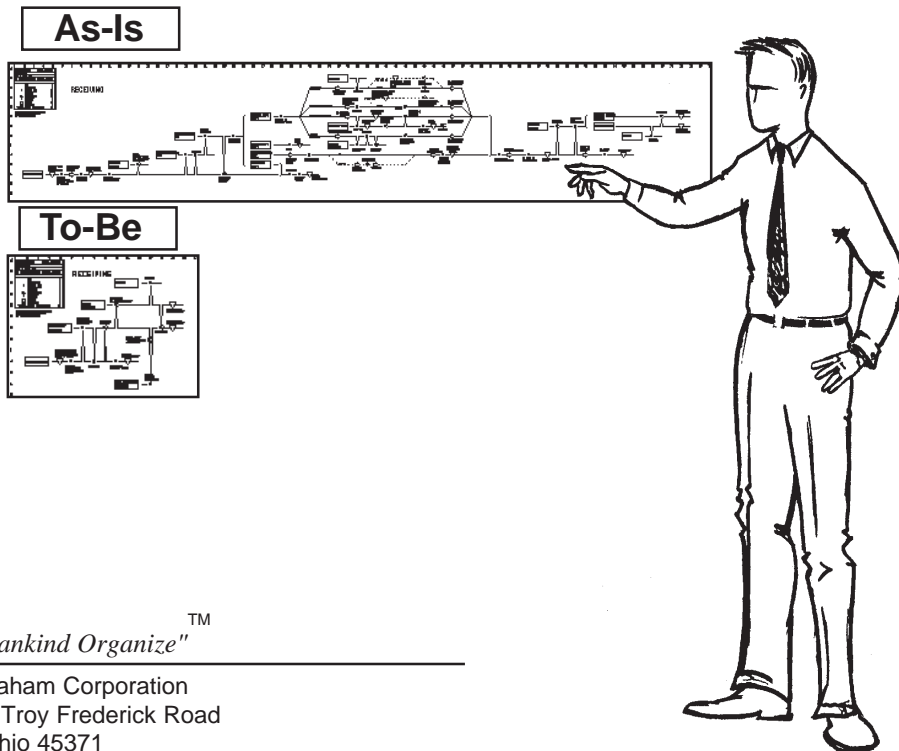


# Business Process Improvement Project Guide

*for* GRAHAM PROCESS CHARTING SOFTWARE



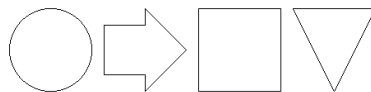
*"Helping Mankind Organize"*<sup>TM</sup>

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# Business Process Improvement Project Guide

*for* GRAHAM PROCESS CHARTING SOFTWARE



**The Ben Graham Corporation**

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Third Printing, January 2004

“Work smarter, not harder”

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## **Preface**

The suggestions built into this project guide are based on forty years of experience working with project teams on process improvement. During those years the results ranged from extremely successful to thoroughly disappointing. The two most important factors that have seemed to separate the excellent results from the others both involved respect, respect for the charting methodology and respect for the people with the first hand experience.

Every project is different and as you follow this guide there will be times when you will want to do things differently than suggested here. This is only a guide. Go ahead! Use your best judgement! But let me offer one overriding caution. Don't skip over the involvement of people who do the work. They are your link to reality.

Wishing you the Best in Improvement

Dr. Ben S. Graham, Jr.

# INITIATION



Initiate your projects by meeting with the person requesting the project to:

- Decide on the type of project
- Establish the authority of the project
- Select Team Members
- Prepare and sign off a Project Agreement Form
- Set up a Project Announcement

## **Six Project Types**

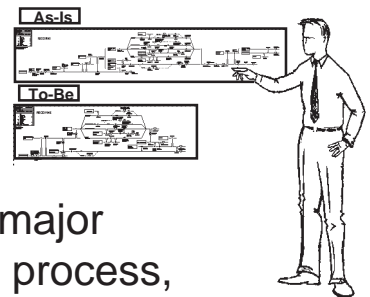
### **DOCUMENTATION - DOCUMENT ONLY**

In a documentation project you will chart an existing work process and review it with a review team (of people who do the work) to assure that it is accurate. These projects clarify processes and build process chart libraries that are available for clarification, training and continuous improvement later on.



