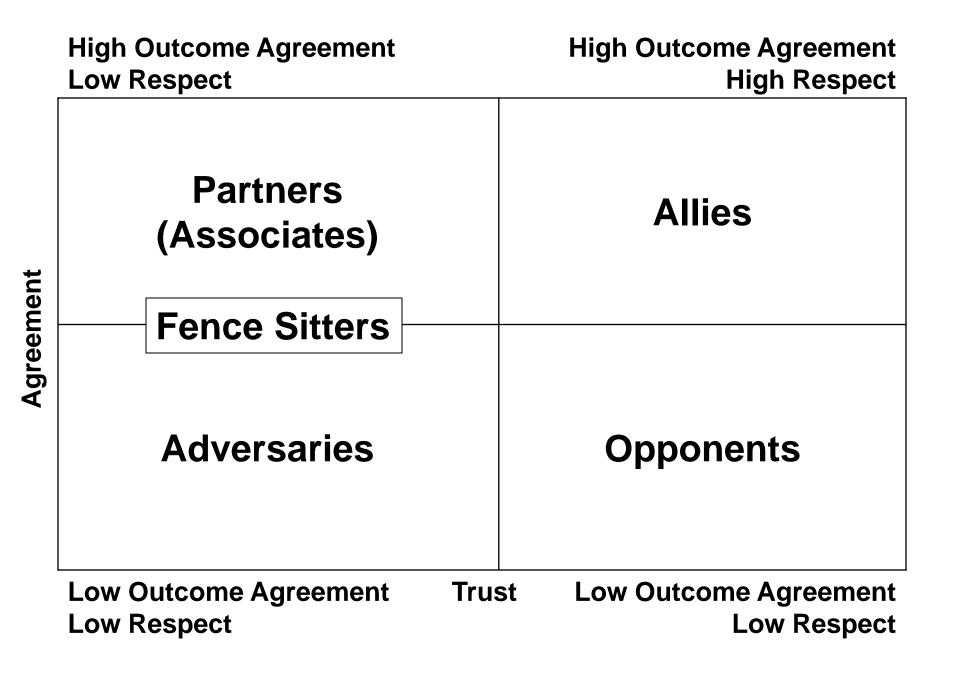
Developing System Outcomes for Improved Effectiveness

C.J. Johnson L.M.H.P., L.C.S.W., L.M.F.T.

"If people do not participate in decisions, there is little to prevent them from assuming that things would have been better, 'if I'd been in charge'." Unknown

Information Management and Performance Improvement



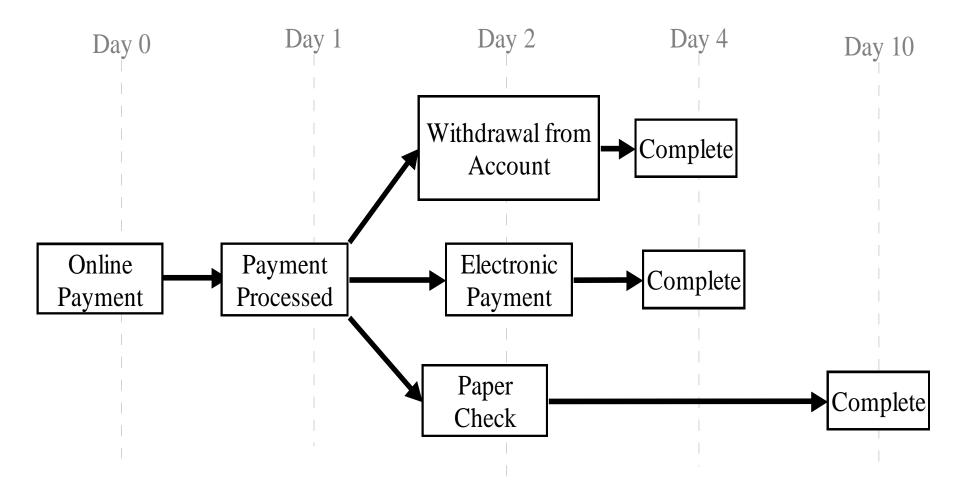


Aim/Purpose	Knowledge	Motivation	Resources	Action Plan Execution	Assessment Feedback/Data	<u>= Happiness</u> QualityChange
	Knowledge	Motivation	Resources	Action Plan Execution	Assessment Feedback/Data	<u>= Confusion</u> <u>Conflict</u>
Aim/Purpose		Motivation	Resources	Action Plan Execution	Assessment Feedback/Data	<u>= Fear-Failure</u> <u>Anxiety</u>
Aim/Purpose	Knowledge		Resources	Action Plan Execution	Assessment Feedback/Data	<u>= Passivity</u> <u>Mediocrity</u>
Aim/Purpose	Knowledge	Motivation		Action Plan Execution	Assessment Feedback/Data	<u>= Frustration</u> <u>Overload</u>
Aim/Purpose	Knowledge	Motivation	Resources		Assessment Feedback/Data	<u>= Resentment</u> <u>Fragmentation</u>
Aim/Purpose	Knowledge	Motivation	Resources	Action Plan Execution		<u>= Illusion of</u> <u>Change</u>

• • Flow Chart

- To identify the actual flow or sequence of events leading to a service or product.
- Shows where simplification or standardization may be possible.
- Allows examination of activities that may impact the process performance.
- Identifies where additional data may be needed.

Flowchart: Bank Payment



Flow Chart: How To Do It

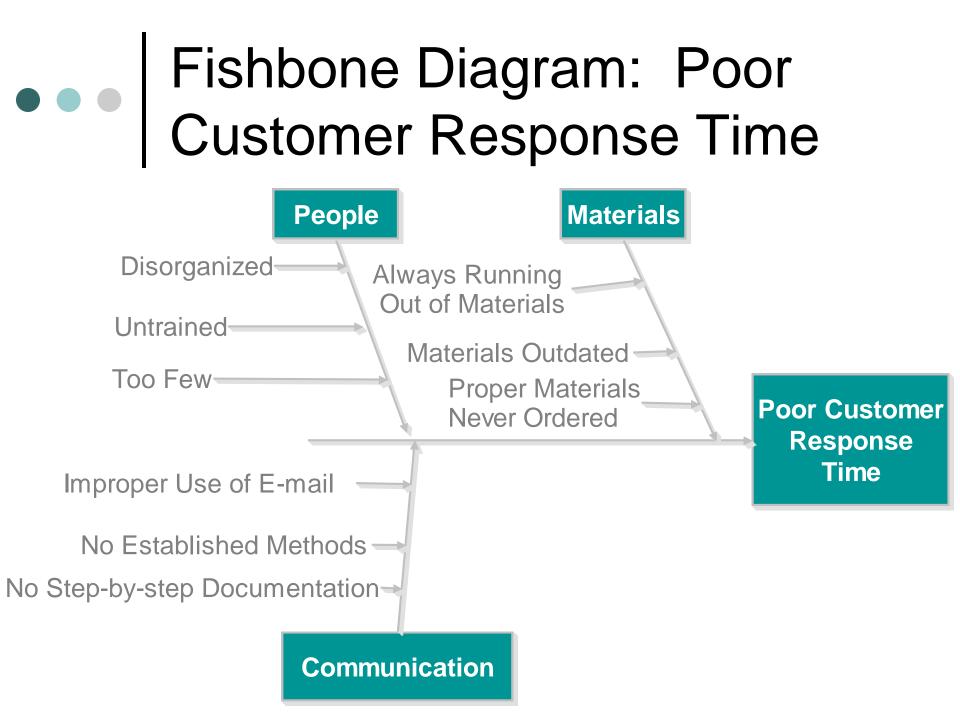
- 1. Determine the frame or boundaries of the process.
- 2. Determine the steps in the process.
- 3. Sequence the steps.
- 4. Draw the Flowchart using consistent symbols.
 - An oval is used to show the materials, information, or action (inputs) to start the process or to show the results at the end (output) of the process.
 - A box or rectangle is used to show a task or activity performed in the process. Although multiple arrows may come into each box, usually only one output or arrow leaves each activity box.

Flow Chart: How To Do It

- A diamond show those points in the process where a yes/no question is being asked or a decision is required.
- © A circle with either a letter or number identifies a break in the Flowchart and is continued elsewhere on the same page or on another page.
- ← Arrows show the direction or flow of the process.
- 5. Test the Flowchart for completeness.
- 6. Finalize the Flowchart.

• • Fishbone Diagram

- Focuses on identifying the root causes of the problem.
- Used to identify, explore, and graphically display the problem or condition.
- Focus the team on causes, not symptoms.
- A snapshot of the collective knowledge of the team.
- Organizes the team around the problem.



• Fishbone Diagram: How To Do It

- Select the most appropriate cause & effect format. There are two major formats:
 - Dispersion Analysis Type Constructed by placing individual causes within each "major" cause category and then asking of each individual cause "Why does this cause happen?"
 - This question is repeated for the next level of detail until the team runs out of causes.
 - Process Classification Type Uses the major steps of the process in place of the major cause categories. The root cause questioning process is the same as the Dispersion Analysis Type.

• Fishbone Diagram: How To Do It

2. Generate the causes needed to build a Cause & Effect Diagram.

Choose one method:

- Brainstorming
- Check Sheets
- Construct the Cause & Effect/Fishbone Diagram.
 Place the problem statement in a box on the right hand side of the writing surface.
 - Draw major cause categories or steps in the production or service process. Connect them to the "backbone" of the fishbone chart.

• Fishbone Diagram: How To Do It

- Place the brainstormed or data-based causes in the appropriate category.
- Repeatedly ask one of the two following questions of each cause listed on the "bones":
 - "Why does it happen?"
 - "What could happen?"
- Interpret or test for root cause(s) by one or more of the following:
 - Look for causes that appear repeatedly within or across major cause categories.
 - Select through either an unstructured consensus process or one that is structured.
 - Gather data to determine the relative frequencies of the different causes.

Force Field Analysis

- To identify the forces and factors that either support or work against the solutions of an issue or problem.
- Presents "positives" and "negatives" of an issue or problem, so that they can be easily compared.
- Forces groups to work together.
- Encourages agreement about priority.
- Promotes honest reflection of underlying roots to an issue or problem.

Force Field Analysis: Retaining Customer Service Employees

+ Driving Forces	Restraining Forces -	
401K Benefits ►	Low Pay	
Paid Training ►	Lack of Opportunities	
Free Lunches ►	Stressful Work Environment	
Good Health Insurance Benefits	 No Dental or Vision Plan 	
Strong Community ►	No On-site Daycare Center	
Casual Dress Code ►	 Long Hours 	
Christmas Bonus ►	 No Stock Options 	

Force Field Analysis: How To Do It

- 1. Draw a large letter "T" on a flipchart.
- 2. At the top of the T, write the issue or problem that you plan to analyze.
- 3. To the far right of the top of the T, write a description of the ideal situation you would like to achieve, eliminate, avoid, or maintain.
- 4. Brainstorm the forces that are driving you towards the ideal situation. List them on the left side.
- 5. Brainstorm the forces that are restraining movement toward the ideal state. List them on the right side.

