

**SEED ENTERPRISE MANAGEMENT INSTITUTE (SEMIs)**  
Seed Quality Assurance, Management and Control Processes

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# **Process analysis and flowcharting**

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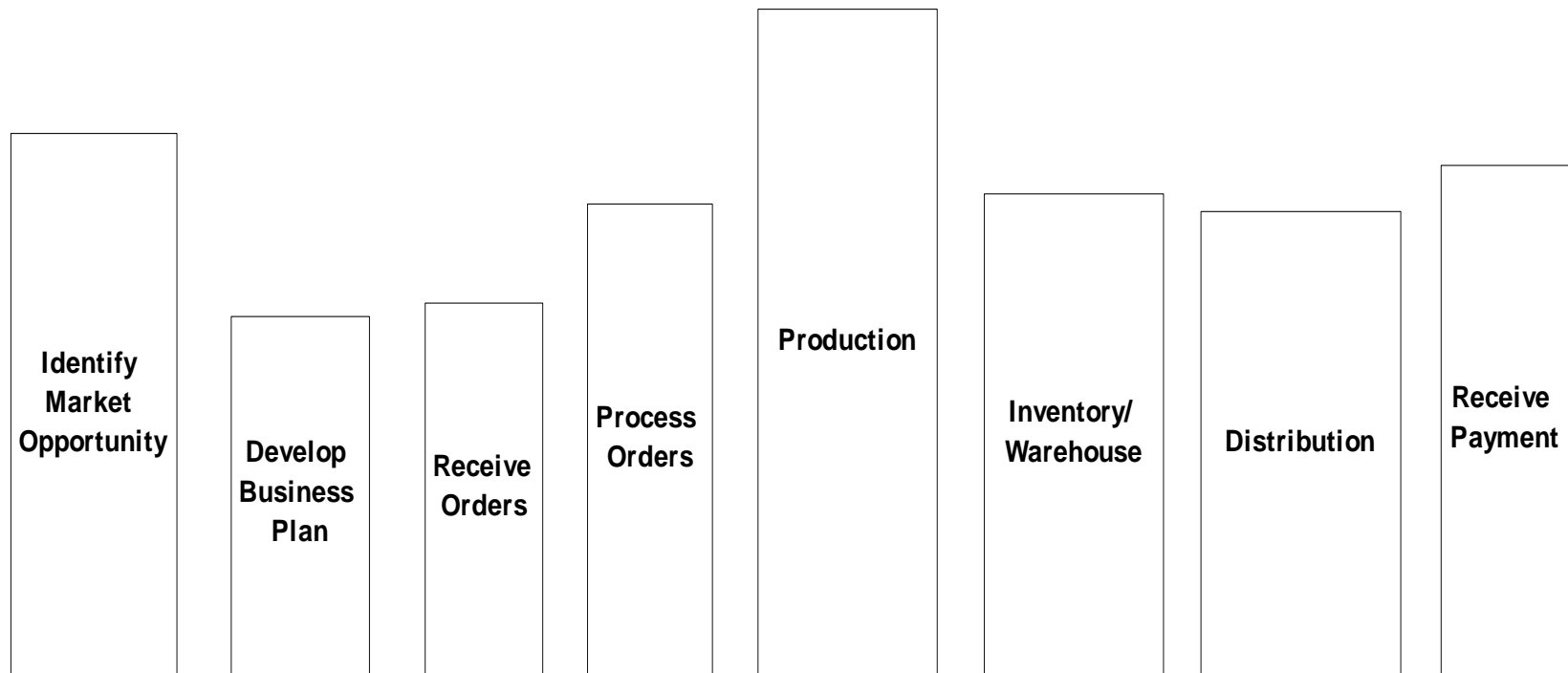
## Process Analysis

