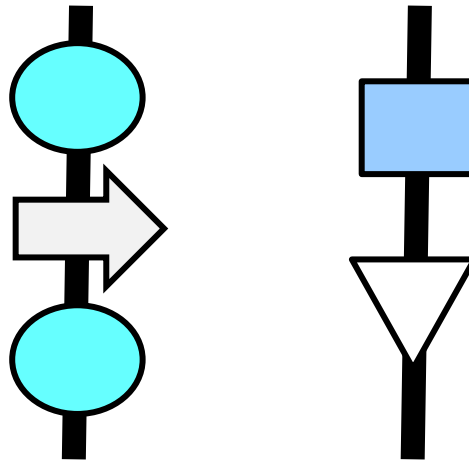# Flow Process Chart

Managing Risk

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

Deciding & Selecting

- Pros and Cons
- Break-even Analysis
- Importance-Urgency Mapping
- Cost Benefit Analysis
- Force Field Analysis
- Pugh Matrix
- Voting
- SWOT
- Decision Tree
- Matrix Diagram
- TPN Analysis
- QFD
- Kano Analysis
- Prioritization Matrix
- Critical-to Tree
- Paired Comparison
- Cause and Effect Matrix
- Pareto Analysis

Planning & Project Management*

- RACI Matrix
- Stakeholder 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

Understanding Cause & Effect

- Confidence Intervals
- Probability Distributions
- ANOVA
- Hypothesis Testing
- Design of Experiments
- Regression
- Scatter Plot
- Correlation
- 5 Whys
- Chi-Square Test
- Multi-vari Charts
- Relationship Mapping*
- Fishbone Diagram
- TRIZ***

Identifying & Implementing Solutions***

- 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

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

Data Collection

- Focus groups
- Interviews
- Photography
- Check Sheets
- Measles Charts
- Questionnaires
- Critical Incident Technique
- Observations

Creating Ideas**

- Brainstorming
- Analogy
- SCAMPER***
- Nominal Group Technique
- Mind Mapping*
- Affinity Diagram
- Attribute Analysis
- Lateral Thinking
- Visioning

Designing & Analyzing Processes

- IDEF0
- Value Stream Mapping
- SIPOC
- **Flow Process Chart**
- Process Mapping
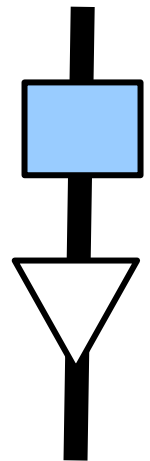- Flowcharting
- Service Blueprints

- Process Flow Chart

- ❑ The Flow Process Chat is a symbolic representation that illustrates the sequence of actions within a process.
- ❑ It is commonly used when analyzing the steps in a process to help identify and eliminate waste.
- ❑ It records the steps of a process along a vertical line.
- ❑ It is used to show the steps of a process using symbols along with text.
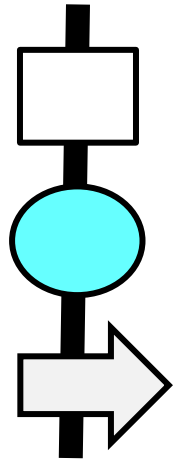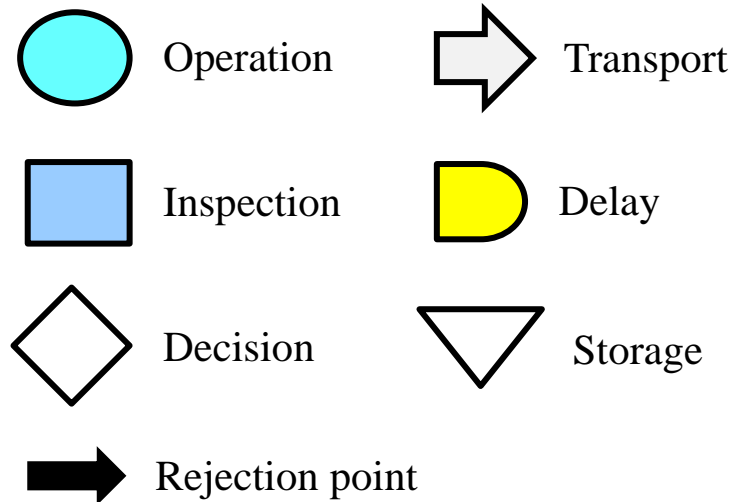
- Process Flow Chart

