Step 2: Explore

- Process Mapping (Current State)
- Measure process activities
- Assess value from customer's perspective

The Explore step

- This step is about understanding and documenting the "current state"
  - Create a map of the process that accurately reflects how work gets done
  - Include measures of how long steps in the process take
  - Consider the customer's point of view and what constitutes value

PROCESS MAPPING

What is a process?

- A process describes a sequence of events required to get results

- It is a collection of activities that takes one or more inputs and creates an output that is of value to the customer

- It is often not confined to one organizational unit

What is process mapping?

- A graphical representation of a process that shows tasks in sequence and that makes work visible
- A mechanism to clarify roles and responsibilities
  - What activities are completed by whom, and in what sequence
  - Crosses functions
- A way to uncover duplication, excessive controls, and rework points
- A tool to focus on tasks not people, steps not opinions

Why process mapping?

- Helps orient people by creating a common understanding
- Creates a baseline from which to discuss potential improvements to the process, e.g.
  - Identify areas for improvement
  - Streamline activities and eliminate waste
  - Automate processes
  - Identify metrics to improve (time, resource allocation, cost)

Why do process issues exist?

- Process was not designed well initially
- Customer needs changed but process did not
- Technology changed but process did not
- Processes and policies change over time
  - Added or removed steps, approvals, checks
- Process is dependent on a few individuals but is not documented
- Process owners rarely have the time to review
- Those working on a process do not have a mechanism to fix the process

Typical steps for process mapping

1. Identify customer and supplier
    - Process output(s) and customer(s)
    - Customer quantity, quality, and delivery requirements
    - Process input(s) and supplier(s)
    - Supplier quantity, quality, and delivery mechanism(s)
2. Identify process name & owner
3. Identify start and stop points (scope of the process)
4. Reflect the key process activities

    Tip: Most processes have exceptions; map what happens 80% of the time!

Typical steps for mapping, continued

5. Map the major process steps in sequence
6. Note information flow and technology used in the process steps and between steps

Tips:

- Simply <u>document</u> the current process, do not try to fix it
- Do take note of problems, frustrations, hassles, areas of concern, and good ideas in a 'parking lot' as you go

There are several ways to gather input to develop the process map

- Observe the process as it is happening
- Assemble people who work with the process to create the map
- One person knowledgeable of the process independently creates the map, then presents it to others familiar with the process, gets input, and revises as necessary
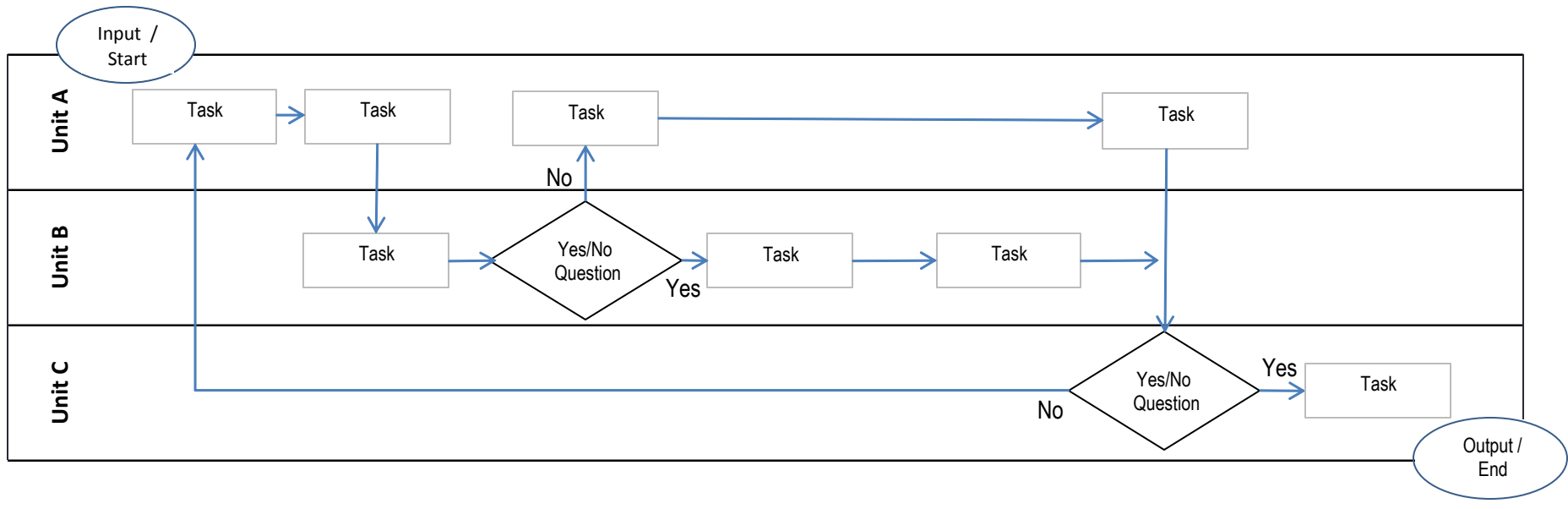- Interview process participants

