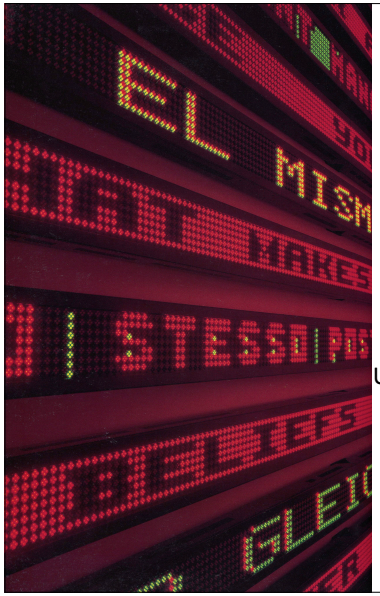


BNAI MIS 3504

Digital Design and Innovation Studio

UNDERSTANDING WORK PROCESSES

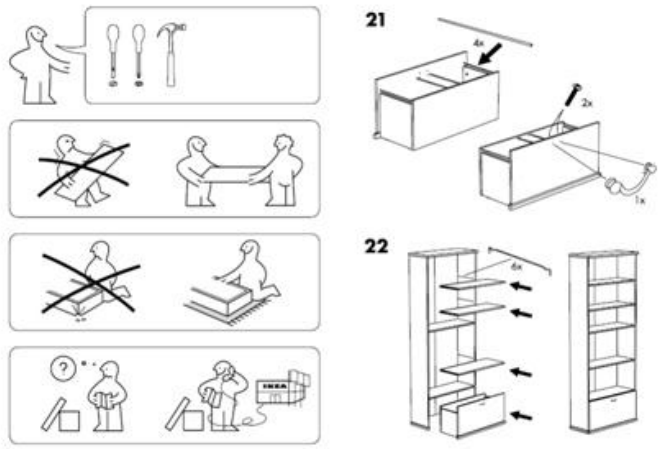
Rich Flanagan

Photo: Installation by Jenny Holzer, US Pavillion, Venice Biennale 1990

Process DIAGRAMMING

Understanding HOW people do their work

Think VISUALLY



assembly process: IKEA

Workflow Diagrams

- How would you describe a process you routinely use to a friend who wanted to do the same thing?
- Is it easier to use words or draw a picture of the steps you take?
- What would some uses of this approach be?

Workflow Diagrams

- One of a Business Analyst's key tools, especially for analyzing the as-is situation
- Great way to begin to understand the process you are dealing with at high level
- Different levels of workflow can be used to explain the process to different audiences
- Can document Standard Operating Procedures (SOP's)
- Revising the flow to facilitate improvements is standard design technique

Workflow Diagrams

- What would we want to include in a workflow diagram?
- There are many different types of workflow diagrams, we will focus on one.
  - **Swim Lane Flowcharting**
  - ANSI Flowcharting
  - UML Activity Diagrams
  - SIPOC
  - Etc.

Think:

Actors [who]

Actions [what]

Decisions

Sequence [when]

Space [where]

RELATIONSHIPS

Team Exercise: Swim Lane Workflow

- With your teammates,
- Take 5 minutes to imagine the steps a warehouse goes through when it receives material from its suppliers
- Sketch it out if you can
- Be ready to share your ideas

Swim Lane Process Mapping

1. Name the process - subject+verb+object

1. What's the business event that initiates the process?

1. What's the outcome of the process?

Swim Lane Process Mapping

1. Name the process - subject+verb+object

Warehouse Receives Materials

1. What's the business event that initiates the process?

Receive Materials

1. What's the outcome of the process?

Materials are Stored

Swim Lane Process Mapping

Receiving Dock

Receiving Clerk

Forklift Driver

Warehouse Foreman

Data Processing

List all people, systems and departments that may be involved in the process

Swim Lane Process Mapping

Receiving Dock

Receiving Clerk

Forklift Driver

Warehouse Foreman

Data Processing

Draw a lane next to each person

Swim Lane Process Mapping

Receiving Dock

Receiving Clerk

Forklift Driver

Warehouse Foreman

Data Processing

Materials

Unload Trucks

What is the first step?

