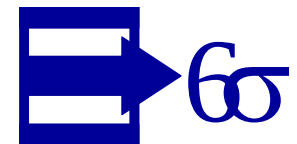
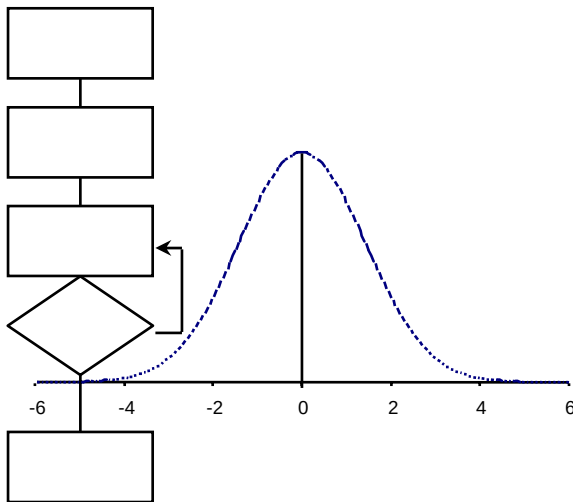


Policy Deployment



Policy Deployment

- The ABC aircraft testing facility had started its Six Sigma effort several years ago. Its reason for starting Six Sigma was the urging of its major customer. Two VPs within the organization had read about the successes at General Electric and were championing the efforts. They started by sending several people to training classes and hiring a consulting firm that had much experience. The consulting firm put together a plan for getting started and warned them that it would take more than a few trained people to achieve significant results.
- During the training several teams were started to work on projects. The projects were picked by the teams themselves. There were a few false starts but the majority of the projects were successful. At a staff meeting the completed projects were presented and the teams congratulated. The executives were satisfied with the progress and agreed that more training should be conducted and projects chartered. Each of the staff directors was asked to identify some one within their area to be trained and a project to be started.

Policy Deployment

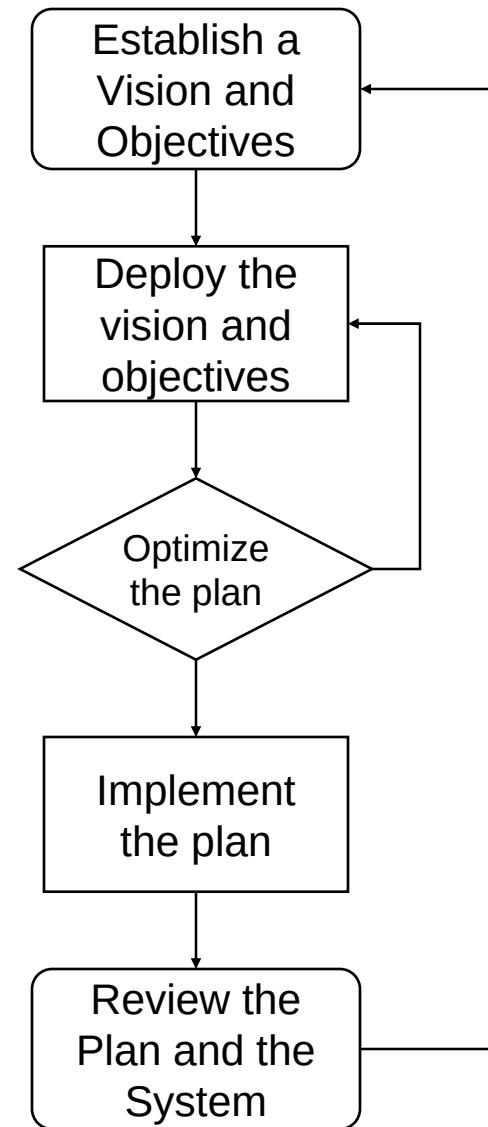
- At a following staff meeting the directors were asked to report. Most had picked a person and written a draft charter, but a few were hesitant. They said they didn't have the resources for training or to work on a project for 8 to 12 months. They had too many other priorities. It was agreed that they did not have to commit the resources at this time.
- The other projects dealt with many different subjects. From scheduling to cost over-runs and even one on cafeteria efficiency. The teams in general met once a week for a few hours and would finish a project in about 8 months. Some of the projects were finished. Others just sort of ran out of steam and were discontinued. Things were going along until.....
- The vice president of operations announced that the client was not happy with their performance and was threatening to re-bid the contract. Project management added that many of the tests were being delayed because of materials, resources and facilities. These things had always been a problem but they were not getting better.