Cross-functional ('swim lane') map

- Shows relationships and handoffs between functions
- Clarifies roles in relation to the flow of events
- Helpful when analyzing process issues
  - See duplicate work across functional roles
  - Identify sources of delays
  - Understand cross-departmental issues
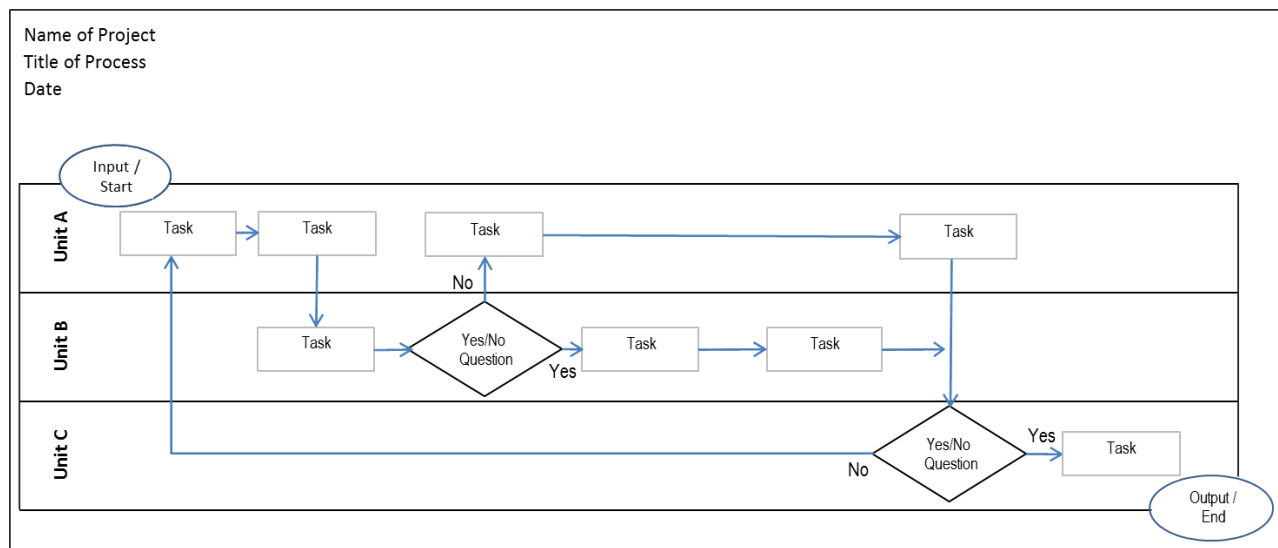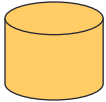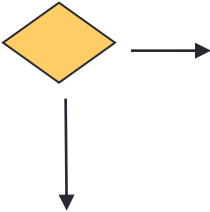
Example of a swim lane process map

Basic process mapping symbols

▪ Process activity step

Name of activity, task, or operation

▪ Direction of flow

Direction and order of activities

▪ System

Database or system/application

▪ Delay/queue

Process waits with no action taking place

▪ Decision point

Process branching due to results of a decision

Many processes cross unit boundaries

- Evaluate processes from an organization-wide perspective
- Move from a unit/silo perspective to a process-oriented viewpoint

UNIT VIEW

| F A S | E V C P | S C H O O L |

PROCESS VIEW

HIRE EMPLOYEES

ACQUIRE GOODS

MANAGE FINANCES
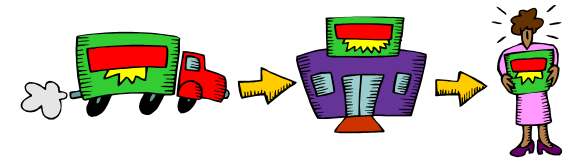
Common pitfalls of process mapping

- Too detailed
- Not detailed enough
- Focuses on systems rather than processes
- Used as a tool for problem solving rather than problem discovery
- Focuses on single tasks not overall process