Swim Lane Process Mapping

Receiving Dock

Receiving Clerk

Forklift Driver

Warehouse Foreman

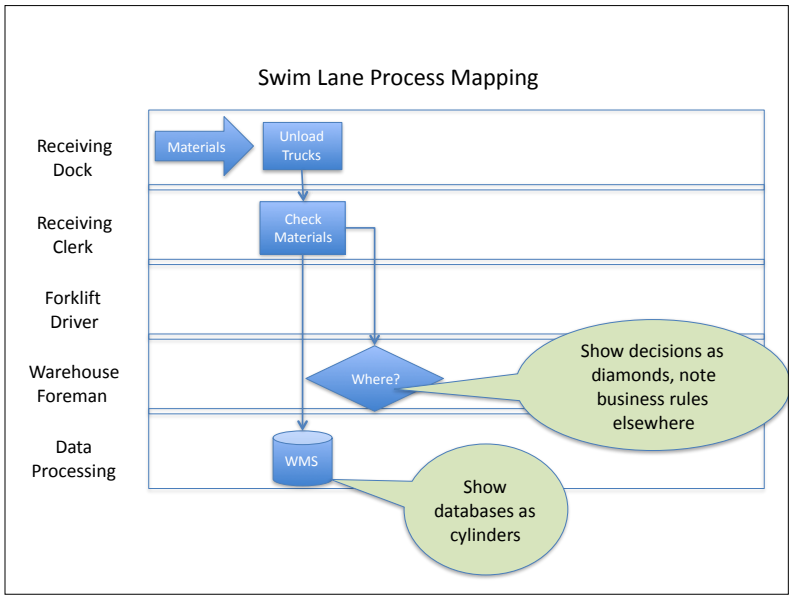
Data Processing

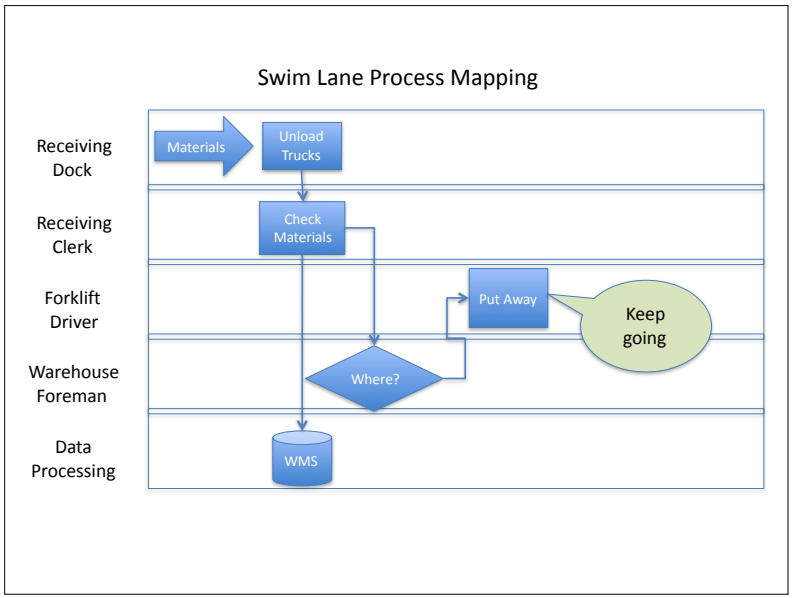
Materials

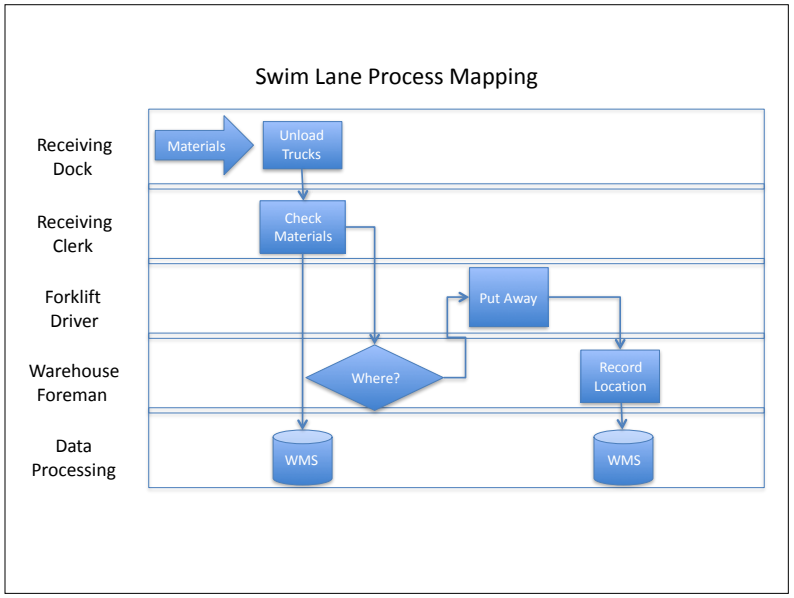
Unload Trucks

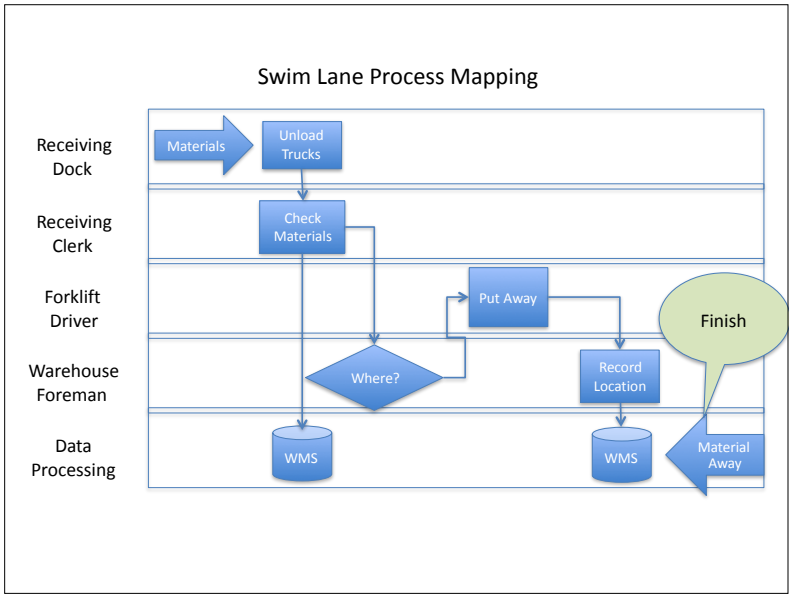
Check Materials

What is the next step?


Swim Lane Process Mapping
Receiving Dock
Receiving Clerk
Forklift Driver
Warehouse Foreman
Data Processing
Materials
Unload Trucks
Check Materials
Where?
WMS
Show decisions as diamonds, note business rules elsewhere
Show databases as cylinders


Swim Lane Process Mapping
Receiving Dock
Receiving Clerk
Forklift Driver
Warehouse Foreman
Data Processing
Materials
Unload Trucks
Check Materials
Put Away
Keep going
Where?
WMS


Swim Lane Process Mapping
Receiving Dock
Receiving Clerk
Forklift Driver
Warehouse Foreman
Data Processing
Materials
Unload Trucks
Check Materials
Put Away
Where?
Record Location
WMS
WMS


Swim Lane Process Mapping
Receiving Dock
Receiving Clerk
Forklift Driver
Warehouse Foreman
Data Processing
Materials
Unload Trucks
Check Materials
Put Away
Finish
Where?
Record Location
WMS
WMS
Material Away

Team Exercise: The Sales Order Process Case

Instructions:

1. Read through the case.
2. Work with your team.
3. Identify the actors – Who are all of the people/departments/systems involved?
    • Share with the class
4. Actions – What are the steps they perform in the process?
    • Share with the class
5. Sequence – Map the process in sequence using the swim lane method.
    • Share with the class