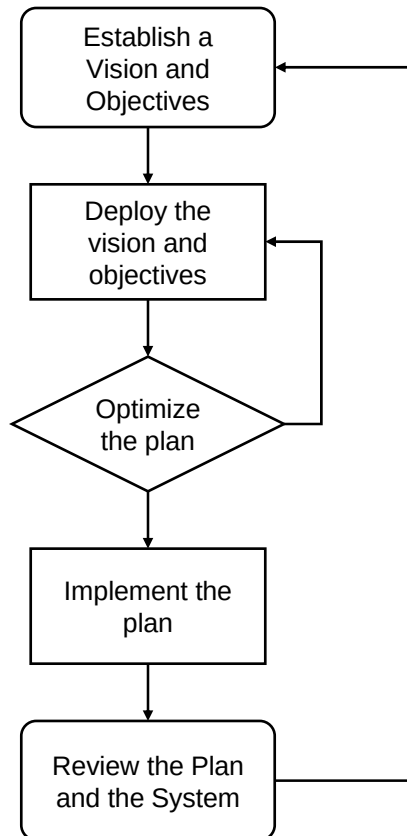
Policy Deployment

- The meeting continued until a plan was devised. Basically all non essential work was to be halted including the Six Sigma projects. Everyone was to work overtime until performance improved and the client was happy again.
- Many companies find themselves in this situation with or without a Six Sigma program. Their clients at some point become dissatisfied and want a change. The reactions are varied. Some do what this company was planning and think that more hard work is the answer. Others reorganize and hire a new CEO, the Lone Ranger, to come in and save the day.
- How would you diagnose the situation at this facility?
- Do you agree with the plan they devised?
- What recommendations would you make?

Policy Deployment was developed to help an organization focus on its most important problems. Much credit is given to Komatsu Tractor that was very busy in its improvement activities but was losing market share. They did much customer research and found that reliability was lacking in their equipment. From that day forward all improvement projects were focused on reliability. Everyone was asked to contribute what they could.

Policy Deployment consists of 5 phases.

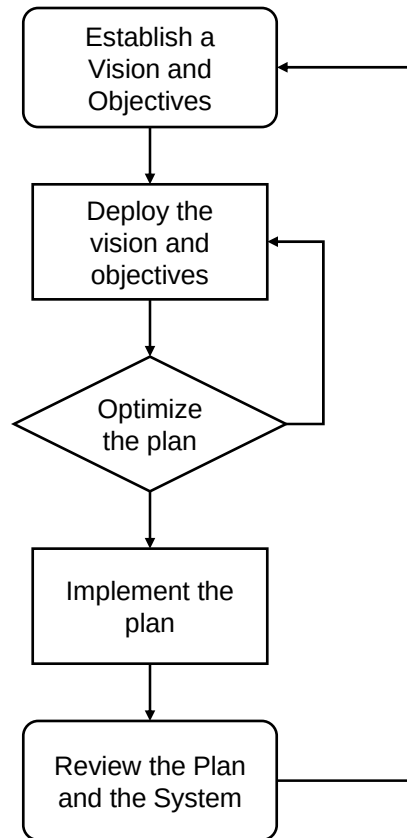




The Vision:

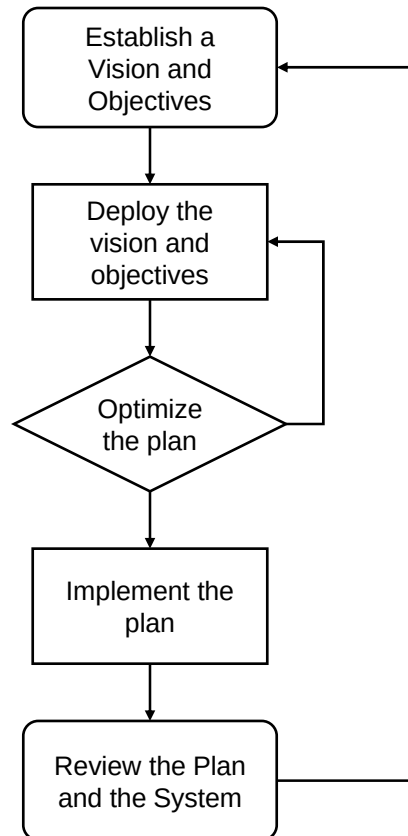
The beginning of Policy Deployment is to set a long term, 3 – 5 year vision for the organization. The vision is based on the customers needs, the competitive environment, and the companies own strategy. The vision should be:

- Challenging,
- Inspiring,
- All encompassing, and
- Understandable.



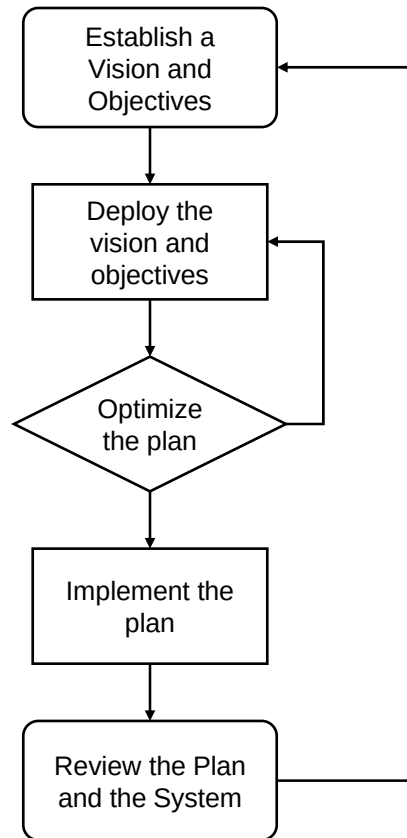
Objectives:

Within the vision there should be 3 to 5 objectives. They are more explicit than the vision. They represent important gaps in performance. Each will have an indicator or indicators associated with them that will be used to quantify the Gap and measure progress towards a target value. Usually an executive champion is appointed for each of the objectives.