## Key Points of Process Analysis

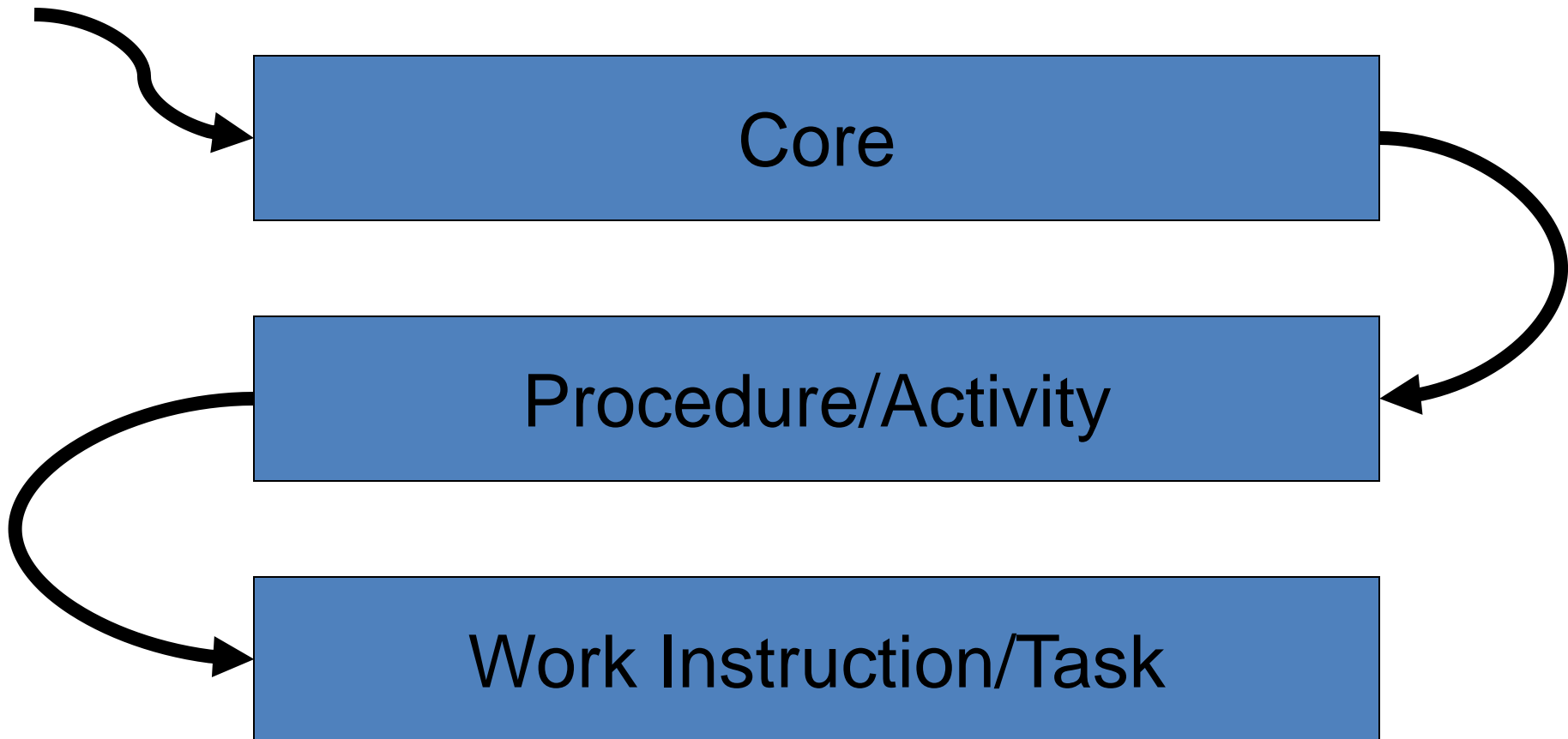
- Defined purpose and scope
- What is happening?
- Who is responsible for what?
- Who interfaces with whom?
- Timing and measurements
- Viewed from a customer and supplier relationship

