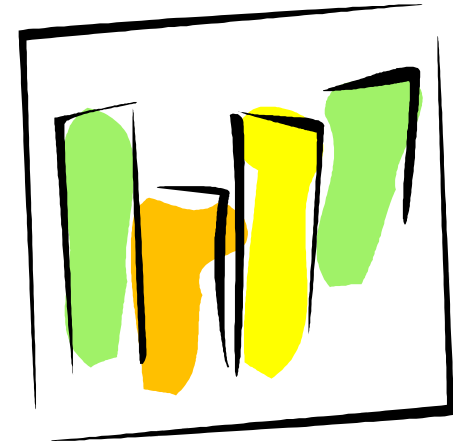
Traffic Light Assessment

Performance Management

Results are expressed in terms of colors . . .
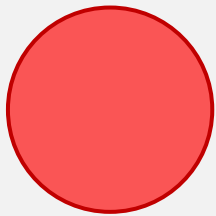
🔴 A performance that is **far below** from target

🟡 A performance that is a bit below from target
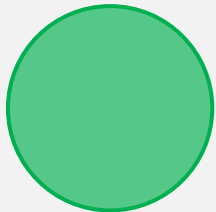
🟢 An expected performance (or better than expected)

Traffic Light Assessment

Performance Management

Traffic light colors can be applied to . . .

Performance indicators

Variance indicators

Trend indicators

Graphical charts

Dashboards

4.4% 3.1% 2.8%
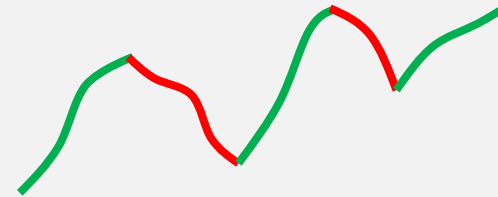
Traffic Light Assessment

Performance Management

Applications . . .

- Performance and trend reports
- Financial reports
- Marketing reports
- Customer satisfaction reports
- Quality control reports

Traffic Light Assessment

Performance Management

Applications . . .

- Risk management and safety audits

- Compliance audits

- Staff training and development

- Staff performance management

- Retention analysis and planning

Traffic Light Assessment

Visual Management

Traffic light assessment is frequently used in **factories**

The **Andon display** uses traffic light signals to communicate production information

It helps bringing immediate **attention** to problems as they occur
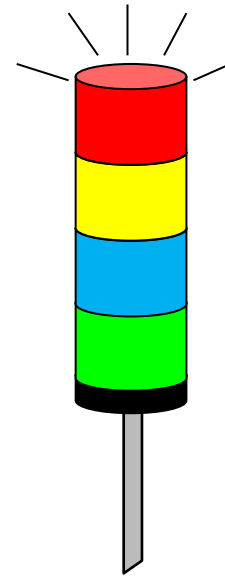
Traffic Light Assessment

Visual Management

Information is expressed in terms of colors . . .
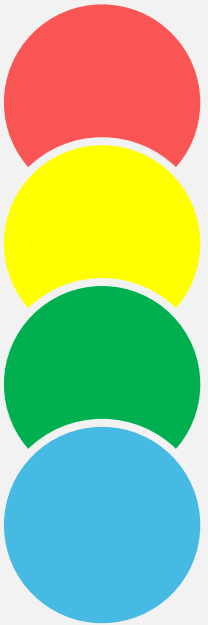
A production that has stopped or a line that is down

Production has slowed down / attention is needed to fix something

Normal production levels and a line that is running smoothly

Operation needs something (material, tooling, ...)