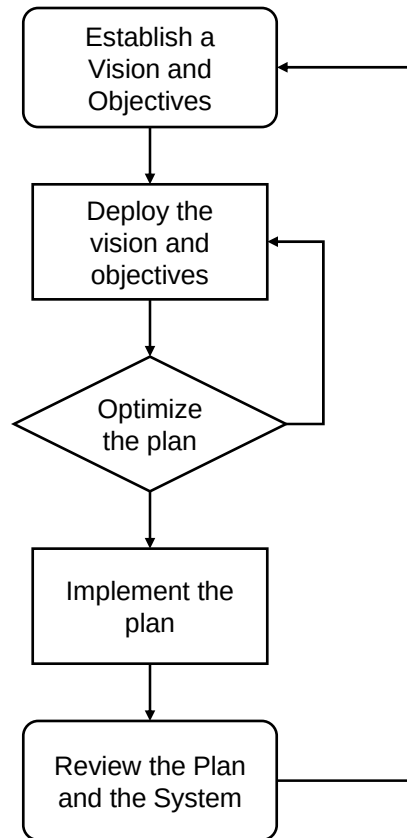
Deploying the Vision and Objectives:

The organization's core processes are reviewed to find the greatest impact on the objectives. Many of these projects will be cross-functional. Project charters are solicited that include estimated impact, plan, specific resources and budget.



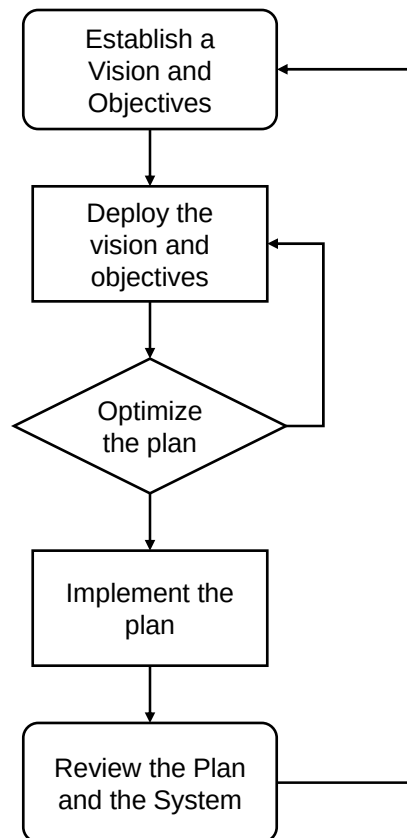
Optimize the Plan:

The charters are reviewed and a plan for the year is formed. This is done by the executive champion for the objective and a committee made up of department heads that are involved. Their decision must consider impact, budget and the specific resources needed to lead the projects. Putting together this plan often takes several iterations called catch-ball.



Implement the Plan:

The projects are implemented under the close scrutiny of their champions. Progress reports are required at least monthly. The project champions review their projects and report to the executive champion who in turn reports to the Executive committee. If a project is faltering, it is the champions responsibility to get it back on track.



Review the Plan and the System:

A review takes place at the end of the year. It reviews the progress made toward the Vision and Objectives and the Policy Deployment system itself. The objectives may need to be adjusted or changed. The execution of the Policy Deployment process is diagnosed and improvements made where needed.

Establishing the Vision and Objectives:

A vision is a guiding statement of what the organization wants to become. As said earlier it should be inspiring, challenging, all encompassing and understandable.

Examples:

The ABC medical center is striving to become the preferred provider of caring, highly qualified, cost effective and innovative healthcare services, that benefit the patient, medical staff and community.

During the decade, we want to become the best managed electric utility in the US, an excellent company overall and be recognized as such.

Establishing the Vision and Objectives:

Objectives are specific performance levels to be obtained. They represent gaps in performance between what the customer or the business wants. The summation of their achievement will achieve the vision. They are made up of a characteristic, a measure, a target and a time frame.

Examples:

Become the best value, cost and quality, as measured by clinical and resource outcomes.