## Typical Business Process

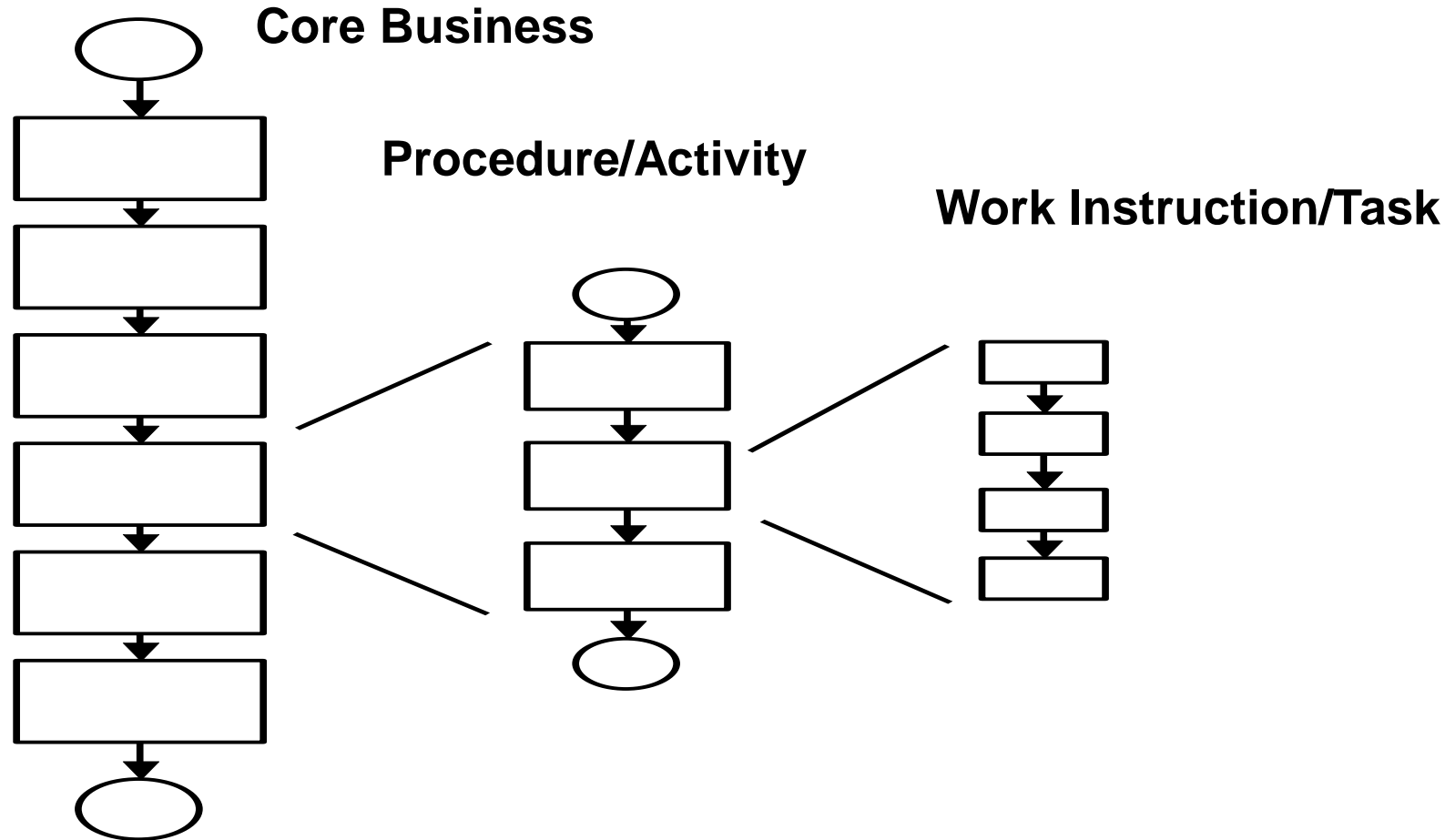
### Core/ Functional Activities



## Process Relationships

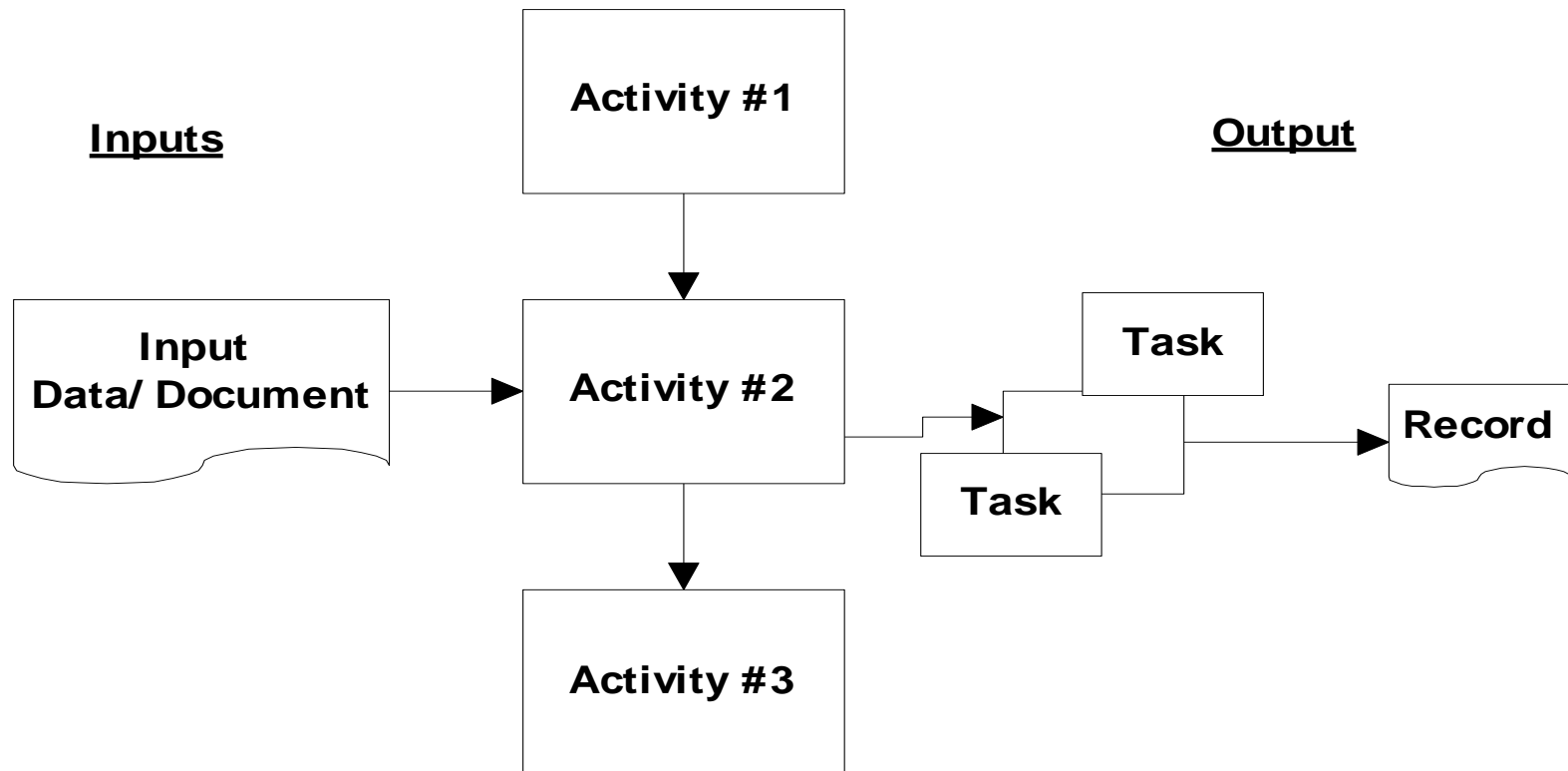


## Process Components



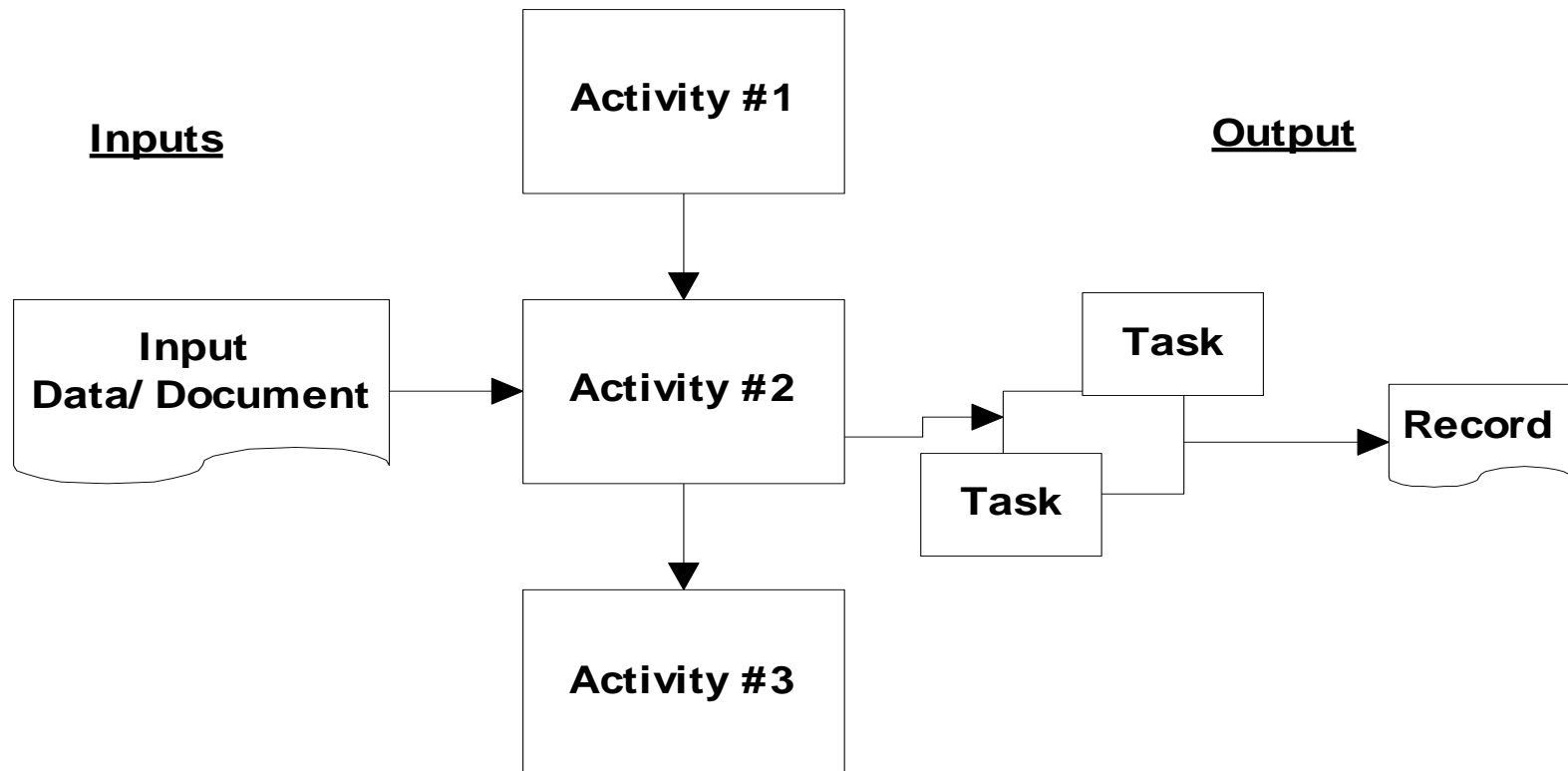
## Business Process

Procedure/ Activity



## Business Process

Procedure/ Activity





## Inputs

- Specifications
- Data and/or documents
- Manuals
- Regulations/laws
- Policies and guidelines
- Output from a companion process

## Inputs – Informal

- Telephone Calls
- Verbal Instructions
- Representative Sample

Note: Informal “critical” inputs require methodology for tracking and audit

## Activity

- An action or activity
- Doing something
- A component of a larger process
- If activity is not initiated, the process will fail
- Typically, made up of several task involving several people

## Work Instruction

- An action or activity
- Doing something
- A subcomponent of a procedure
- Typically, one task that involves one person

## Outputs

- Confirmation that an activity has achieved a defined state of completeness
- Includes:
  - Records
  - Documents
  - Forms
  - Data

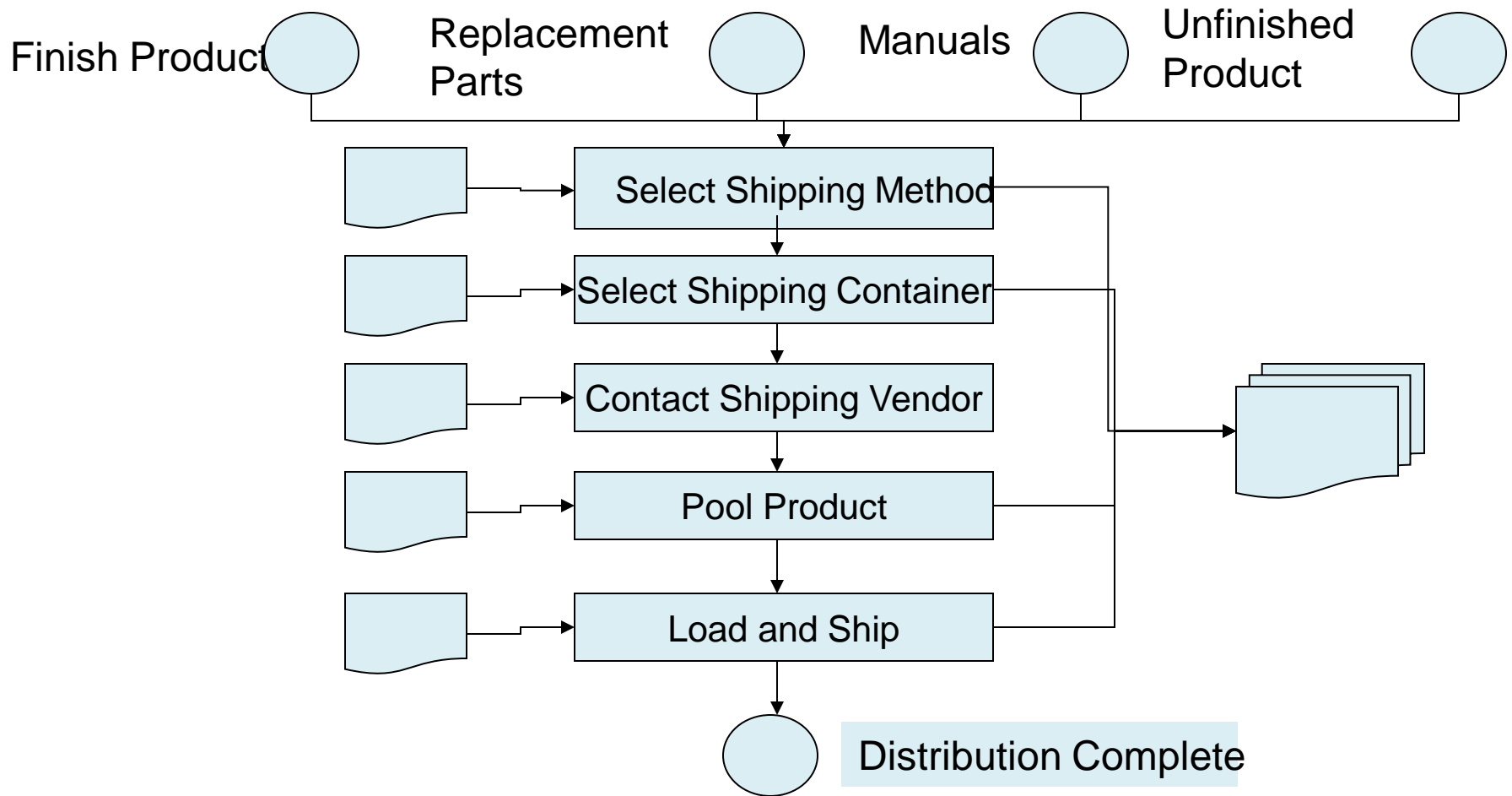
## Key Points of Process Analysis

- Defined purpose and scope
- What is happening?
- Who is responsible for what?
- Who interfaces with whom?
- Timing and measurements
- Viewed from a customer and supplier relationship

## Key Points of Process Analysis

- Examine activity for the following:
  - Inputs
  - Main event
  - Interfaces
  - Defined responsibility and authority
  - Documentation and records

## Distribute Product (Example)





## **FLOW CHARTING**

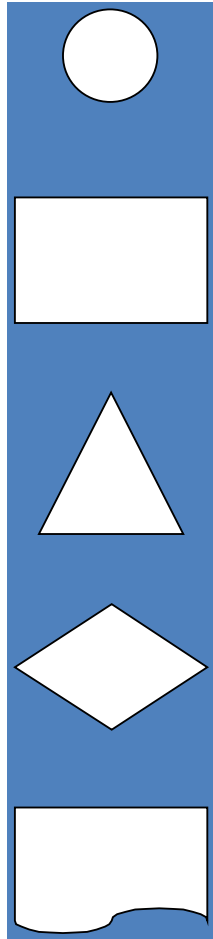
## FLOW CHARTING

- Flow charts help to visualize a process and to represent the essential elements of a given procedure on a single page.
- A flow may be supplemented by explanatory notes or be itself the summary to a textual description.
- By general consensus a very limited number of symbols is used, which facilitates its generic application and makes it a tool that is easily understood

# Process analysis and flowcharting

- Visual representation of each step in the process
- Graphically displays functional activity and provides a visual understanding of interrelated occurrences
- Provides an understanding of the entire process
- Modifications and disconnects can be identified
- Displays a clear relationship between customer and supplier