Traffic Light Assessment

Visual Management

1	2	3	4
5	6		7
8		9
10	11	12	13

🟥 **More than 2 lost cases**   🟧 **1-2 lost cases**   🟩 **Zero lost cases**
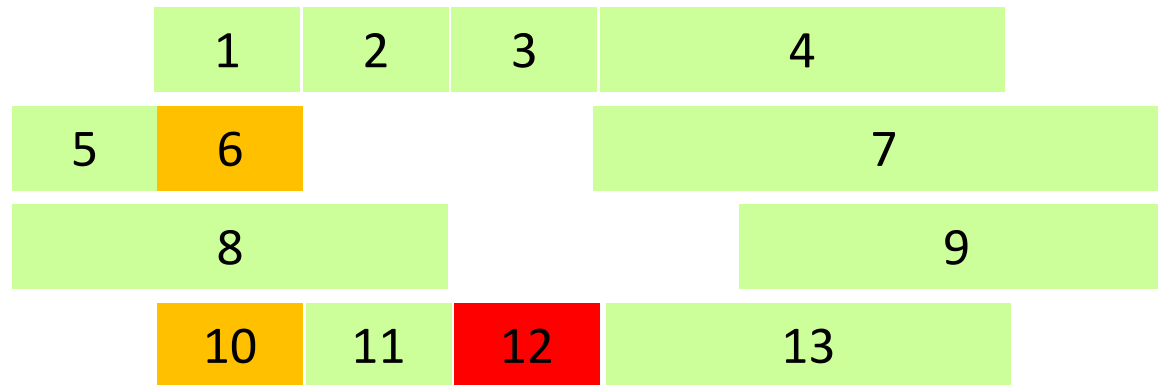
A map for the areas which have the **most safety incidents** that resulted in lost time

Traffic Light Assessment

Project Management

How well **activities** and **milestones** are being achieved?

How on track the overall project is?
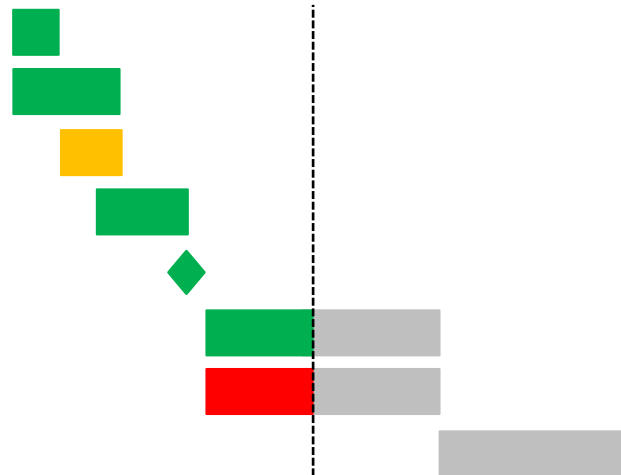
Traffic Light Assessment

Project Management

Activity management

Risk management

Project tracking
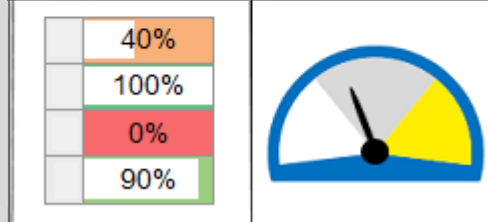
Project KPIs

Traffic Light Assessment

Project information is expressed in terms of colors . . .
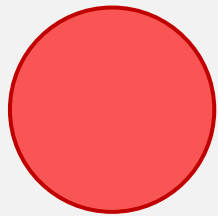
An activity that is **incomplete**

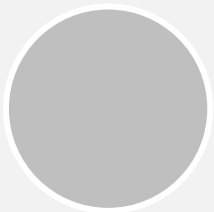An activity that is **partially completed**, or was completed after due date
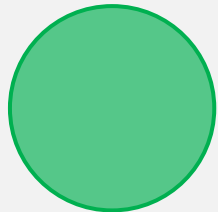
An activity that was **completed** on time, or ahead of time.