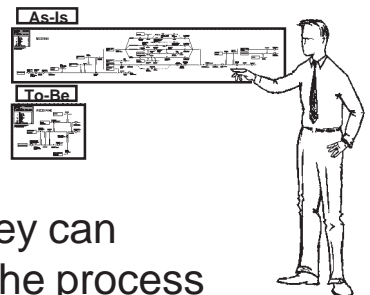
### **IMPROVEMENT - DOCUMENT & MAKE SMALL CHANGES**

In an improvement project you chart an existing process and review it with an improvement team (of people who do the work) to assure that it is accurate and to make improvements that do not require major development efforts. Then you rechart the process, check it out with the team, install the changes and put the “To-Be” chart in your chart library.



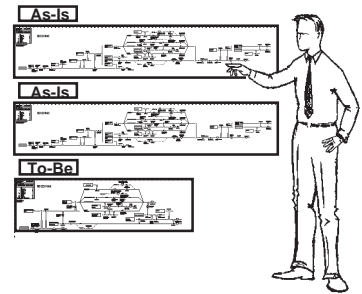
### **RENEWAL - THOROUGH STUDY & RESTRUCTURE**

In a renewal project you will chart an existing work process and thoroughly overhaul it with an improvement team (of people who do the work). The team will strive for the best improvement they can come up with. You will rechart and rethink the process several times before arriving at the final “To-Be” chart.



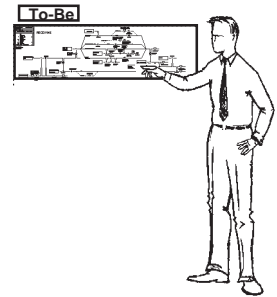
## **STANDARDIZATION - MULTIPLE "AS-IS"**

In a standardization project you will chart an existing process as it is being done in different locations and review the charts with an improvement team representing the different locations. The goal is to use the best of both plus some features that are better than either.



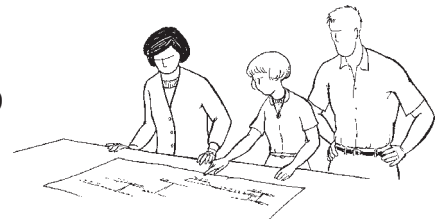
## **DEVELOPMENT - TOTALLY NEW PROCESS**

In a development project there is no existing process. You will prepare a chart of a new process and study it with a team of people who have the best experience available, develop a process, carefully test it, and get it approved and installed.



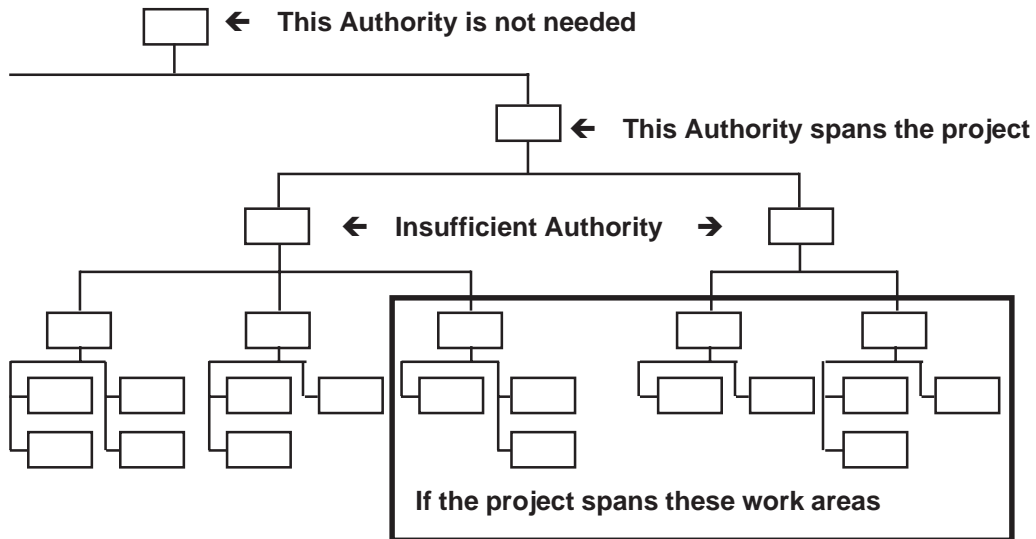
## **MAINTENANCE – REVIEW APPROVED CHARTS**

