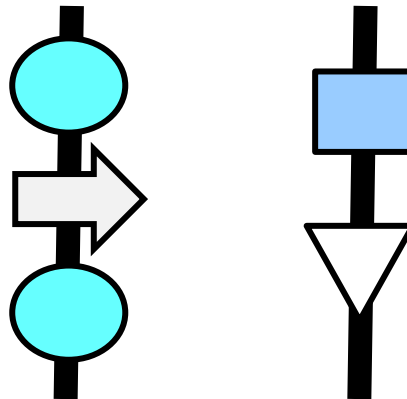
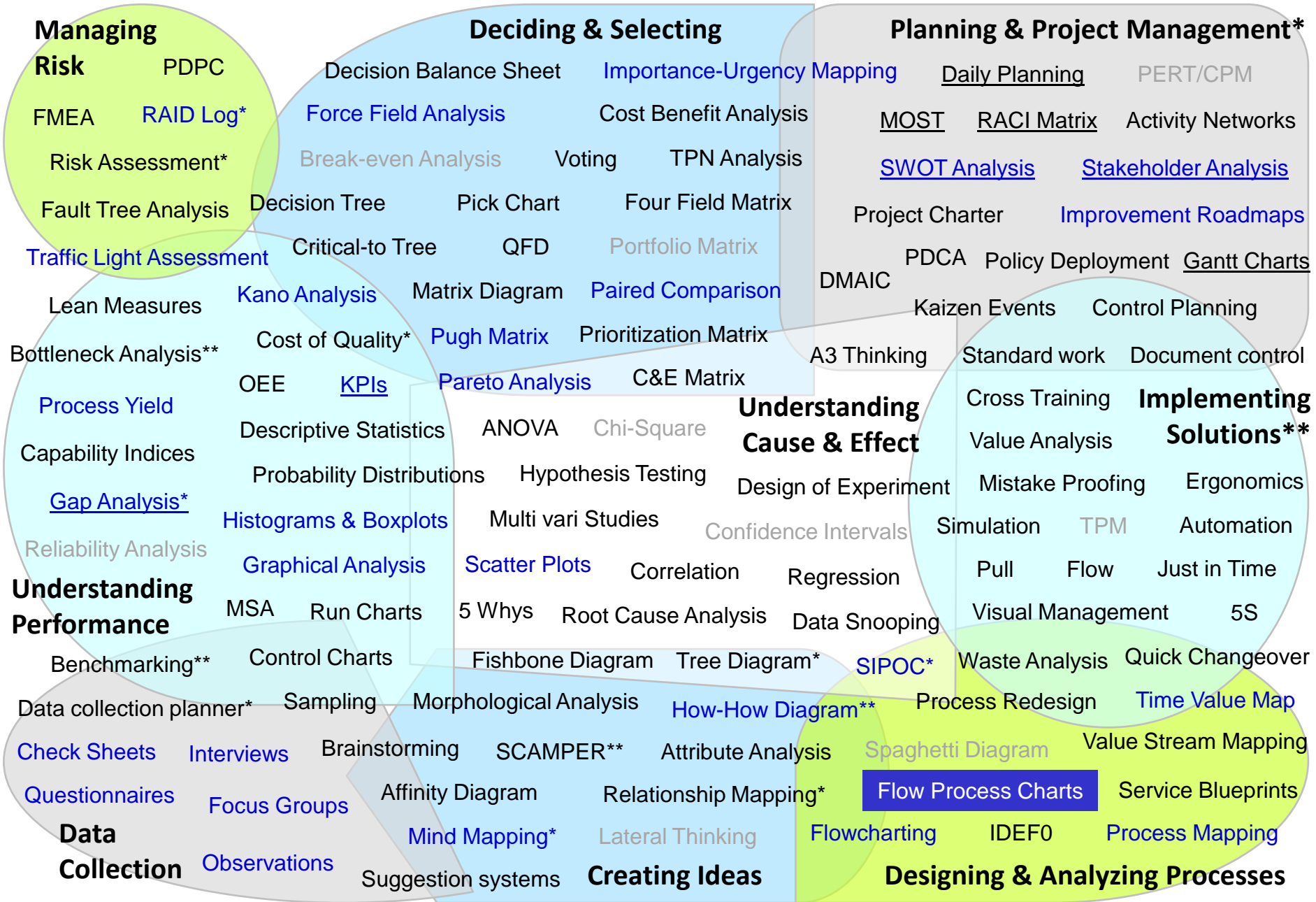