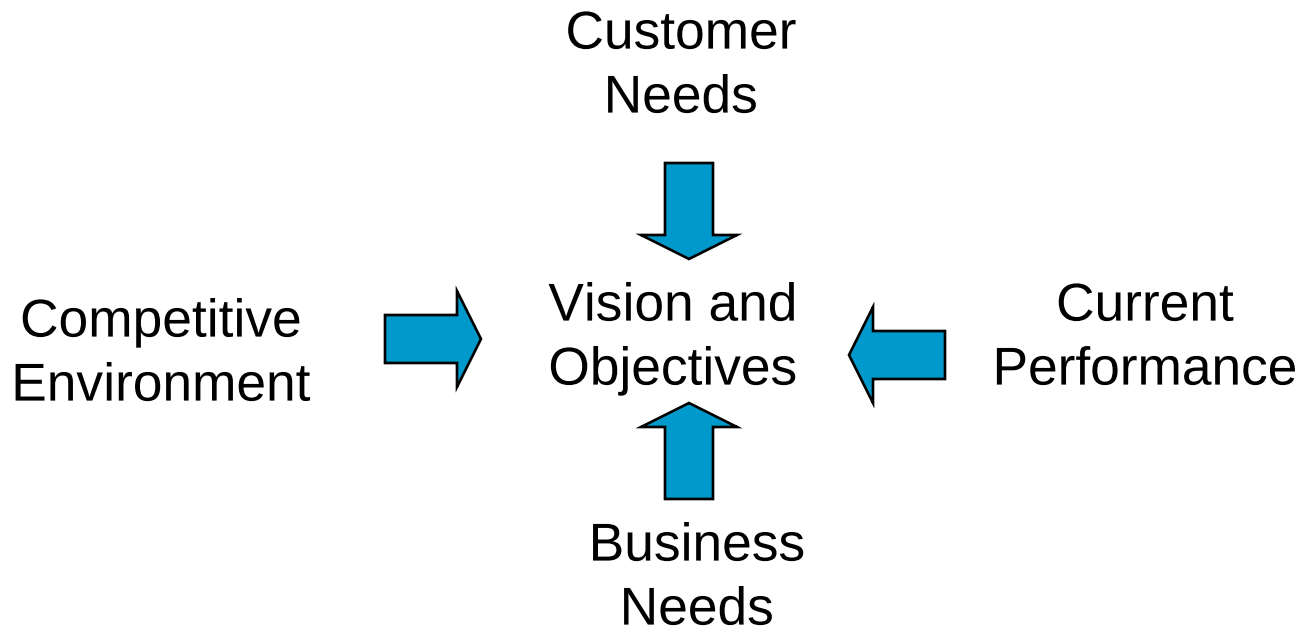
Fulfill the unmet healthcare needs of the community.

Reduce the number of PSC complaints to 5 per 100,000 customers/yr by the end of the decade.

Increase the system plant availability from 88% to 96% by the end of the decade.

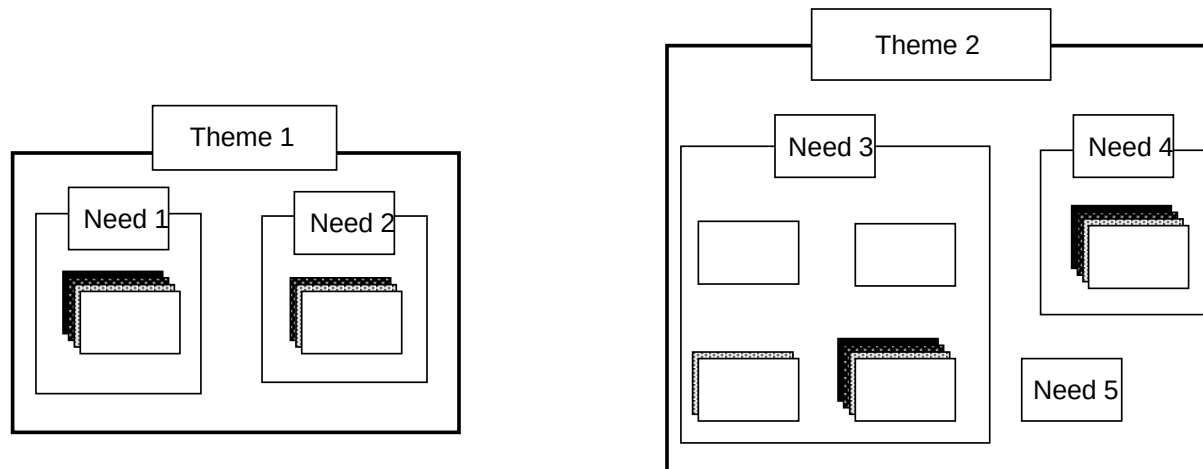
Establishing the Vision and Objectives:

The vision and objectives are written by the executive committee but are based on many inputs.



Establishing the Vision and Objectives:

Information is gathered from the many sources. The affinity diagram can be used to group this information into major categories that can then be used to craft a vision and objectives.



