MIS 3504
Digital Design and Innovation Studio

5: UNDERSTANDING WORK PROCESSES

Rich Flanagan / James Moustafellos

Exam #1

Chapters 1-4 and Chapter 6 up to page 228.
Memory Jogger pp 43-49
No Process Diagramming
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 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 [when]

Sequence [when]

Space [where]

RELATIONSHIPS
Swim Lane Process Mapping

1. Name the process  -  subject+verb+object

2. What’s the business event that initiates the process?

3. What’s the outcome of the process?
Swim Lane Process Mapping

1. Name the process - subject+verb+object

   Warehouse Receives Materials

2. What’s the business event that initiates the process?

   Receive Materials

3. What’s the outcome of the process?

   Materials are Stored
Swim Lane Workflow Exercise

• 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

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

- Receiving Dock
- Receiving Clerk
- Forklift Driver
- Warehouse Foreman
- Data Processing
**Swim Lane Process Mapping**

<table>
<thead>
<tr>
<th>Role</th>
<th>Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Receiving Dock</td>
<td></td>
</tr>
<tr>
<td>Receiving Clerk</td>
<td></td>
</tr>
<tr>
<td>Forklift Driver</td>
<td></td>
</tr>
<tr>
<td>Warehouse Foreman</td>
<td></td>
</tr>
<tr>
<td>Data Processing</td>
<td></td>
</tr>
</tbody>
</table>

*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

What is the next step?

Receiving Dock
- Materials
- Unload Trucks

Receiving Clerk
- Check Materials

Forklift Driver

Warehouse Foreman

Data Processing
Swim Lane Process Mapping

- Receiving Dock
  - Materials
  - Unload Trucks
- Receiving Clerk
  - Check Materials
  - Where?
- Forklift Driver
- Warehouse Foreman
- Data Processing
- WMS

Show decisions as diamonds, note business rules elsewhere
Show databases as cylinders
Swim Lane Process Mapping

1. **Receiving Dock**
   - Unload Trucks

2. **Receiving Clerk**
   - Check Materials

3. **Forklift Driver**
   - Put Away

4. **Warehouse Foreman**
   - Where?

5. **Data Processing**
   - WMS

6. **Keep going**
Swim Lane Process Mapping

1. **Receiving**
   - Dock
   - Clerk

2. **Forklift Driver**

3. **Warehouse Foreman**

4. **Data Processing**

---

**Unloading**
- Unload Trucks
- Check Materials
- Where?
- Put Away
- Record Location
- WMS

**Data Processing**
- Material Away
- Finish
Exercise: Work as a team to draw the sales process described in the sales order case

- **Actors** – Who are all of the people/departments/systems involved?
- **Actions** – What are the steps they perform in the process?
- **Sequence** – Map the process in sequence using the swim lane method.
Case Review:

1. How did it go?
2. What confused you?
3. What does your diagram look like?
Sales Order Swim Lane

Customer
- Buy?
  - Price Quote
  - Receive Order
    - Add Date
    - Credit?
      - Packing Slip Invoice
        - Prep Invoice
          - Pick, Pack, Ship
            - Get Goods
              - Pay Invoice

External Sales

Internal Sales
- Buy?
- Credit?
- Credit Limit

Warehouse
- Delivery Date
- Add Date
- Credit?
- Packing Slip Invoice
- Prep Invoice
- Accept Payment

Accounting
- Pay Invoice
- Accept Payment
- Credit
- Pay Invoice

Books
- Posted
Case Review:

1. How did it go?
2. What confused you?
3. What does your diagram look like?
4. What follow-up questions do you have?
5. What problems or opportunities should you be looking for?
Swim Lane Evaluation

1. How well does the work product highlight the client’s problem?
2. How completely does it cover the client’s situation?
3. Does it accurately reflect what the client is doing?
4. Is it an appropriate tool for the client’s situation?
Extra Credit 1: Due --

Using the case as a starting point, create a prototype in Justinmind of an online sales order form. Include check-out in the process. Make sure to include all of the DATA needed to complete the transaction.

A sample will be emailed to you.