Continuous Improvement Toolkit

Flow Process Chart

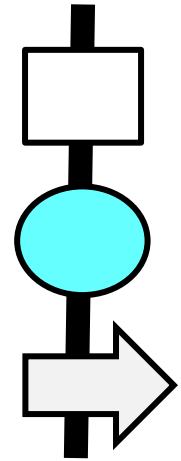


The Continuous Improvement Map



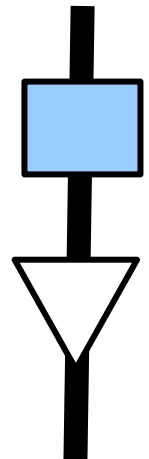
- Flow Process Chart

- ❑ A symbolic representation.
- ❑ Illustrates the sequence of actions within a process.
- ❑ Records the steps of a process along a vertical line.
- ❑ Used when analyzing the steps in a process.
- ❑ Helps identify and eliminate waste.
- ❑ Sometimes called **process sequence chart**.



- Flow Process Chart

- ❑ It can be drawn up as the process is happening.
- ❑ This allows getting an accurate description of the process.
- ❑ A person for example can follow a part, noting how and when it is produced, moved, checked and stored.
- ❑ This ensures that what actually happens gets recorded.
- ❑ Later when analyzing the process, some steps become obvious candidates for improvement such as:
 - Non-value-adding activities.
 - Long delays.
 - Excessive transportation.



-- Flow Process Chart

Common Process Problems:

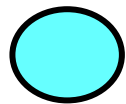
- Non-value adding steps.
- Errors and rework.
- Unnecessary activities and duplication.
- Bottlenecks.
- Long cycle times and excessive delays.
- Missing and unclear steps.
- Too many inspections or checks.
- Complex procedures.
- Departure from procedure.
- Dead ends.
- Costly steps.



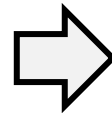
- Flow Process Chart

Common Symbols:

- ❑ **Operation** – produce or process something.
- ❑ **Inspection** – checking of items to ensure correct quality or quantity.
- ❑ **Storage** – storing materials or other items.
- ❑ **Transport** – movement of people, materials or other items.
- ❑ **Delay** – idle time of people, material or machinery.