Establishing the Vision and Objectives:

Affinity Diagram Steps:

1. Gather information about a theme. It may be gathered by interview, observation or your own thinking.
2. Write the information on 3X5 cards or post it's. Only one thought or idea per card.
3. Randomly lay out the cards for the group to see. They should be shuffled to avoid any pre-existing grouping.
4. Group the cards using your feelings or impressions. Resist sorting the cards into categories. The cards should create the categories. It should seem as if the cards group themselves.
5. Label the cards with a title that succinctly describes the group. Before labeling read the cards aloud to the group. Remove any cards that are inappropriate.

Establishing the Vision and Objectives:

Exercise Assignment: Write a vision and identify objectives for your organization

Process:

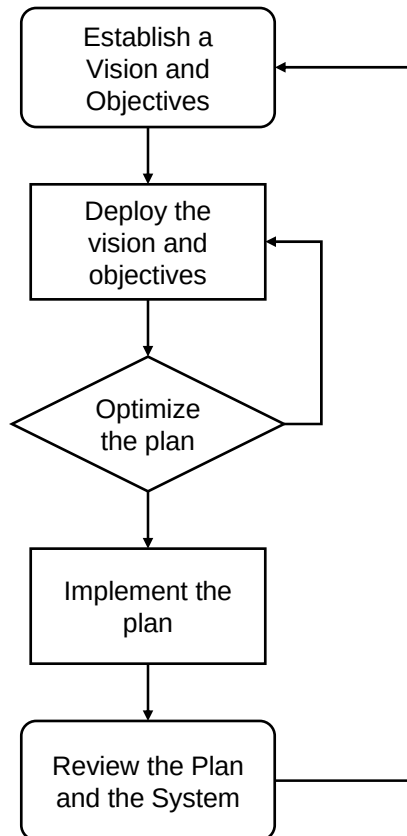
1. Brainstorm information about the theme of What the customer wants and what your organization wants.
2. Use the affinity diagram to identify major subjects that should be addressed in the vision or objectives.
3. Write the vision and list the objectives.
4. For each objective define a measure.

Deploying the Vision and Objectives:

The objectives are deployed to the entire organization, however not all departments will be expected to respond to all objectives. Some may better spend their resources working on one specific objective.

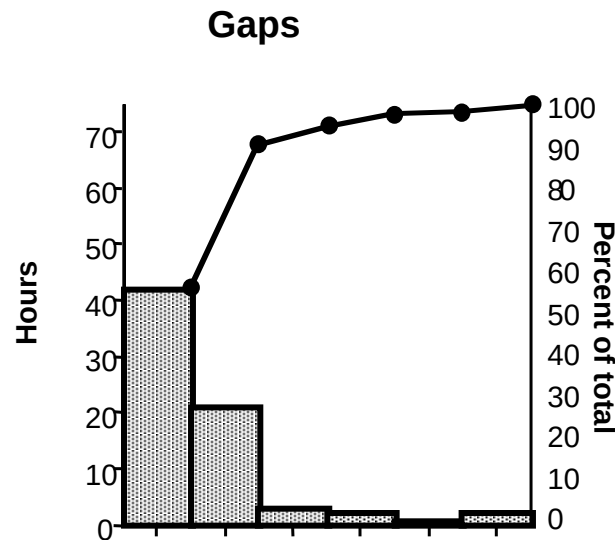
A Matrix Diagram of which departments impact which objectives can help in the deployment.

An executive champion for the objective is normally chosen from a department that has major impact on the objective. This assures their knowledge of the analysis needed to address the objective.



Deploying the Vision and Objectives:

Each department should evaluate their impact on the objectives and the Gap that exists between their performance and the target. Their goal is to find how best to contribute their resources to achieving the vision. If they have a strong impact on one objective and little impact on the others, they should focus their efforts there. If the performance Gap is large on one and little on another, that too will guide there plans.



Deploying the Vision and Objectives:

An Matrix Diagram of which departments impact which objectives can help in the deployment.

Matrix diagram steps:

1. Clarify the purpose of the matrix.
2. Draw enough rows and columns for the components. Be sure to leave a header row for labeling.
3. Specify the symbols to be used and their meaning in a legend on the matrix.
4. Fill in the cells of the matrix with the appropriate symbols. The basis for the symbol should be recorded if there is initial disagreement.
5. Evaluate the matrix.

Policy Deployment

		Objectives	
Departments	Improve patient satisfaction	Provide value	Increase employee safety
Emergency	⊙	⊙	⊙
Laboratory	◇	⊙	◇
Housekeeping	⊙	◇	○
Nursing	⊙	○	⊙
Radiology	⊙	⊙	
Pharmacy		⊙	
Dietary	⊙	◇	
Administration	◇		⊙

⊙ Strong Impact

○ Medium Impact

◇ Weak Impact

Deploying the Vision and Objectives

Exercise Assignment: Create a deployment matrix for your organization.

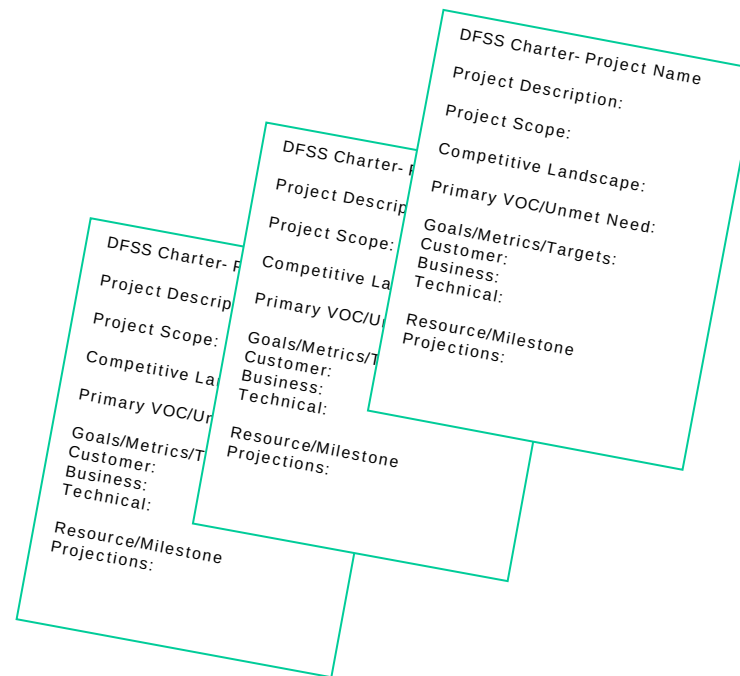
Process:

1. Use the objectives identified in the previous exercise.
2. List the major department in your organization.
3. Create a matrix and rate the impact of each department on the objectives.
4. Extra credit, who should be the executive champion for each objective?

Optimize the Plan:

Project charters, data and plans for each objective are submitted to the executive champion. Usually a committee is formed to evaluate the projects and select the best ones for implementation. Criteria for the evaluation are typically:

- Impact on the objective
- Impact on the customer
- Likelihood of success
- Cost and resources



Optimize the plan:

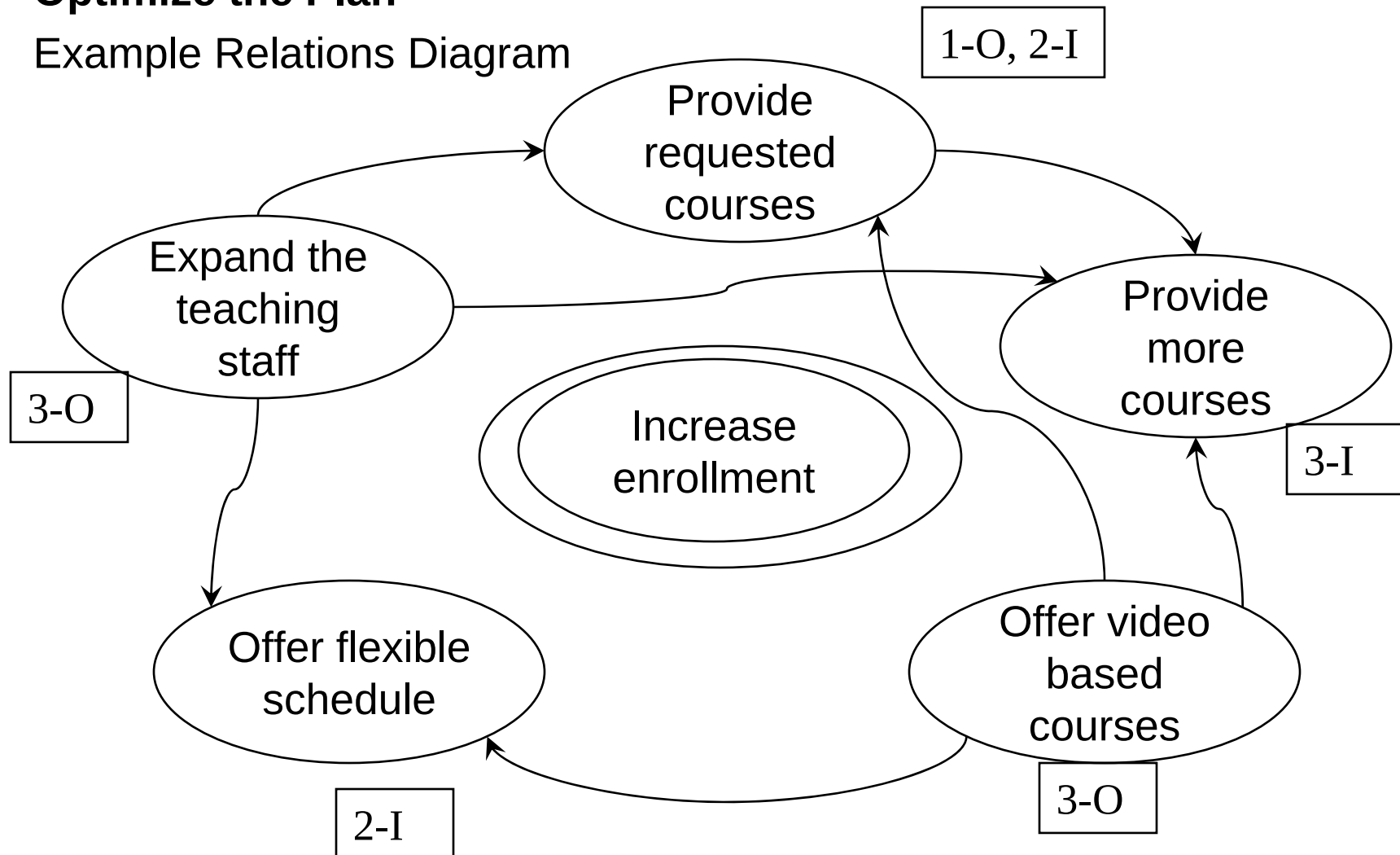
Some projects are chosen because of their leverage. That is their impact or inter-relation to several other projects or processes. A relations diagram can be used to evaluate this leverage.

Relations Diagram Steps:

1. Write the objective in the center of a large piece of paper. Designate it as the objective by circling it twice.
2. List projects that will be needed to achieve the objective. Write each one separately around the objective. Designate them as projects by circling them once.
3. Determine the causal relationships of the projects to each other. Do this by starting with one project and ask if it impacts the one to its right. If the answer is no move on, if yes, draw an arrow to show the direction from cause to effect. Continue until all relationships are evaluated.
4. Complete the drawing by counting the number of in arrows and out arrows for each project. The projects with the most outgoing arrows are considered those with the highest leverage.

Optimize the Plan

Example Relations Diagram



Optimize the Plan

Exercise Assignment: Draw a relations diagram

Process:

1. Select one objective from the previous exercise
2. List projects that are means to achieve the objective.
3. Draw a relations diagram and determine if some of the projects have greater leverage.
4. Report the results.

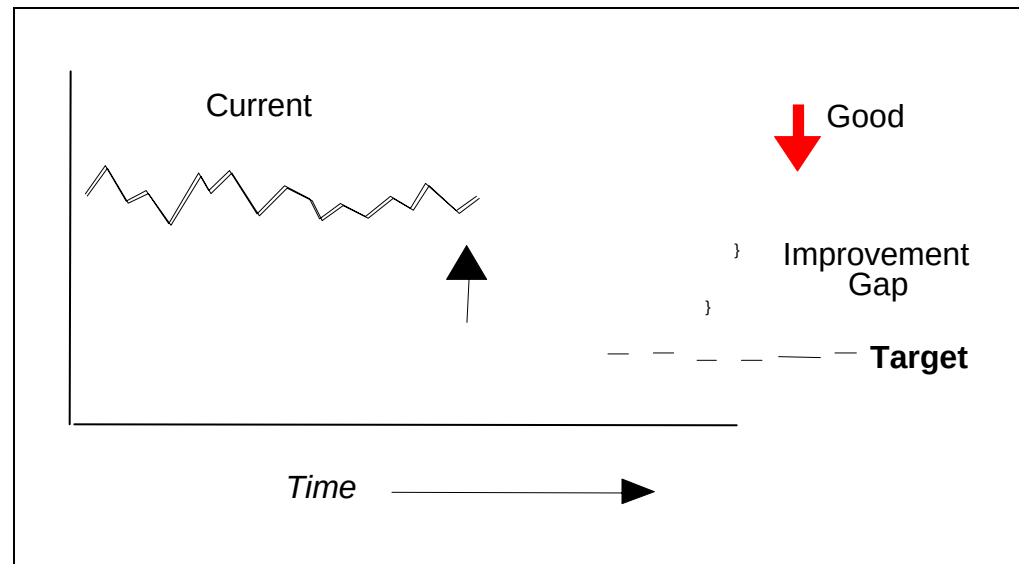
Optimize the Plan

It is the executive champion's role to sanction projects that will achieve the objective. They will draft a plan listing the projects, project leaders and estimated contribution of each project to the objective.

Objective	Project	Project Leader	Improvement	Status
Reduce Schedule delays (Joe executive champion)	Reduce material delays	Dave	Reduce material delays to less than 5 days/month	Project in Improvement step
	Increase resource availability	Rick	Increase resource availability to 95%	Project in analyze step
	Increase facilities availability	Melody	Increase facilities availability to 80%	Project in analyze step

Optimize the Plan

The Executive Champion will also track improvement against the Objectives indicator.