- ❑ A useful feature of the Flow Process Chart is that it can be drawn up as the process is happening.
- ❑ This will allow getting an accurate description of the process.
- ❑ By watching and recording, 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 long delays and non value adding activities.
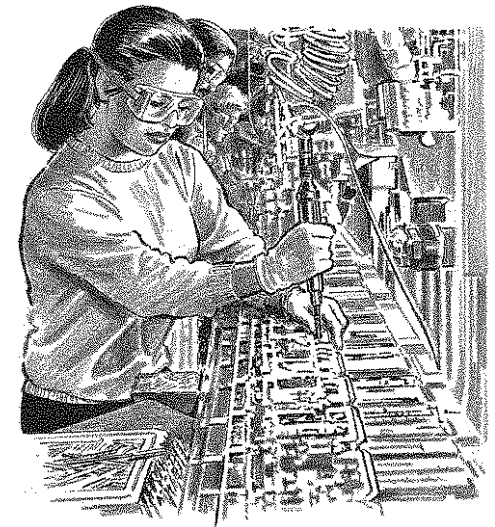
- Process Flow Chart

Common Symbols:

❑ **Operation:** Produce or process something.

❑ **Storage:** Storing materials or other items.

❑ **Transport:** Movement of people, materials or other items.

❑ **Delay:** Idle time of people, material or machinery.

❑ **Inspection:** Checking of items to ensure correct quality or quantity.