In a maintenance project you will print out a previously prepared chart and review it with a team (of people who do the work) to see that it is still correct or to update it. If the team discovers attractive opportunities, a maintenance project may turn into an improvement or a renewal project.



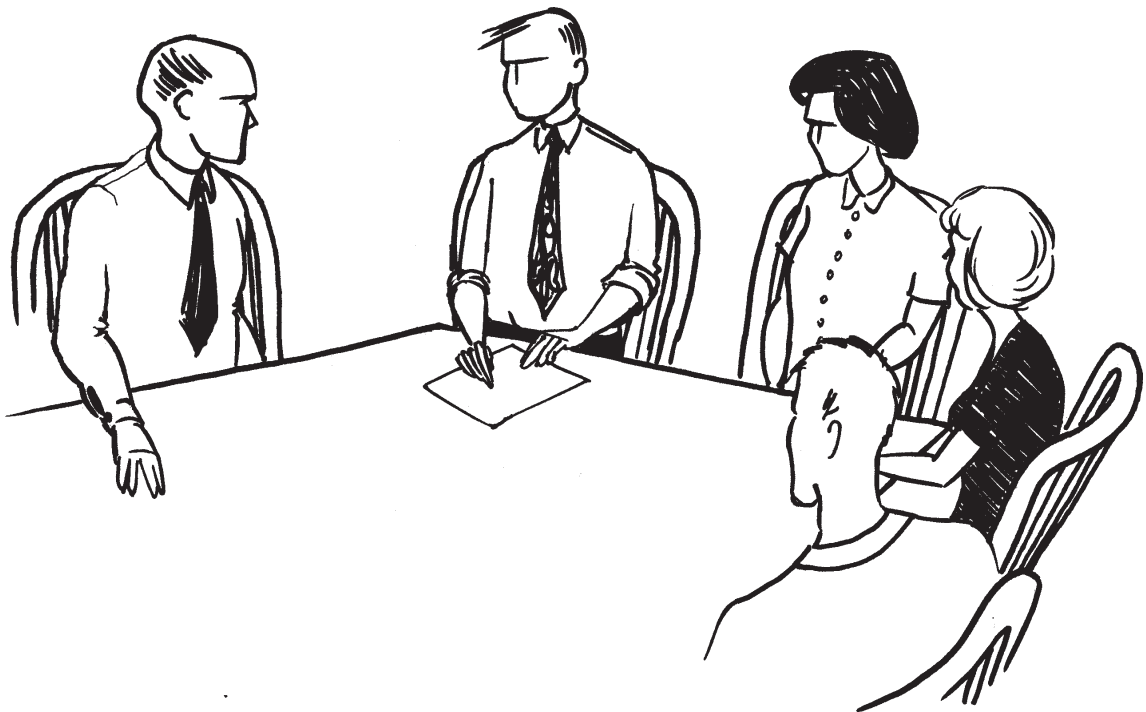
# Project Authority

The person who requests a project should have authority that spans the entire project. If the project affects areas outside of his or her authority, clear the request with a person who does have the necessary authority.