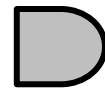
Operation



Transport



Inspection



Delay



Storage

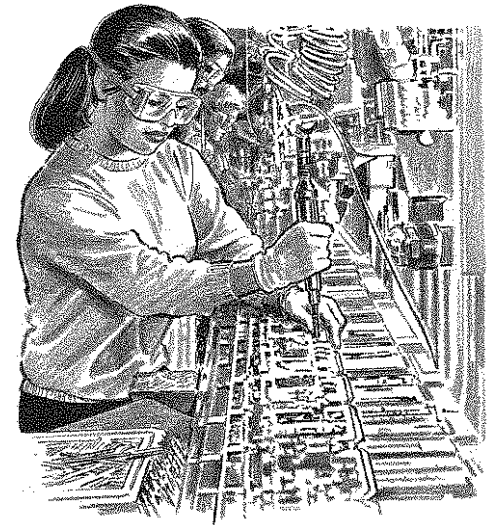


Rejection point

- Flow Process Chart

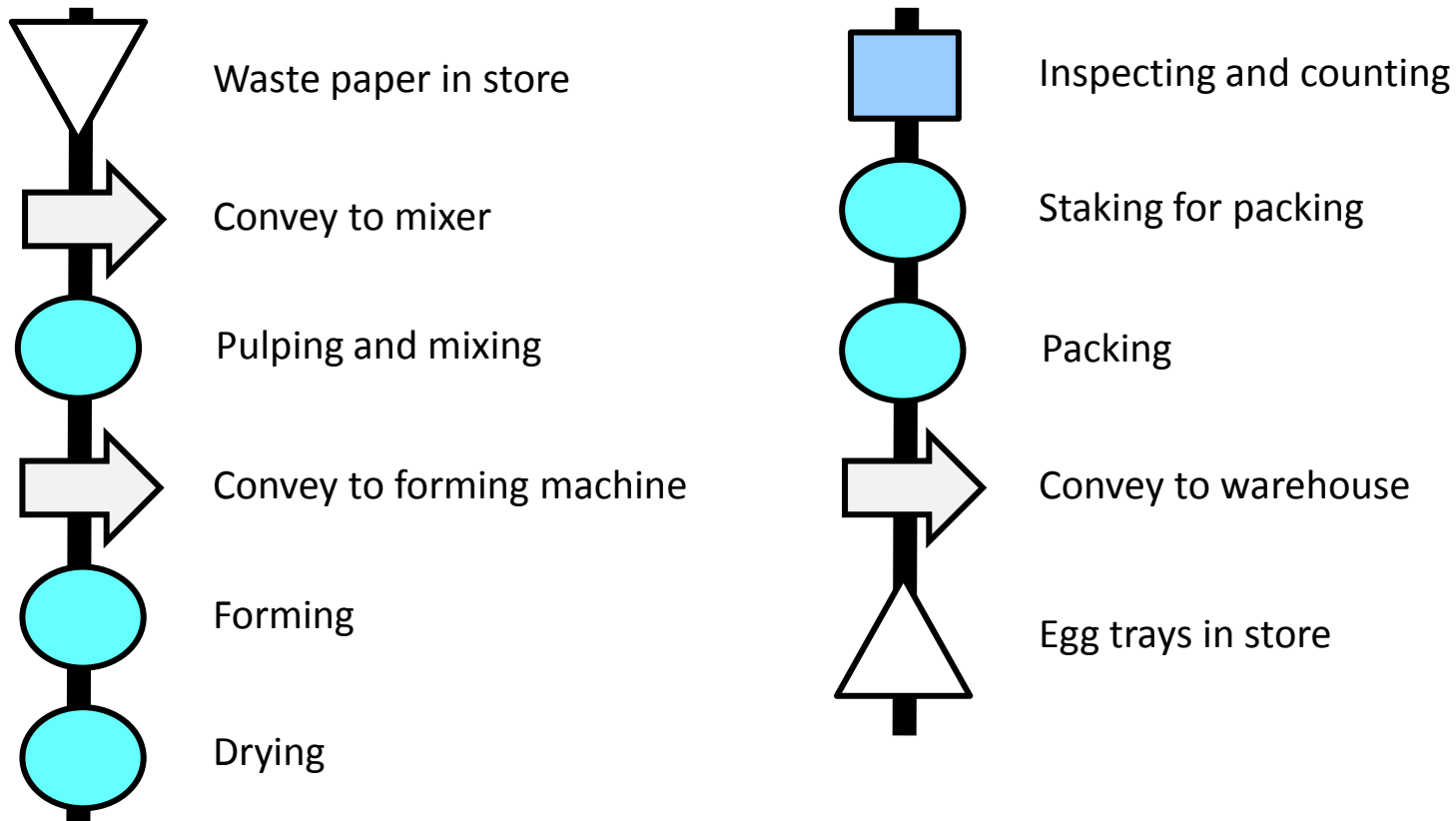
Three Types:

- ❑ A **man-type** chart which shows the actions of a person.
- ❑ A **material-type** chart which shows what happens to a product or item.
- ❑ An **equipment-type** chart which shows how a tool or other piece of equipment is used.