Operation   Transport

Inspection   Delay

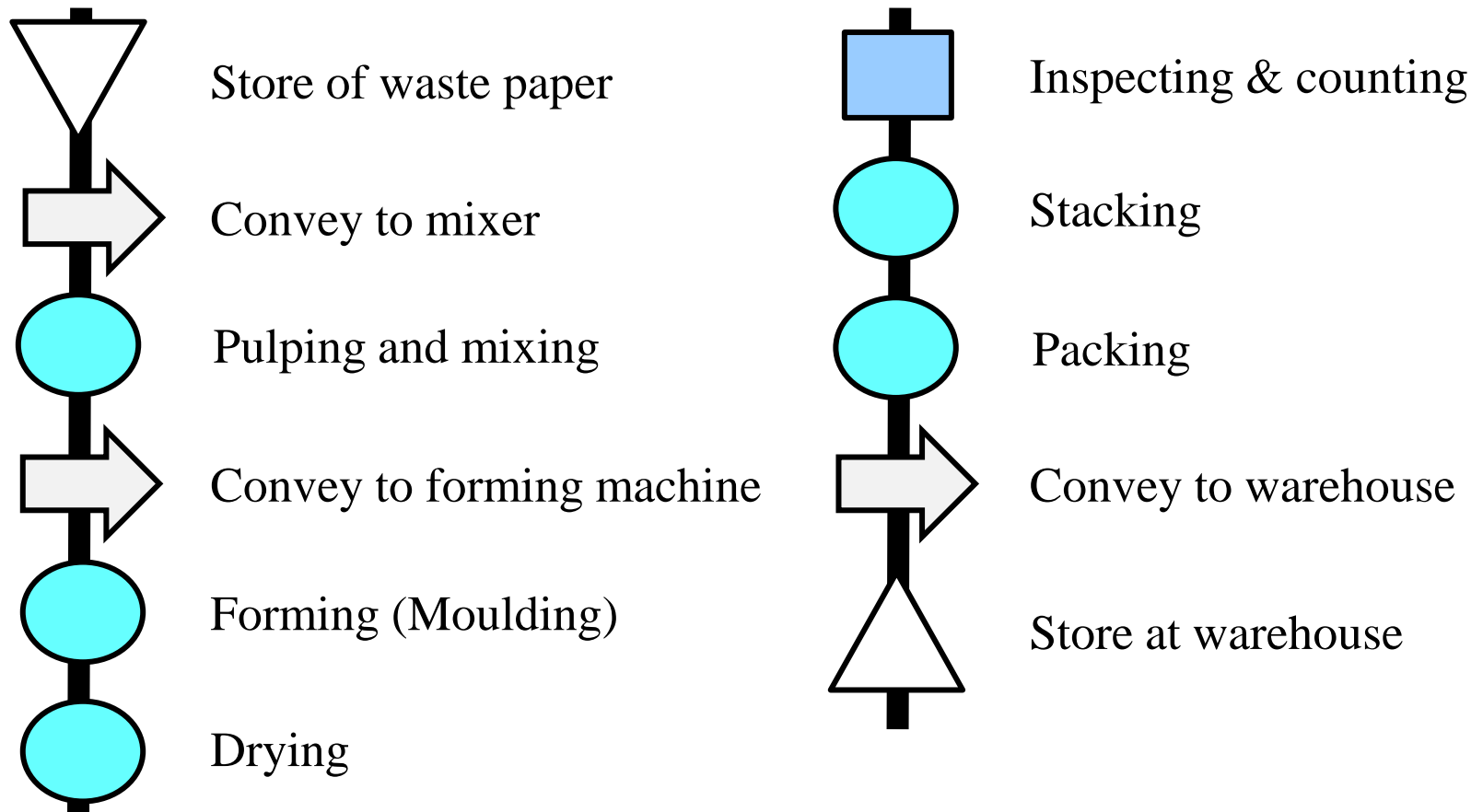Decision   Storage