Traffic Light Assessment

Project Management

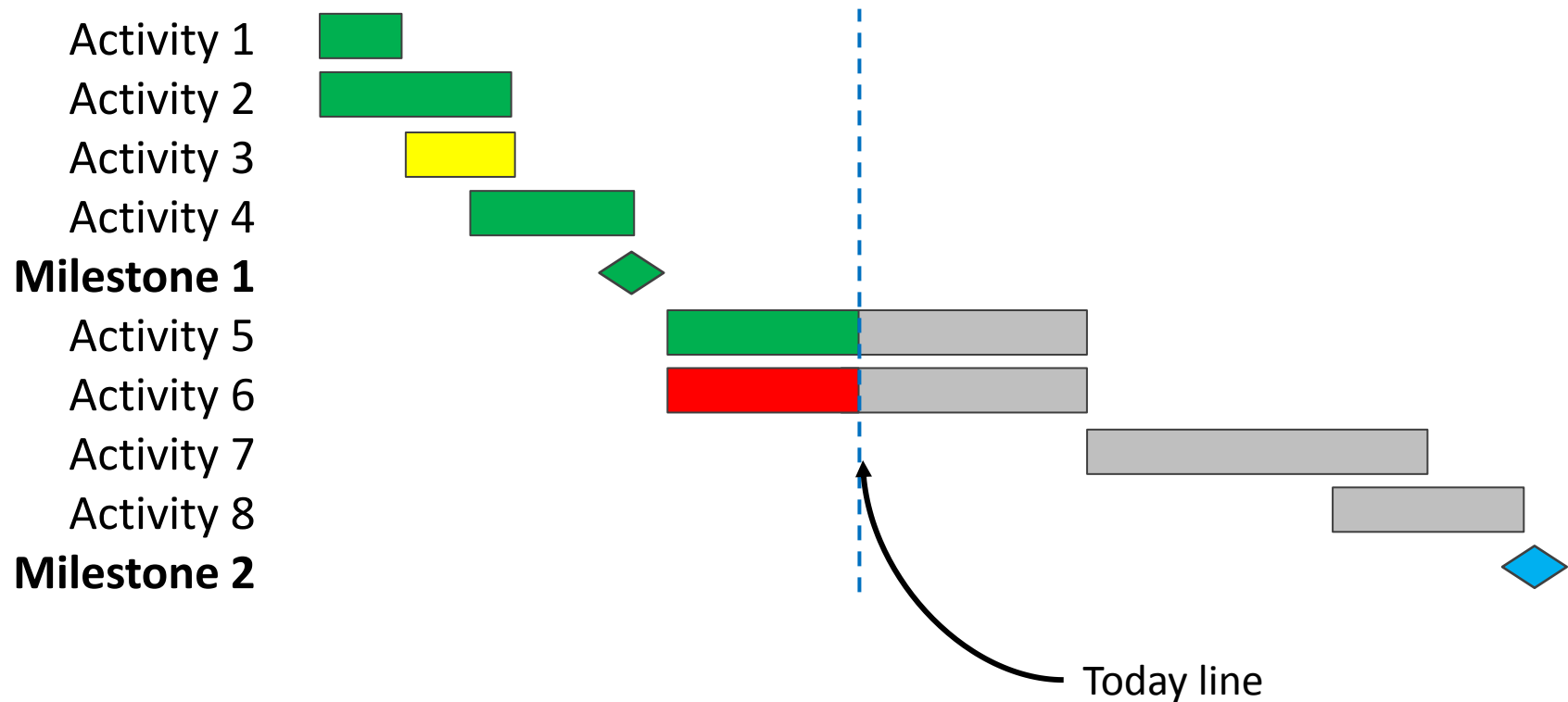**Additional colors** can be used to convey specific information . . .

Scheduled activities

On hold activities

New added or changed activities
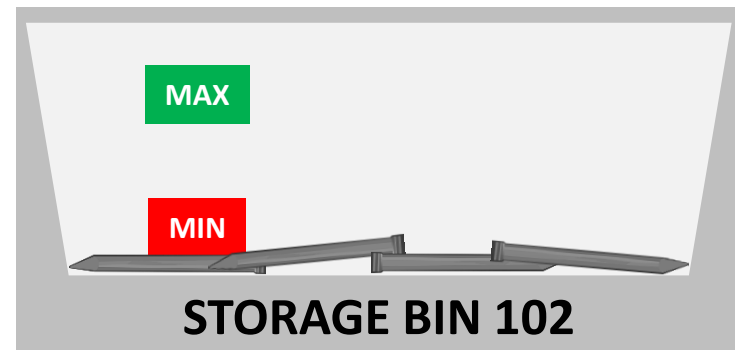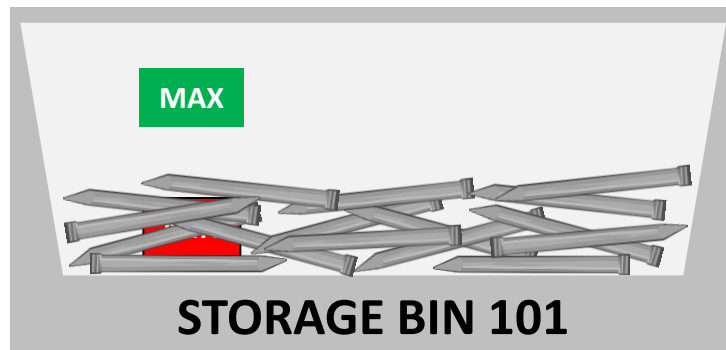
Traffic Light Assessment