## ***Forming the Team***

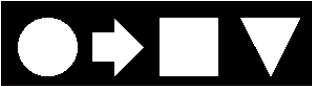
Select team members for their knowledge of the work. Since the most knowledgeable people are hard to spare, it is important to make it clear that meetings will be limited to one or two hours and there will be no more than four or five team meetings per chart on renewal and development projects and only one or two per chart on other types of projects. Team members chosen “because they can be spared” may have little to contribute. With the right people, you can produce outstanding work processes in only a few hours. With the wrong people, it doesn’t matter how long they are available. Firsthand experience is the cornerstone of realistic business process improvement.



## ***Agreement Signatures***

Complete a Project Definition Agreement Form and get it signed off by the person who has the authority described on page 4.





# PROCESS IMPROVEMENT PROJECT DEFINITION AGREEMENT

DATE

PERSON REQUESTING PROJECT (NAME AND TITLE)

**PROJECT  
TYPE**

DOCUMENT  
 IMPROVEMENT

RENEWAL  
 STANDARDIZATION

DEVELOPMENT  
 MAINTENANCE

PROJECT OBJECTIVES (PURPOSE OF THE PROJECT – SEE SUGGESTED OBJECTIVES IN FORM INSTRUCTIONS ON THE REVERSE)

PROJECT SCOPE (BOUNDARIES) (NAME THE PROCESS TO BE CHARTED AND THE START AND END POINTS OF THE CHARTING)  
PROCESS NAME                      START POINT (OF FIRST ITEM CHARTED)                      END POINT (OF LAST ITEM CHARTED)

DEPARTMENT(S) INVOLVED

TEAM MEMBERS (L = LEADER)