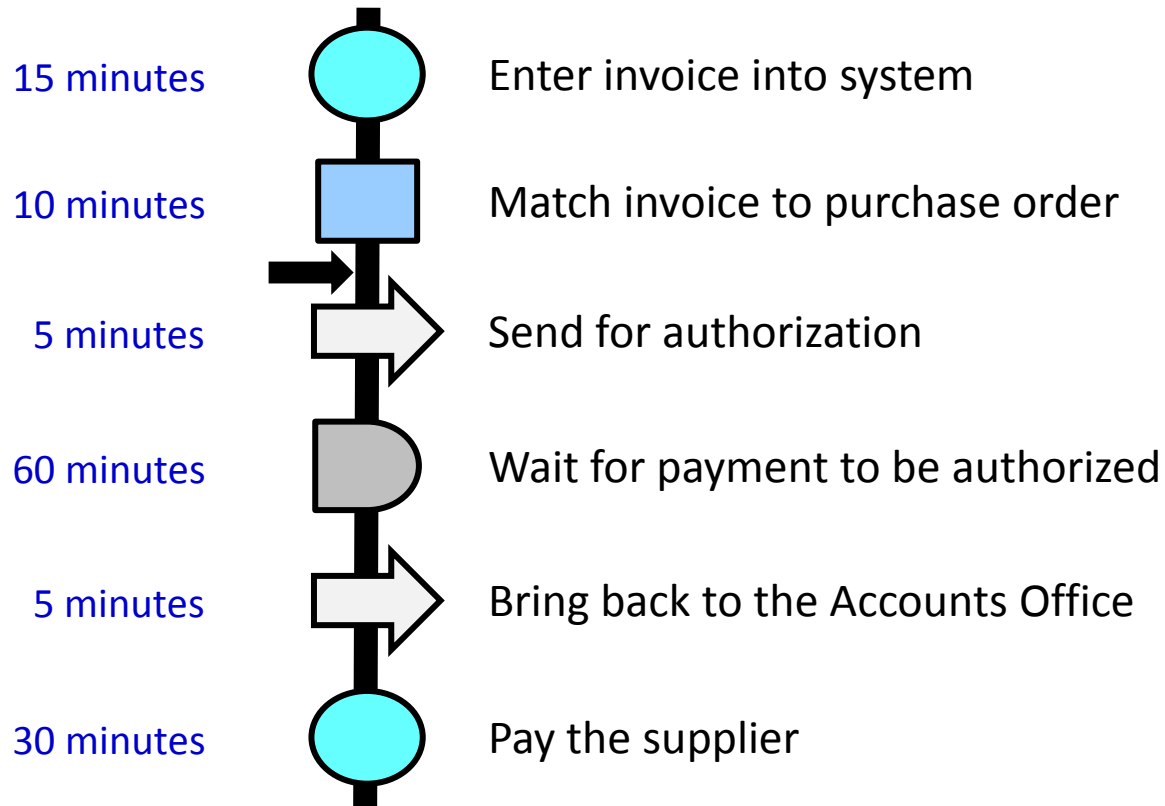
- Flow Process Chart

Example – Material Type Chart – Egg Tray Production Process:



- Flow Process Chart

Example – Supplier Invoice Processing:








- Flow Process Chart

Example – Supplier Invoice Processing:

Step #	Time (min)	Distance (meters)	○	⇒	□	D	▽	Step Description
1	15		X					Enter invoice into system
2	10				X			Match invoice to purchase order
3	2	85		X				Send for authorization
4	60					X		Wait for payment to be authorized
5	2	85		X				Bring back to the Accounts Office
6	25		X				X	Pay the supplier

- Flow Process Chart

Example – Supplier Invoice Processing:

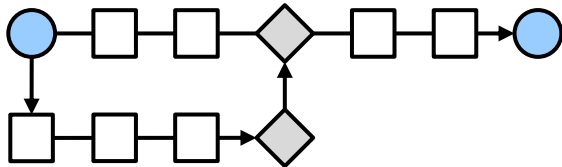
	 Operation	 Transport	 Inspection	 Delay	 Store
Number of steps	2	2	1	1	0
Time (min)	40	4	10	60	0
Distance (meters)	-	170	-	-	-

-- Flow Process Chart

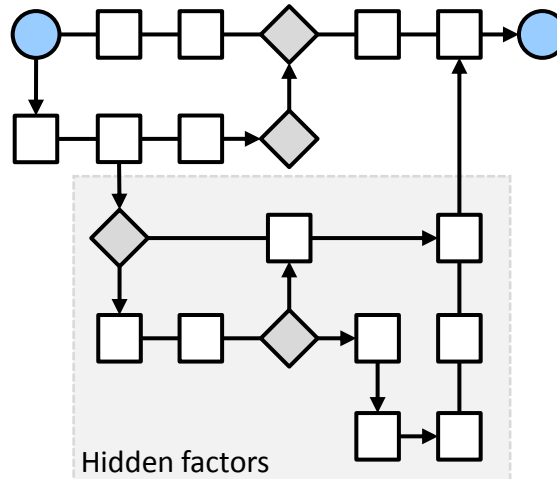
Further Information:

- ❑ What do we think of a process is not necessary what it actually is.

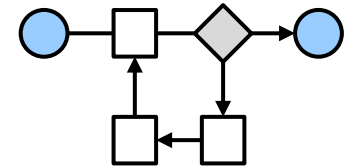
What you think it is...



What it actually is...



What you would like it to be...



-- Flow Process Chart

Example – Can Making Process:

