

# Systems Approach to Process Improvement

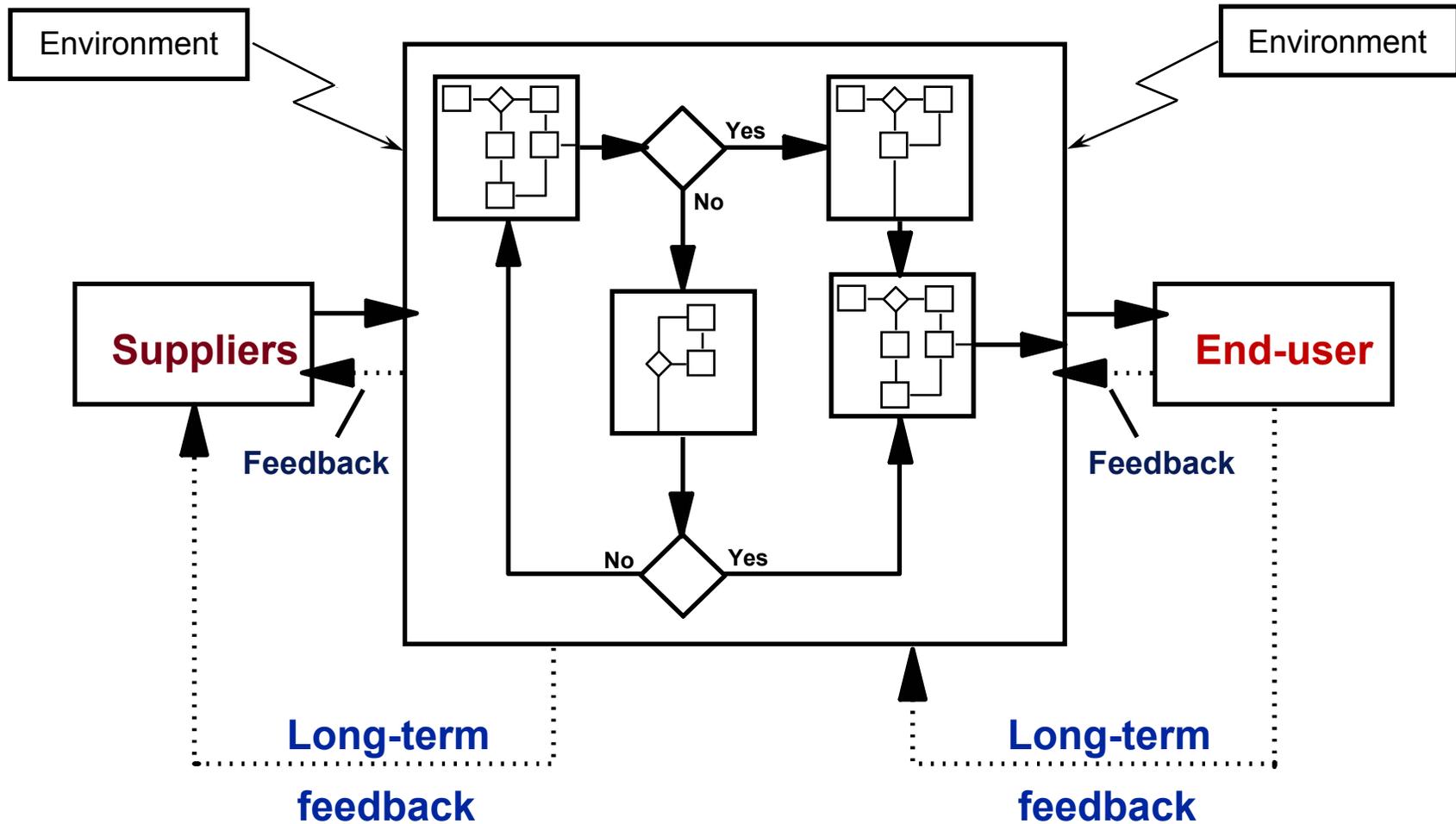
# Course Objectives

- **Prepare quality advisors to help an organization optimize the performance of the extended system:**
  - **Gain knowledge of the extended system**
  - **Select processes**
  - **Improve processes**
  
- **Prepare quality advisors to guide an organization in the activities required to improve processes by understanding:**
  - **What to do**
  - **When to do it**
  - **How to do it**

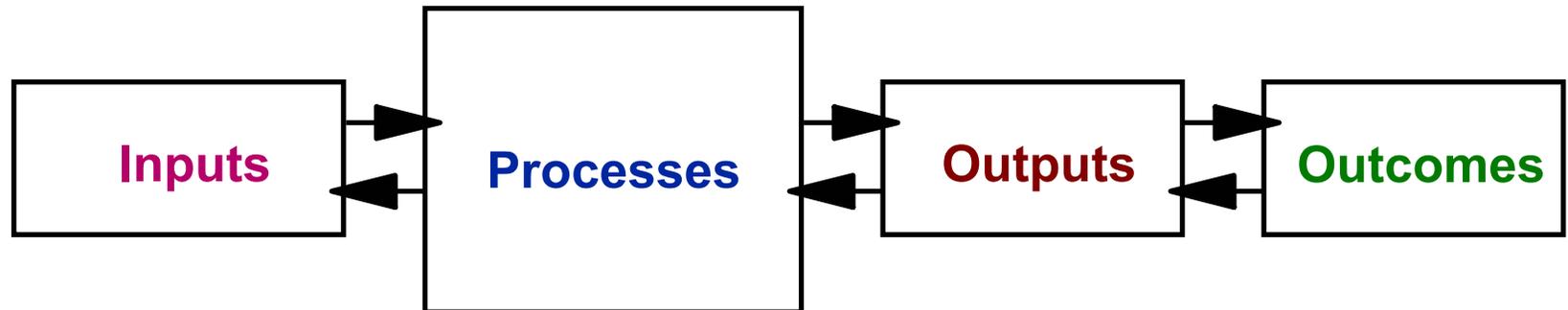
# Extended Systems View of Organizations

- **Extended System**
  - ① **Optimization of the system**
- **Process Improvement**
  - ① **Customer focus**
  - ① **Measurement**
  - ① **Management and improvement of processes**

# The Extended System



# Measurement Sources



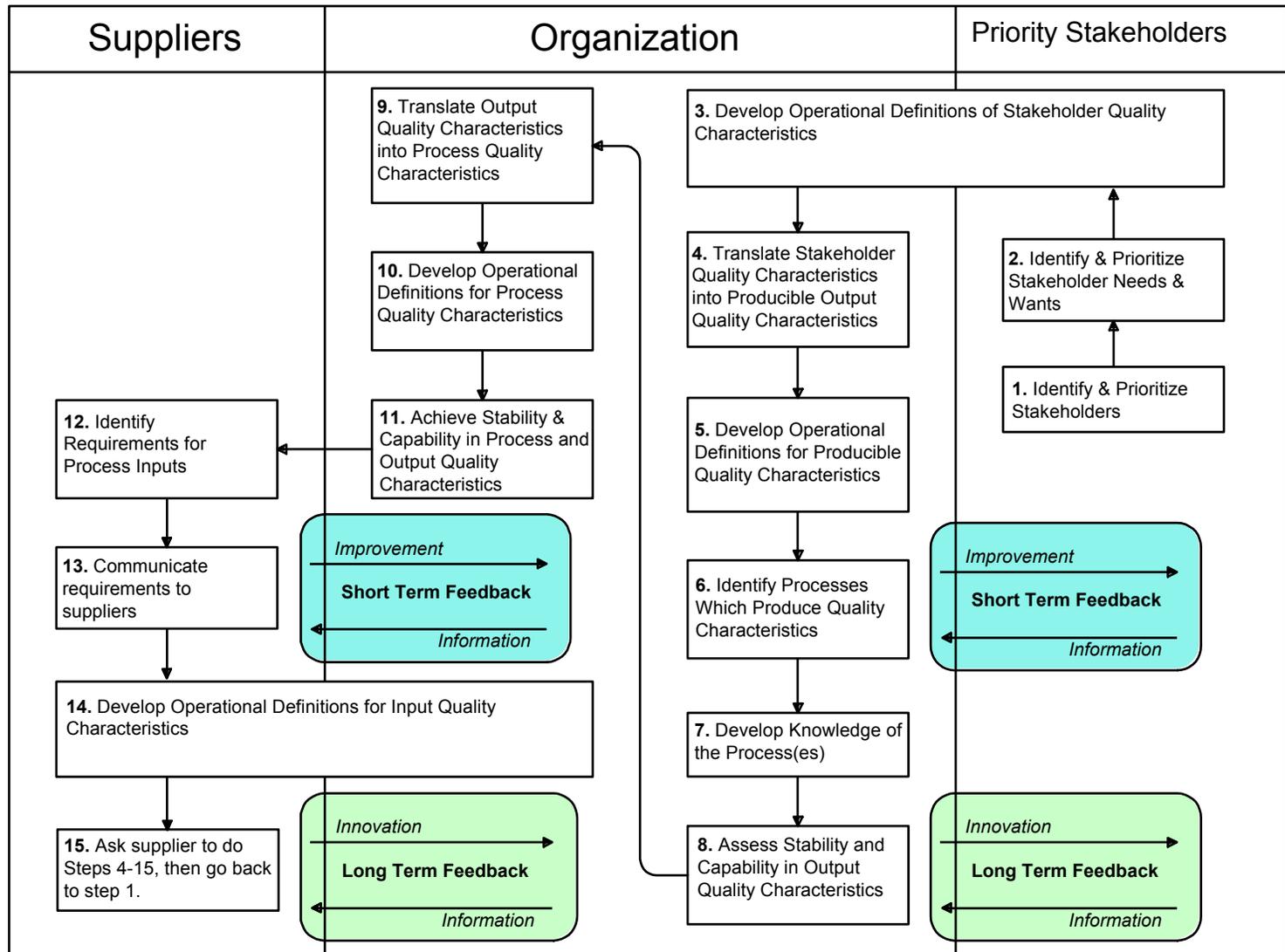
# Variation

- ❑ **Variation is to be expected**
- ❑ **Need to learn when to act and when not to act**
- ❑ **Achieve predictability**
- ❑ **Meet requirements**

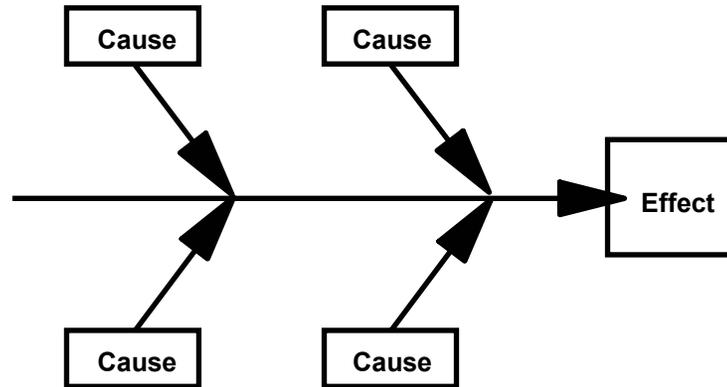
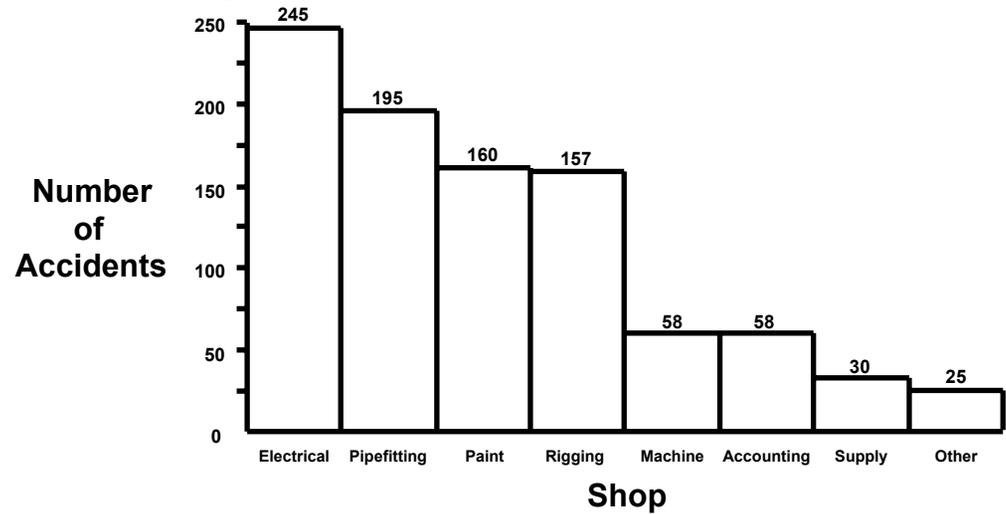
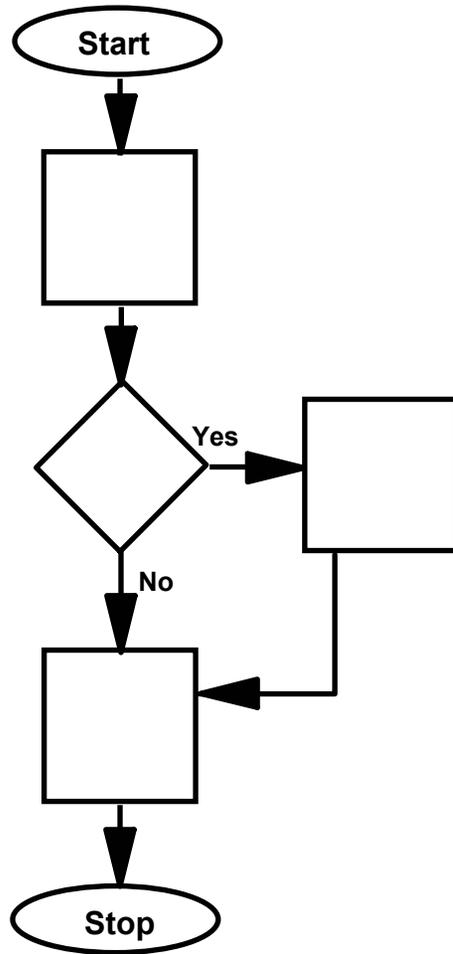
# PDCA

- ❑ **Operational definitions**
- ❑ **Data collection plans**
- ❑ **Statistical tools**

# Systems Approach to Process Improvement Model

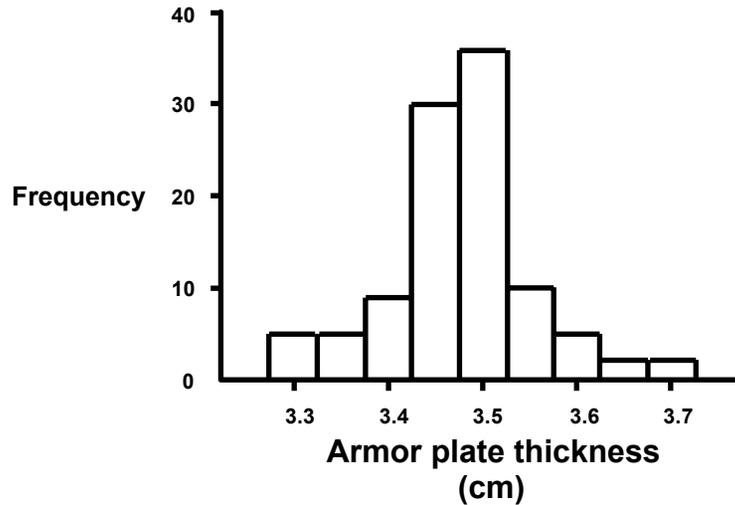
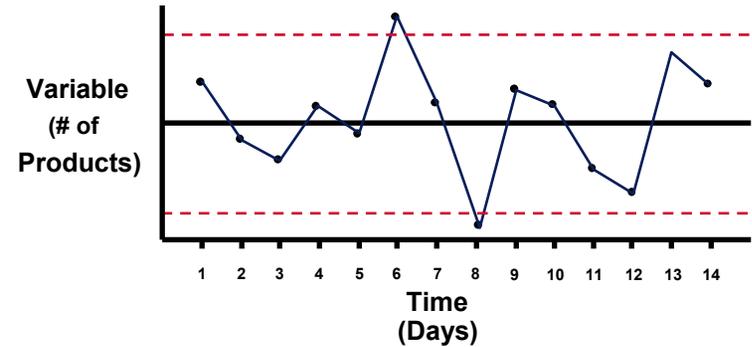
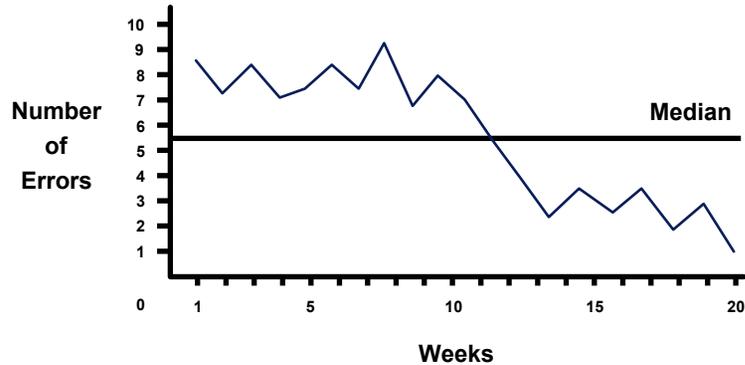


# Basic Graphic Tools



(1 of 2)

# Basic Graphic Tools



(2 of 2)

# Course Structure

- **Overview**
- **Module 1: Understanding the Extended System**
- **Module 2: Data Collection Procedures**
- **Module 3: Data Characteristics and Variation**
- **Module 4: Assessing and Achieving Stability Using Averages Control Charts**
- **Module 5: Assessing and Achieving Stability Using Individuals Control Charts**
- **Module 6: Assessing Process Capability**
- **Course Summary**

# Course Results

- ❑ **Depict your organization's extended system and measurement sources**
- ❑ **Demonstrate how the PDCA can be used as a framework for acquiring knowledge and gathering data**
- ❑ **Use knowledge of variation as a basis for action**
- ❑ **Apply the Systems Approach to Process Improvement Model to your organization's extended system**
- ❑ **Construct and apply basic graphic tools**