PHONE NUMBERS

BUSINESS PROCESS IMPROVEMENT FACILITATOR WHO WILL PREPARE CHARTS AND GUIDE THE PROJECT

PHONE NUMBER

START DATE

EST. COMPLETION DATE

REQUESTING DEPARTMENT MANAGER

BUSINESS PROCESS IMPROVEMENT FACILITATOR

SIGNATURE

SIGNATURE

DATE

DATE

## PROJECT DEFINITION AGREEMENT FORM - INSTRUCTIONS

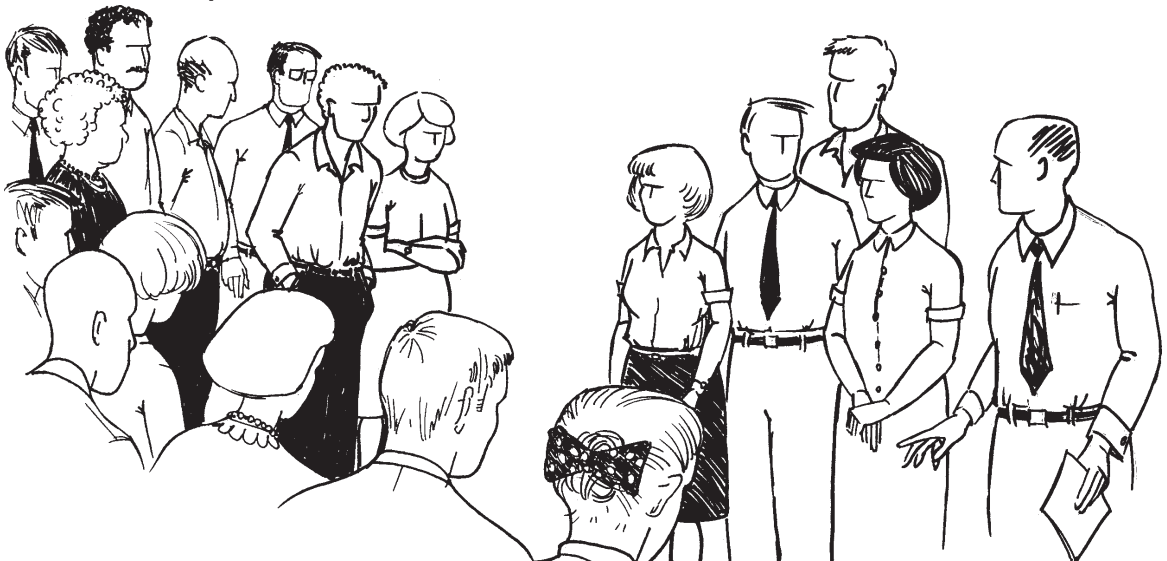
<b>Date</b>	The date the form is completed.
<b>Person Requesting Project</b>	The name and title of the person requesting the project. (See Authority, page 4.)
<b>Project Type</b>	Check the project type agreed upon. (See Project Types, pages 2 and 3.)
<b>Project Objectives</b>	<p><b>For Documentation Projects</b> a suggested objective is - <i>“To prepare charts and assure that they are accurate for (enter the name of the process here).”</i></p> <p><b>For Improvement Projects</b> a suggested objective is - <i>“To prepare charts for (enter the name of the process here) and assure that they are accurate, to improve those features of the process that can be changed without major development effort and to identify further improvement opportunities.”</i></p> <p><b>For Renewal Projects</b> a standard general objective is - <i>“To improve the effectiveness and efficiency of the (enter the name of the process here) by eliminating unnecessary work and by rearranging and streamlining tasks.”</i> Specific objectives may deal with cycle time, error rate, reporting effectiveness, security, etc.</p> <p><b>For Standardization Projects</b> a suggested objective is - <i>“To chart two or more ways that the (enter the name of the process here) is currently being done and develop a single better process .”</i></p> <p><b>For Development Projects</b> a suggested objective is - <i>“To chart, develop and obtain approval for (enter a description of the process to be developed here).”</i></p> <p><b>For Maintenance Projects</b> a suggested objective is - <i>“To review and reaffirm the approved chart of the (a process name is entered here).”</i></p>
<b>Project Scope</b>	Enter the name of the process being studied, the point where the study will begin and the point where it will end. (Sample of a scope description. PROCESS NAME - New Hire, START POINT - Receipt of application, END POINT - Decision to hire or not to hire.
<b>Department(s) and Team Members</b>	Enter the names of the departments involved in the project and the names and phone numbers of the people from those departments assigned to work on the team. Enter a capital “L” before the name of the person chosen to be the team leader.
<b>BusinessProcess Facilitator</b>	Enter your name and phone number.
<b>Start Date</b>	Enter a start date agreed upon with the requesting manager.
<b>Estimated Completion Date</b>	Enter the estimated completion date agreed upon with the requesting manager.

## ***Project Announcement***

The manager who requested the project explains the project to the people in the areas that will be affected. This is done in a meeting or by memorandum. A meeting is preferable because questions can be dealt with. (On maintenance projects omit this step, print out a chart and skip directly to Validation, p. 23.)

The key Items covered in the announcement are:

- The reason for the project.
- The business process improvement facilitator and the team members are identified.
- It is explained that process charts will be prepared and all people in the areas affected will have a chance to review the charts.
- The meeting ends with a request for support and an invitation for questions.





