## How to Make a Process Map

Process mapping is used to visually demonstrate all the steps and decisions in a particular process. A process map or flowchart describes the flow of materials and information, displays the tasks associated with a process, shows the decisions that need to be made along the chain and shows the essential relationships between the process steps.

## Why use a process map?

Creating a process map helps organize processes and makes information visible to everyone. By creating a process map or flowchart, you are producing a visual example of the process to better understand it and see areas for improvement. The act of flowcharting to improve a process was first introduced in 1921 by Frank Gilbreth to the American Society of Mechanical Engineers (ASME).

# **Preparing for process mapping**

It's important to include everyone involved in the process: workers, suppliers, customers and supervisors. Everyone involved needs to clearly understand what the goals of the process are, agree with deadlines and have some knowledge of basic process mapping. You can create a flowchart by hand or in a software program like Microsoft Word, Microsoft Excel, Microsoft Visio or Microsoft PowerPoint; however, there are other software programs specifically built for creating a process flowchart.

# Steps to creating a process map

- Step 1: Identify the problem:
  - What is the process that needs to be visualized? Type its title at the top of the document.
- Step 2: Brainstorm all the activities that will be involved:

- At this point, sequencing the steps isn't important, but it may help you to remember the steps needed for your process. Decide what level of detail to include. Determine who does what and when it is done.
- Step 3: Figure out boundaries:
  - Where or when does the process start?
  - Where or when does the process stop?
- Step 4: Determine and sequence the steps:
  - It's helpful to have a verb begin the description. You can show either the general flow or every detailed action or decision.
- Step 5: Draw basic flowchart symbols:
  - Each element in a process map is represented by a specific flowchart symbol, which together represent process mapping symbols (see meaning of symbols below).
- Step 6: Finalize the process flowchart
  - Review the flowchart with other stakeholders (team member, workers, supervisors, suppliers, customers, etc.) to make sure everyone is in agreement.
  - Make sure you've included important chart information like a title and date, which will make it easy to reference.
  - Helpful questions to ask:
    - Is the process being run how it should?
    - Will team members follow the charted process?
    - Is everyone in agreement with the process map flow?
    - Is anything redundant?
    - Are any steps missing?

# **Numbering conventions**

To help with process map organization, you can number the process maps and process steps. Here's a process mapping numbering convention example:

- Process 1
  - o Sub-process 1.1
    - Sub-process 1.1.1
    - Sub-process 1.1.2
    - Sub-process 1.1.3
  - Sub-process 1.2
    - Sub-process 1.2.1
    - Sub-process 1.2.2

# Meanings of flow chart process mapping symbols

The first symbol to be displayed is the arrow, a connection symbol used to indicate a link between two other symbols and the direction of flow.



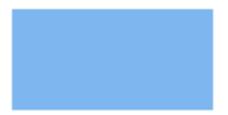
Next, we will show various designs of shapes with their meaning of these symbols in the process flowchart.



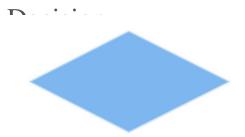


Process flow diagram: symbol meaning. It indicates the beginning or end of a process flow diagram.

## Process



Process flow diagram: symbol meaning. It indicates a particular process and its functions and activities.



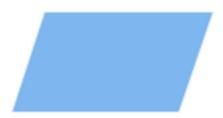
Process flow diagram: symbol meaning. It shows that a decision will have to be taken and the process flow will follow a certain direction due to this decision.

# Delay



Process flow diagram: symbol meaning. Is that some time will pass before the process flow continues.

Data



Process flow diagram: symbol meaning. It's any data used in the flowchart.



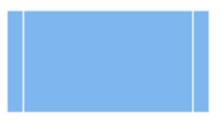
Process flow diagram: symbol meaning. It is a type of data or information that can be read by people, such as a printed report, for example.

## Various documents



Process flow diagram: symbol meaning. It indicates that there are several documents.

# Subroutine or default process



Process flow diagram: symbol meaning. A process that is already pre-defined.





Process flow diagram: symbol meaning. It shows that something must be done, adjusted or modified in the process before proceeding.

## Display



Process flow diagram: symbol meaning. It indicates that any information or data is displayed for reading on a screen or other display.

## Manual entry



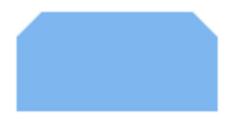
Process flow diagram: symbol meaning. It shows that a procedure will be performed manually by a person.

# Loop manual



Process flow diagram: symbol meaning. It indicates that a command sequence will occur continuously in repetition until stopped manually by a person.

# Loop Limit



Process flow diagram: symbol meaning. It shows the beginning of a loop process.

# Stored Data



Process flow diagram: symbol meaning. It shows that there is stored data.

## Connector



Process flow diagram: symbol meaning. It indicates that there is an inspection at this point.

# Connector to another page



Process flow diagram: symbol meaning. It shows that there are a cross-reference and link to this process from another process designed on another page.

## OR



Process flow diagram: symbol meaning. Used to indicate the 'OR' logic.

## Adder



Process flow diagram: symbol meaning. Used to indicate the logic 'and'.

## Group



Process flow diagram: symbol meaning. **Indicates a step in which the data is organized in a standard way.** 

## Rate



Process flow diagram: symbol meaning. It shows that at this point there will be a list generated that organizes items in a particular order.

## Merge



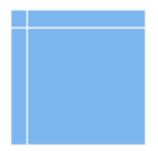
Process flow diagram: symbol meaning. Indicates a step that will combine several sets into one.

## Database



Process flow diagram: symbol meaning. A list of information with a standardized structure that allows searching and sorting.

# Internal Storage



Process flow diagram: symbol meaning. It indicates an internal storage device.

These were the 23 main meanings of flowchart process mapping symbols. Using these symbols, you will be able to map processes and interpret flowcharts.