Rejection point

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.
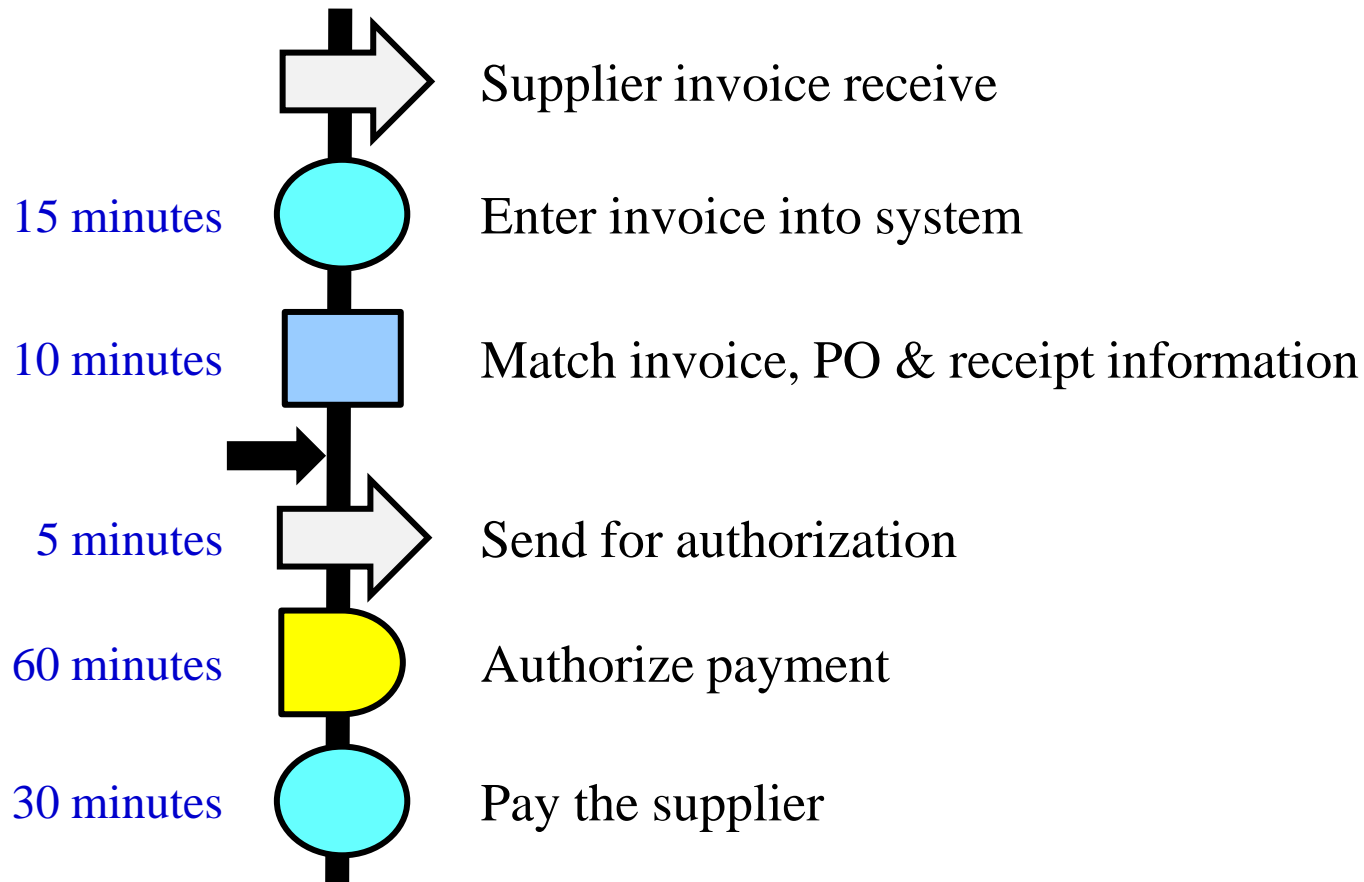
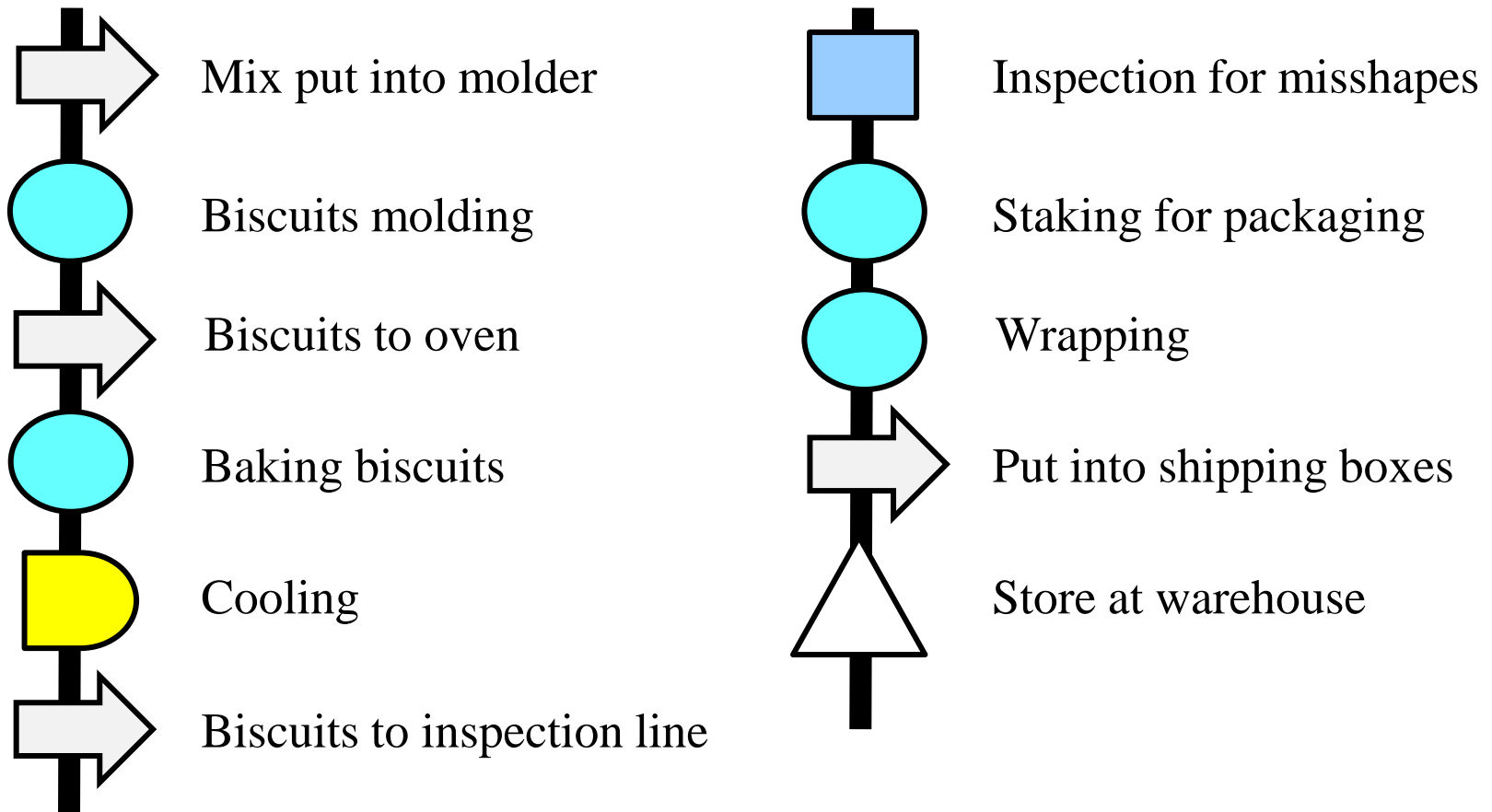# - Process Flow Chart