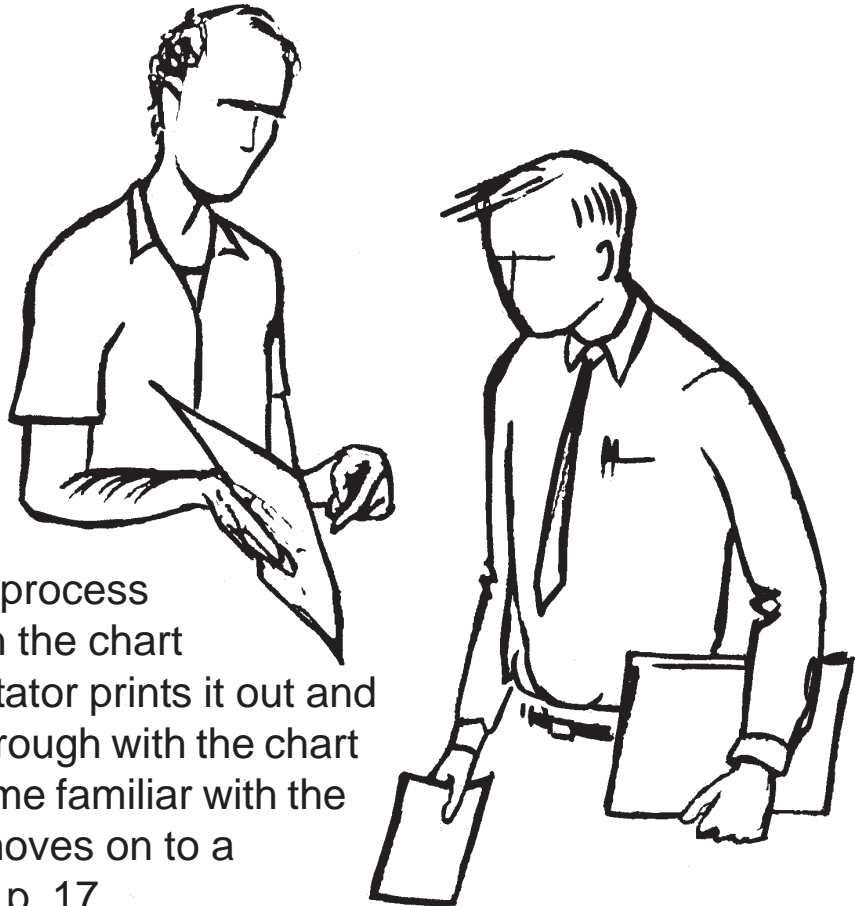
# DATA GATHERING



## ***Familiarization***

A familiarization walkthrough gives you a general idea of the size of the project while you pick up samples of forms and reports.

Do this in the work areas where the processing actually occurs except on development projects, where there is no current procedure.



If a chart of the process already exists in the chart library, the facilitator prints it out and does the walkthrough with the chart in hand to become familiar with the process, then moves on to a kickoff meeting, p. 17.

## ***Collecting Detailed Process Notes***

Walk through the process taking notes, using the charting symbols and conventions as a specialized shorthand.

On development projects do this by talking to a team of people who have been selected to develop the new process. These people should have as good experience related to the new process as is available.

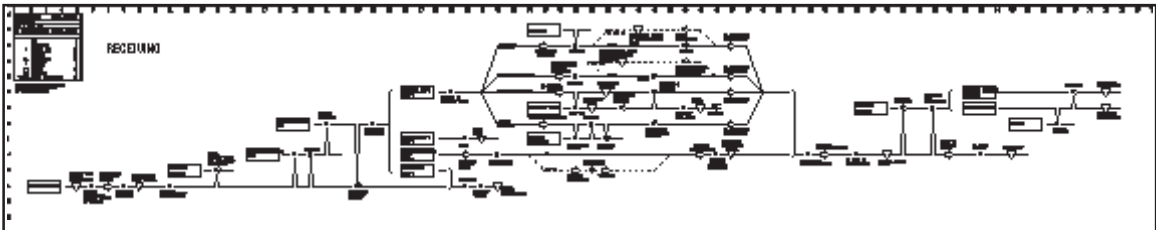


Write quickly, using few words. These words are reminders of what you have seen and heard. They will be effective reminders for only a short time. Convert your rough notes to chart form on the same day that you gather them.