MEASURE PROCESS ACTIVITIES

Measure process activities

- *Measure* n. A standard: a basis for comparison; a reference point against which other things can be evaluated. v. To bring into comparison against a standard.
  - **Measures drive improvement.** Teams who review their performance measures are able to make adjustments, share successes, and probe for causes when progress comes up short
  - **Measures inform customers.** As a growing number of measures are reported, customers are better able to assess quality for themselves, and then use the results to make choices and ask questions
  - **Measures influence rewards.** Increasingly, organizations use measures as the basis for recognizing achievement
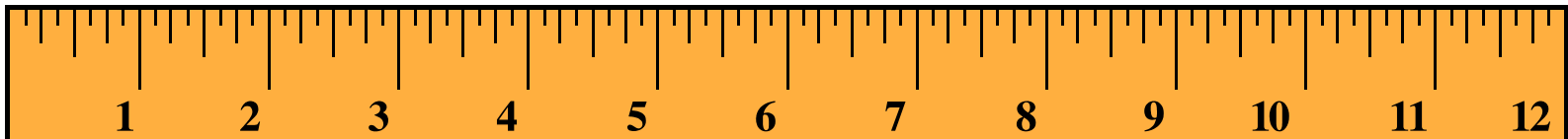
Choosing measures

- The measure is easily accessible
- There is an identified responsible entity and a process to maintain and update the measure periodically
- The measure is tested for reliability and validity
- Considerations when selecting a measure:
  - Importance
  - Scientific acceptability
  - Feasibility
  - Usability
  - Related and competing measures

Types of measures

- Time Metrics
  - **Cycle Time (CT)**: how long it takes to complete a specific task from start to finish
  - **Wait Time (WT)**: time an item is not touched or is delayed
  - **Lead Time (LT)**: Start time to finish time of the overall process
    - (**LT = CT + WT**)

- Other Metrics
  - Volume of throughput; number of transactions per period (year, week, day, etc.)
  - Number of errors
  - Customer assessment of value (e.g. performance)

Types of measurements

Type		Questions
Outcome measures	Voice of the customer	How is the system performing? What is the result?
Process measures	Voice of the system	Are the parts of the system performing as planned?
Balancing/ Structure measures	Looking at a system from various directions /dimensions	Are changes designed to improve one part of the system causing new problems in other parts of the system?
Business measures	Voice of the business	Are there regulatory requirements? Are there financial / business accounting requirements?

Project measures - sample

Metric	Current State	Future State
Lead Time	19 days	
Percent Correct	37%	
Cycle Time for Step 2	44 minutes	

Measuring the process

- Interview people who do the process
- For a set time, track exact time it takes to complete specific steps
- Add time for all steps and sum
  - Example: making toast

Step	Time (minutes)
Select bread and put in toaster	1
Toast	2
Delay: make coffee	5
Spread butter and cut	1
Total lead time	9

- Track mistakes
  - Items sent back, corrections
  - Error interactions with system (exception report)
- Get stats on the number of transactions

Types of Data Collection

Type	Description	Example
Sampling	Select representative portion of larger population for analysis	Staff attitudes using 85% classified employees and 15% management
Check Sheets	Worksheet formatted for ease of tabulation	Staff mark on sheet every time file is not where it should be.
Focus Group	Small representative group to provide feedback	Group session with structured interview by leader
Time Series	Record how much time is taken in any step	A document is stamped when received and the time is recorded when the next step is made

ASSESS VALUE FROM CUSTOMER PERSPECTIVE

Assess value from the customer's perspective

Why is it important?

- The customer is why you exist
- Confirms what is working and what is not
- Allows focus on those problems that are of value to the customer – current and future
- Provides a variety of perspectives
- Provides quantitative data for measuring improvement

Collecting data about customer needs

- Value is determined, in part, by customer expectations and perceptions
- Multiple methods exist to gather both qualitative and quantitative data:
  - Interviews
  - Focus groups
  - Surveys
  - Existing systems
- When collecting data:
  - Create questions that are specific and easy to collect and record
  - Compile results so that management can take action based on the results

Collecting data about customer needs, continued

What keeps us from asking the customer questions?