Example –Egg Trays Production:

Store of waste paper

Convey to mixer

Pulping and mixing

Convey to forming machine

Forming (Moulding)

Drying

Inspecting & counting

Stacking

Packing

Convey to warehouse

Store at warehouse

- Process Flow Chart

Example – Supplier Invoice Processing:

	Supplier invoice receive
15 minutes	Enter invoice into system
10 minutes	Match invoice, PO & receipt information
5 minutes	Send for authorization
60 minutes	Authorize payment
30 minutes	Pay the supplier

- Process Flow Chart

Example – How to Improve the Biscuit Production Process?

Mix put into molder

Biscuits molding

Biscuits to oven

Baking biscuits

Cooling

Biscuits to inspection line

Inspection for misshapes

Staking for packaging

Wrapping

Put into shipping boxes

Store at warehouse

- Process Flow Chart

What you think it is...

What it actually is...

What you would like it to be...

Hidden Factors
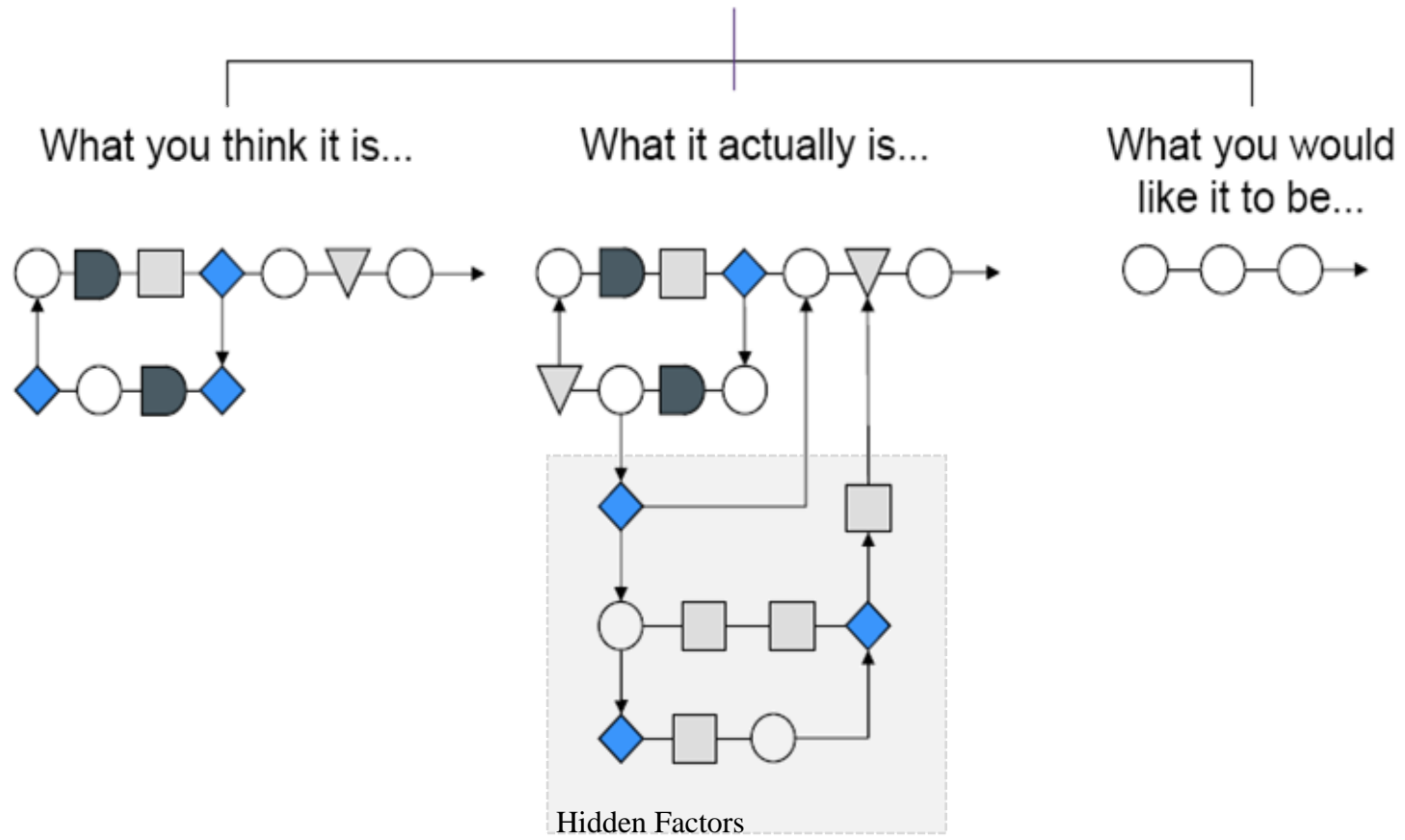
- Process Flow Chart
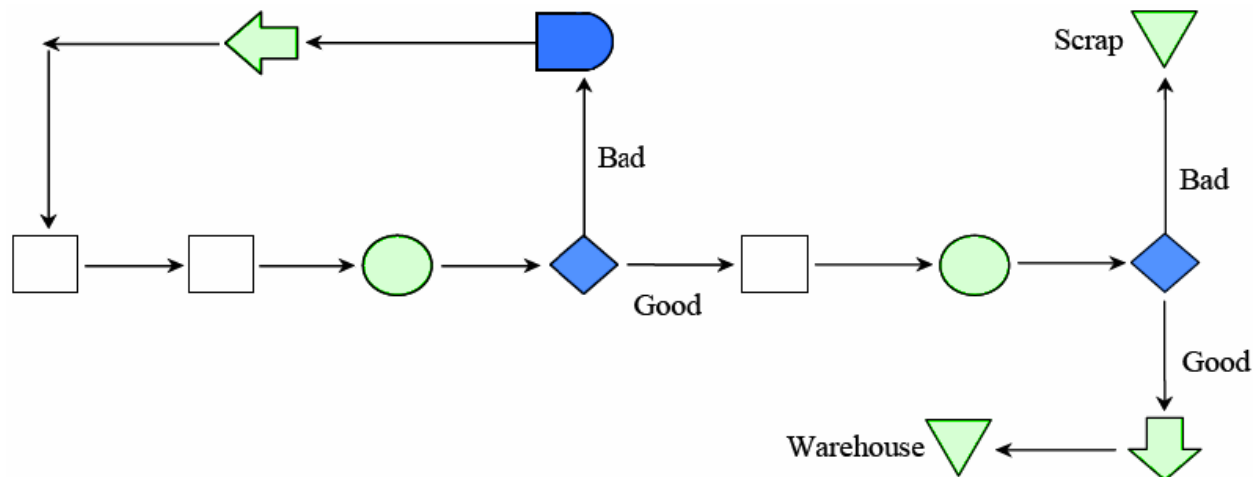
An outsider?
Walk the process and understand it