Project Management - **Example**

Today line

Traffic Light Assessment

Other Uses

Marking inventory levels and reorder triggers
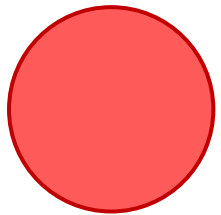
Communicating the status of a material or product
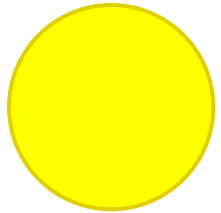
Knowing what a team think of a particular idea

MAX

STORAGE BIN 101

MAX

MIN

STORAGE BIN 102
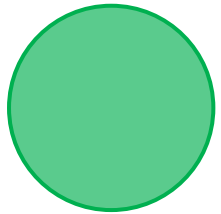
Traffic Light Assessment
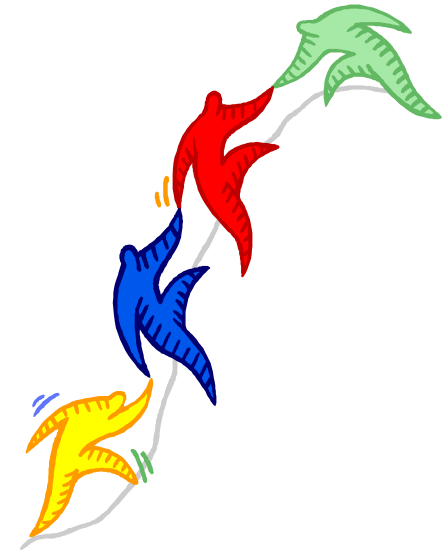
Team members may use them to assess an idea . . .

An idea that is poor or inappropriate

A good idea,
or an idea that needs to be reviewed

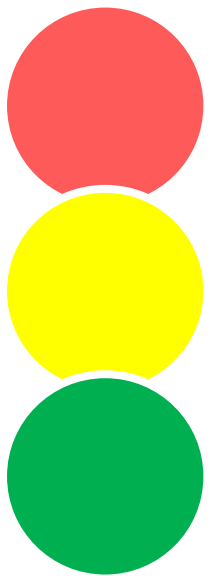An excellent idea

Traffic Light Assessment

In the **food industry**, traffic light labels can be used to show how much fat, sugar and salt exist in the food products

High

Medium

Low

Traffic Light Assessment

Other Uses – Skills Matrix

ID	Name	Job Title	Safety Intro.	Product Defects	SPC	5S	SOP	DMAIC	FMEA	Score
3113	Harvey	Supervisor	2	2	2	0	4	0	0	10
3120	Sami	Supervisor	2	4	3	1	3	2	0	15
3181	Emer	Maintainer	1	1	2	2	4	0	0	10
3109	Zekaria	Maintainer	0	1	1	0	3	0	0	5
3110	Shadi	Inspector	0	2	0	0	2	0	0	4
3193	Peter	Inspector	1	3	1	0	2	1	0	8
3174	Kumar	Inspector	1	2	1	1	1	0	0	6
Training Requirement Score:			5	2	4	6	1	6	7	

4	Trainer level	1	Basic awareness
3	Practical experience	0	Training needed
2	Little practical experience		

Traffic Light Assessment

Further Information

Use charts rather than detailed data where relevant

Sometimes, the letters R, Y and G (or R, A and G) are used in addition to the colors