## Flowchart Symbols



Begin/End/Linkage

Activity/Process

Major Review

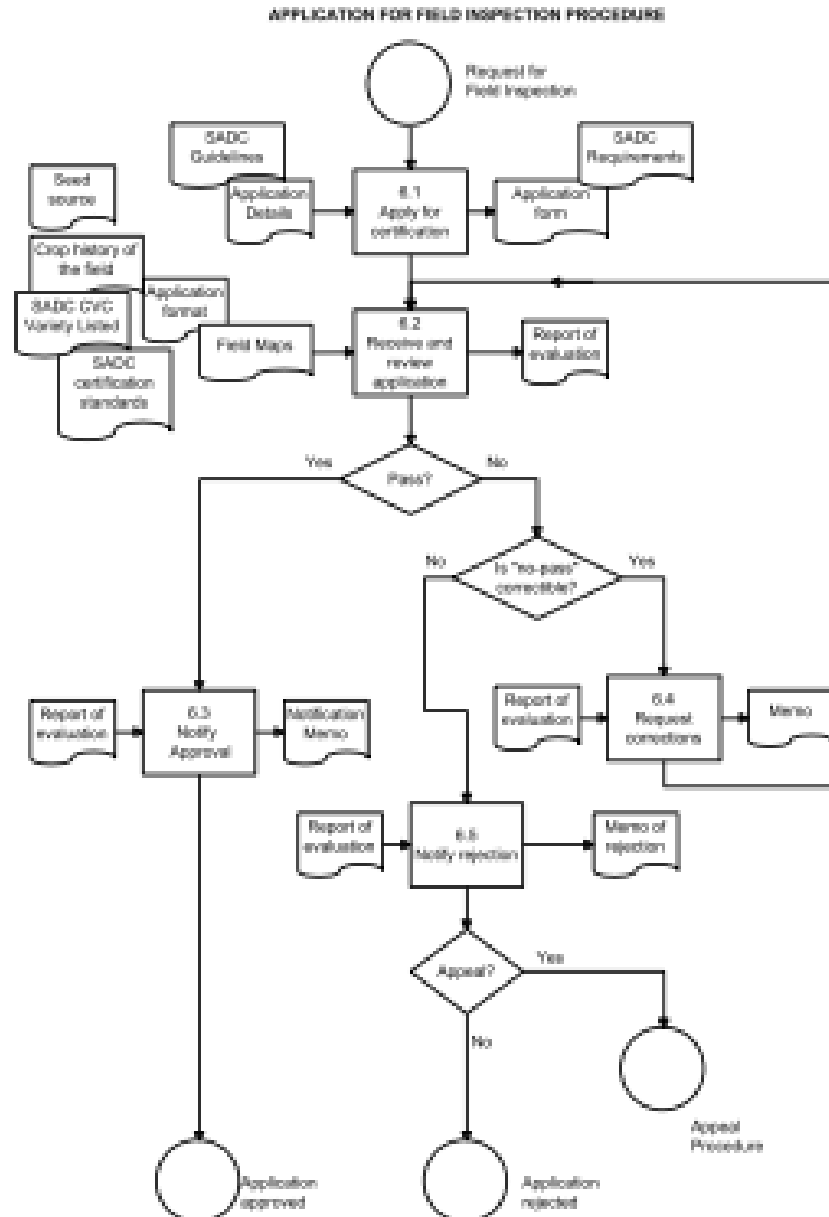
Decision

Data and/or Document

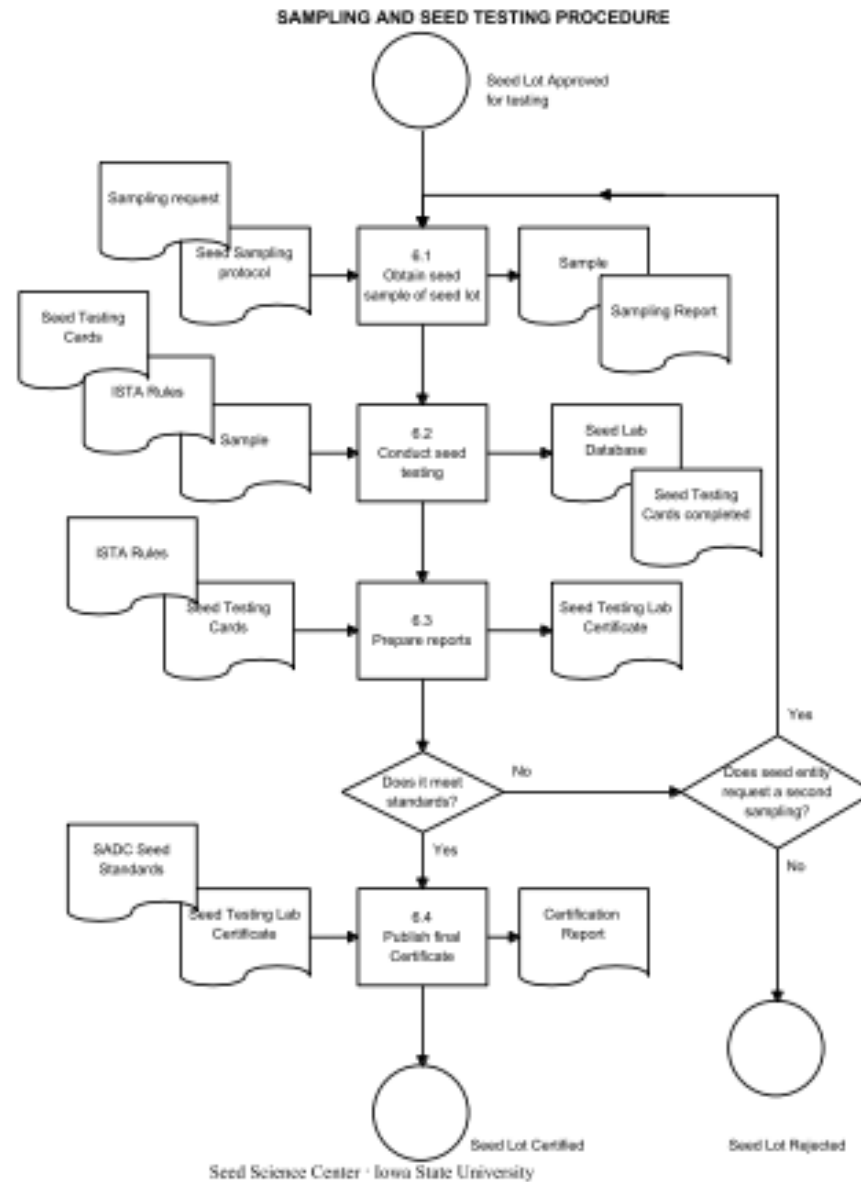
## Basic Flowcharting Guidelines

- Start at the top of the page and end at the bottom
- As a general rule do not exceed 20 symbols per page
- Describe activities with same level of process complexity
- Too much detail will defeat the purpose of a flowchart
- Do not develop flowcharts without input from everyone involved in the process
- Use active terms - verb/noun
  - Schedule meeting
  - Develop plan
  - Conduct audit