Implement the Plan

During implementation project champions will review their projects regularly. The executive champion will schedule an objective review monthly. In this review each of the projects contributing to the objective will display their analysis. At the end of each project review actions necessary to keep the projects on schedule are taken.

Project Review Exercise:

1. Brainstorm what a champion wants from a review.
2. Brainstorm what a project team wants from a review.

Policy Deployment

Implement the Plan

Project Reviews

Reviews are normally scheduled

- At critical decision points
- Prior to implementation or commitment of resources
- When results of analysis or implementation have been received
- At regular intervals

Implement the Plan

Typical Agenda for a project review

Objective: To review the project and provide guidance

Recorder and timekeeper assigned:

Agenda Items: Project team presents progress

Reviewers ask questions

Project team present future plans

Reviewers provide feedback

Follow up actions are summarized and assigned

Plan next review and critique meeting

Implement the Plan

Project Reviewers questions:

Does the logic make sense?

Are the data used credible?

Are the conclusions supported by data?

Are appropriate analysis tools applied?

Is improvement methods applied correctly?

Implement the Plan

DMAIEC Checklist:

This checklist of the DMAIEC steps and tools may be used as a guideline for a project review

Step	Activity	Typical Tools Used	Comments
Define	Charter the project	Charter form	
	Select project team (if needed)		
	Create process SIPOC	SIPOC	
	Gather the voice of the customer	Interviews, focus groups and surveys, affinity diagram	
	Create a communication plan		
	Create project plan	WBS, Arrow diagram, Gantt chart	
	Review with Sponsor/Black Belt		
Measure	Draw process flowchart	Deployment flowchart	
	Address low hanging fruit		
	Define the output and input measures	CTQ matrix	
	Create measurement system	Data collection plan	
	Collect and graph data	Run chart, control chart, histogram	
	Determine stability and capability	Control chart	
	Stratify the data	Pie, bar or pareto charts	
	Write specific problem statement		
Analyze	Review with Sponsor/Black Belt		
	Develop cause and effect diagram	Cause and effect diagram	
	Plan verification of root causes	Root cause matrix	
	Gather causal data		
	Verify root causes	Correlation, Hypothesis test, Design of Experiments	
Identify Improv	Review with Sponsor/Black Belt		
	Identify Break throughs solutions	Creativity tools	
	Evaluate solutions	Solution selection matrix	
	Define future process	Deployment flowchart	
	Predict new sigma		
	Perform cost benefit analysis		
Execute	Review with Sponsor/Black Belt		
	Plan Pilot	Gantt chart	
	Pilot solutions		
	Evaluate Pilot	Control charts, hypothesis tests	
	Plan implementation	Gantt chart	
	Implement new solutions		
	Measure results	Control charts, hypothesis tests	
Control	Review with Sponsor/Black Belt		
	Manage change		
	Monitor process	Process control sheet	
	Identify replication opportunities		
	Develop future plans		
	Review with Sponsor/Black Belt		

Implement the Plan

Reviewers skills: Questions are the reviewers tools.

Open questions are asked to find out how teams came to their decision. They are not threatening.

How did you determine the root cause?

What risks do you anticipate?

Closed questions may be used to get specific information.

How many people where in the sample?

What percent of the problem was this cause?

Leading or loaded questions have a built-in assumption or expected answer. They should seldom be used.

Don't you think this was too expensive?

Did you mess up the pareto chart again?

Implement the Plan

Reviewers skills: Feedback can be very helpful

Effective feedback is:

Descriptive

Specific

Timely

Given in manageable amounts

The use of the pareto chart was valuable to identify the major category of defects.

The number of samples is insufficient for the importance of this decision. Can you get more?

Implement the Plan

Exercise Assignment: Conduct a review of another students project

Process:

1. Each student prepares to present their strategic plan 10 mins
2. Present the plans one at a time 10 mins
3. Review, ask questions and give feedback 10 mins
4. Summarize review and actions 10 mins
5. Critique the review 5 mins

Review the Plan and the System

This review is of the Policy Deployment System. It includes:

- The ability to schedule and complete projects
- The effects of projects
- The effectiveness of champions



Review the Plan and the System

Questions for the Policy Deployment review:

1. Were the projects completed? If not why?
2. Were their improvements implemented? If not Why?
3. Did they result in the projected effects? If not why?
4. Was the Policy Deployment system followed?
 - Vision and objectives defined and measured
 - Vision and objectives deployed to the organization
 - Projects optimized
 - Project reviews conducted

Policy Deployment

Review the plan and the system

Exercise Assignment: Diagnose previous yearly plans

Process:

1. Consider the yearly planning process currently used.
2. What does it do well? Why?
3. What could be improved? Why?
4. What changes should be made to the process?

Policy Deployment is normally implemented in stages. In its first year not all the activities are done. For instance it may take a while to get an accurate measurement system in place.

It works well when resting on a basis of employees and management skilled in analytical tools. Without these skills employees may feel frustrated.

What would you begin with?