- Old paradigms - "They are a captive audience"
- Fear of discovering what the customer really feels
- Fear that the customer does not understand the constraints under which we work
- Fear that we will act defensively
- Fear that we must incorporate all suggestions

Collecting data about customer needs, continued

- Two methods are introduced in the appendix:
  - Importance-Performance Surveys
  - Focus Groups
- Customers define the attributes to be measured
- Customize the method to the organization
- Use combination of informal interviews, focus groups, and written surveys

Note: This will likely require specialized assistance from outside the project team

Reference: The Customer Survey: A Tool for Continuous Improvement, Lisa Rose, UCSC, 1995

CUSTOMER PERSPECTIVE: APPENDIX MATERIALS

Importance-Performance Survey Steps

1. Formulate goals, objectives, and strategies
2. Design the written survey
   - Create with end result in mind
   - Base on customer needs, concerns
   - Formulate questions by subgroup if helpful (e.g. Staff vs Managers; Internal vs External)
   - Formulate questions based on knowledge of customer needs
   - Determine if anonymous and/or confidential and follow appropriate protocols
3. Test and Revise
   - Are questions clear and unambiguous?
   - Have key issues been included?

Importance-Performance Survey Steps

4. Distribute and Collect
   - Provide sufficient time
   - Follow-up phone calls
   - Make survey easy to return
5. Tabulate and Analyze Results
   - Importance-Performance Grid
     - Easy to interpret graphical display
     - Results are relative; not absolute
     - In case of absence of low ratings, axes may be moved
   - Gap Analysis
     - Identify attributes which have the greatest disparity between importance and performance
     - May be key indicators of customer dissatisfaction
   - Importance Ranking

Importance-Performance Survey

CONCENTRATE HERE *This quadrant requires immediate attention. Customers place high value on theres items, yet are dissatisfied. Get Moving!*	**KEEP UP THE GOOD WORK** *This quadrant indicates superior performance in the "right" areas. How can you better leverage this superior performance?*
LOW PRIORITY *The items in this quadrant may need improvement but may not merit immediate attention due to low relative importance*	**POSSIBLE OVERKILL** *This quadrant may indicte areas where resources are being ineffectively spent due to low importance to the customer*

Focus Groups

- An interview method where:
  - Small, facilitated groups are used to collect qualitative data / feedback
  - No decisions, actions steps, or agreements need to be made by the group or the facilitator
  - Groups members have similar needs and interests related to the topic
- Focus Groups are useful to collect information such as:
  - Impressions or evaluation of programs, services, ideas, etc.
  - What's Working and What's Not
  - In-depth information on a specific topic
  - Elements of a process, or details of a problem
  - Information helpful in designing surveys and questionnaires
  - What people think and feel about sensitive, difficult, or confusing issues

Focus Groups Steps

1. ## Define Outcomes
   - What information do you want to collect?
   - What does the end result look like?
   - How would you make decisions based on this information?
   - What could go wrong, and how can we respond so that outcomes are achieved?

2. ## Select Target Audience
   - Formulate the questions by subgroup if helpful (e.g. Staff vs Managers; Internal vs External)

3. ## Recruit Participants
   - What lists of potential participants exist?
   - Ask people to suggest other participants
   - List-Services, Mail-groups, news-groups, etc.

Focus Groups Steps

4. Create Agenda
   - What questions should we ask? In what order?
     - Whenever possible, defer difficult or complex issues for the middle of the focus group.
   - What processes or methods will be utilized for each agenda item?
   - How much time should be allocated for each topic?
5. Develop Questions
   - An Introduction
   - The core questions which are the informational questions that drive the research.
   - A closing segment which summarizes and highlights key points, and brings closure to the meeting.
     - TIPS:
       - Move from general to specific questions
       - Use open ended questions
       - Set context for question
       - In general, do not use "yes", "no", or "why" questions

Focus Groups Steps

6. Develop the Method
   - All Talk
   - Interactive
   - Voting

7. Plan the Logistics
   - Setting up is half the work
   - Minimize distractions in the room where the interviews will be held
   - Have name tents or name tags available
   - Facilitator and Recorder should arrange themselves so they have easy eye contact with one another
   - Participants should be able to see the flip chart, each other, and the facilitator
   - The more effective the preparation, the more productive the focus group

Customer Data Collection: Planning

- Who are the customers of the process?
- What are the desired end results?
    - Anecdotal or measurable feedback?
    - Performance vs. Improvements
        - Process and system *requirements* vs. *performance*?
- Select the appropriate method:
    - Measurable ⟶ I/P Survey
    - Perceptions ⟶ Focus Groups
    - Performance ⟶ I/P Survey
    - Needs/Suggestions ⟶ Focus Groups