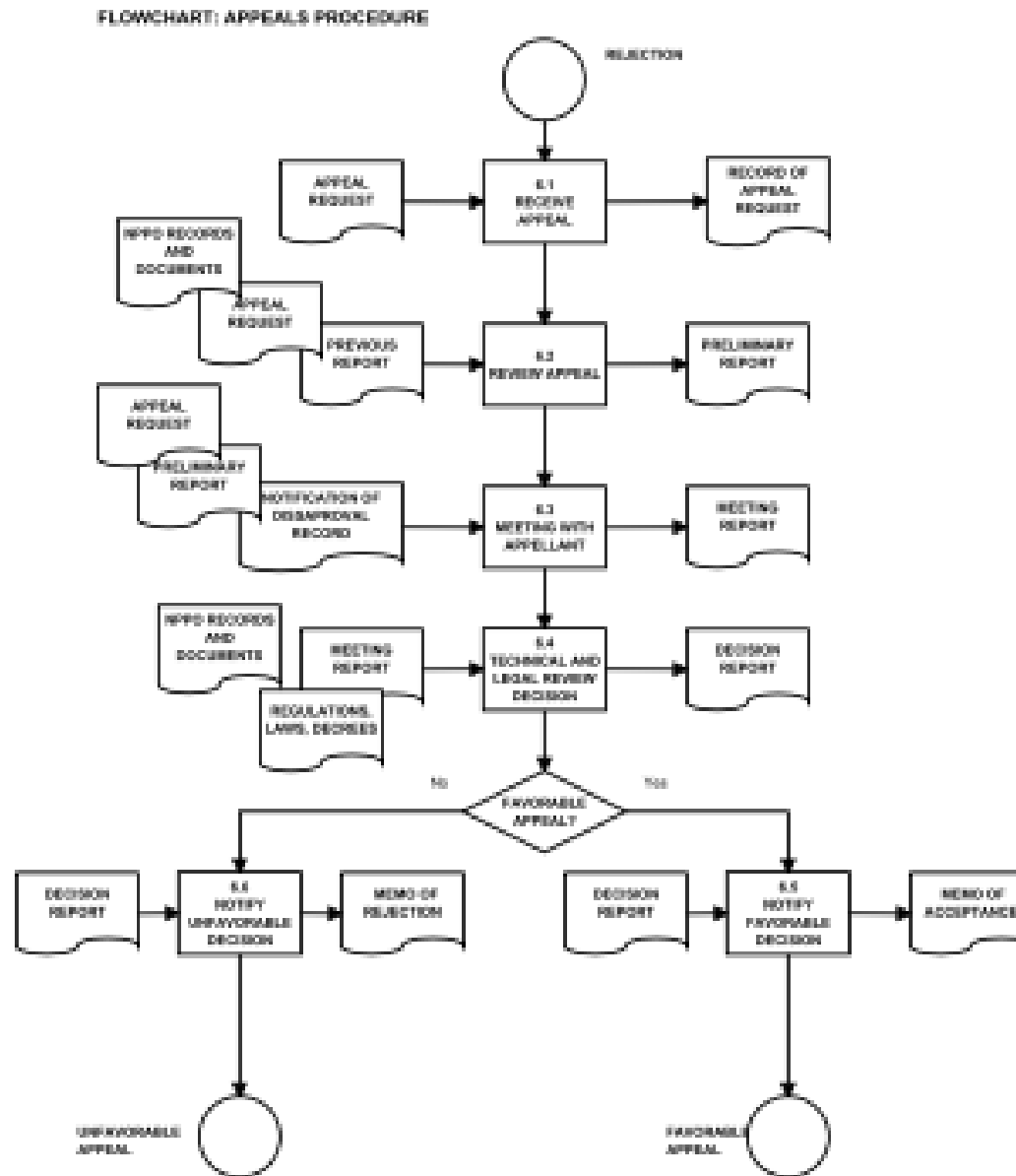
# Process analysis and flowcharting



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**Thank you for the  
audience**