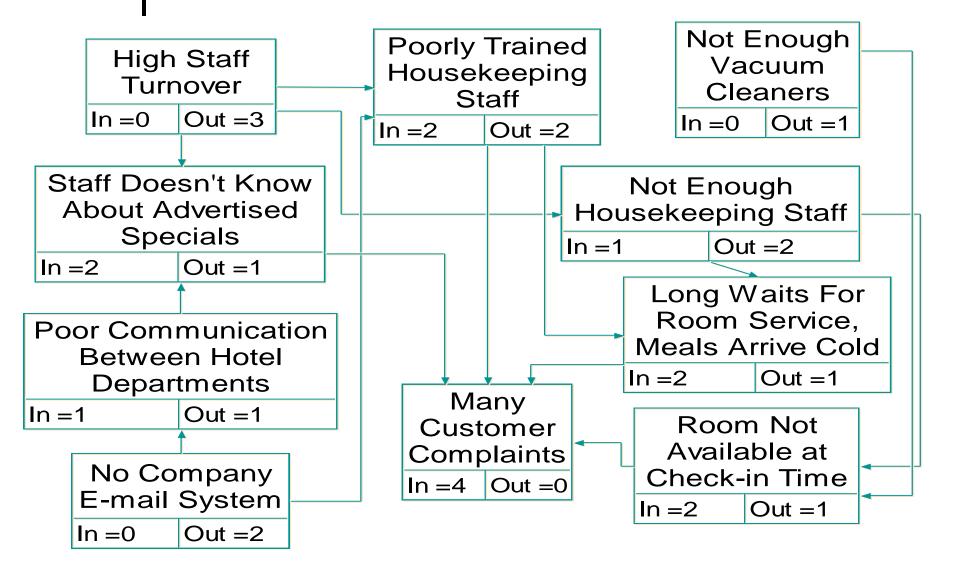
Force Field Analysis: How To Do It

- 6. Prioritize the driving forces that can be strengthened or identify restraining forces that would allow the most movement toward the ideal state if they were removed.
 - When choosing a target for change, remember that simply pushing the positive factors for a change can have the opposite effect. It is often more helpful to remove barriers. This tends to break the "change bottleneck" rather than just pushing on all the good reasons to change.

Interrelationship Digraph

- Used to systematically identify analyze, and classify the cause and effect relationships so that key drivers or outcomes become the focus.
- Encourages thinking in multiple directions.
- Allows key issues to emerge naturally rather than being forced by a dominate or powerful team member.
- Teams can identify root causes even when credible data does not exist.

Interrelationship Digraph



Interrelationship Digraph: How To Do It

- 1. Agree on the issue/problem statement.
- 2. Assemble the right team.
- 3. Lay out all the idea/issue cards that have either been brought from other tools or brainstormed.
 - Arrange the "cards" in a large circular pattern, leaving as much space as possible for drawing arrows.
 - Use large, bold printing, including a large letter on each idea for quick reference later in the process.

Interrelationship Digraph: How To Do It Look for cause/influence relationships between all of the

- Look for cause/influence relationships between all of the ideas and draw relationship arrows.
 - Choose any of the ideas as a starting point. If all of the ideas are lettered, work through them in sequence.
 - An outgoing arrow from an idea indicates that it is the stronger cause or influence.
 - Ask of each combination:
 - Is there a cause/influence relationship? If yes, which direction of cause/influence is stronger?
 - Draw only one-way relationship arrows in the direction of the stronger cause or influence. Do not draw two-head arrows.

Interrelationship Digraph: How To Do It

- 5. Optional: Review and revise the first round.
- 6. Tally the number of outgoing and incoming arrows and select key items for further planning.
 - Record and clearly mark next to each issue the number of arrows going in and out of it.
 - Find the item(s) with the highest number of outgoing arrows and the item(s) with the highest number of incoming arrows.
 - Outgoing arrows- A high number of outgoing arrows indicates an item that is a root cause or driver. This is generally the issue that teams tackle first.

Interrelationship Digraph: How To Do It

- Incoming arrows- A high number of incoming arrows indicates an item that is a key outcome. This can become a focus for planning either as a meaningful measure of overall success or as a redefinition of the original issue under discussion.
- 7. Draw the final Interrelationship Digraph.
 - Identify visually the key drivers (greatest number of outgoing arrows) and the key outcomes (greatest number of incoming arrows).