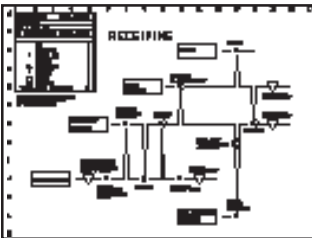


# CHARTING AND ANALYSIS

**As-Is**



**To-Be**



## ***Drawing the “As-Is” Chart***

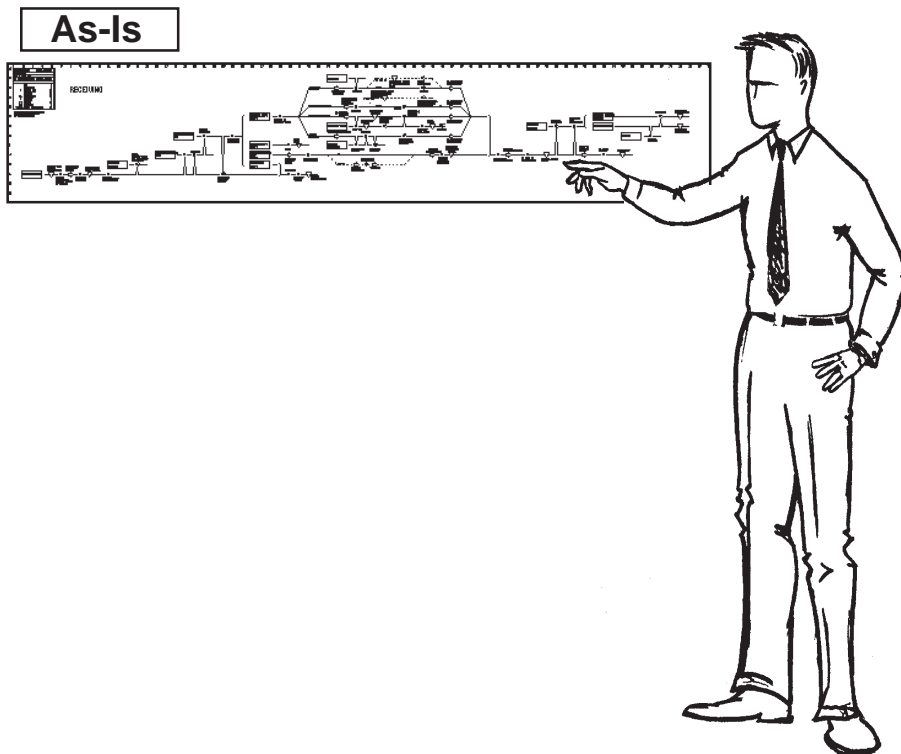
Use your rough notes to prepare an “As-Is” Graham Process Chart (a “First-Cut” chart on development projects) and print out a copy to be reviewed by the team.



## ***Kickoff Meeting***

Review the Project Agreement Form with the team. Then, if it has not already been done, have the team choose a team leader and recorder.

Next read through the chart for the team members. Then have the team leader read through the chart. At least two readings will be needed for the team members to become familiar enough with it to work with it.



## ***Analysis***

The team leader, with your help, leads the team through the chart, questioning the steps.

The recorder (also with your help) keeps track of ideas and assignments using the Improvement Meeting Record Form.

# **The Questioning Method**

**WHAT – WHY?**

**Eliminate**

**WHERE – WHY?**

**Change place**

**WHEN – WHY?**

**Change timing**

**WHO – WHY?**

**Change person**

**HOW – WHY?**

**Change details of method,  
equipment, materials, etc.**

The process improvement facilitator prepares a revised chart. Typically the different types of projects will require:

- Documentation & Maintenance, no analysis sessions.
- Improvement & Standardization, 1 or 2 sessions.
- Renewal & Development, 3 to 5 sessions.



# IMPROVEMENT MEETING RECORD

## RECORD OF IDEAS AND ASSIGNMENTS

PROJECT NAME
--------------

FORM PREPARED BY	DATE
------------------	------

### IDEAS

--

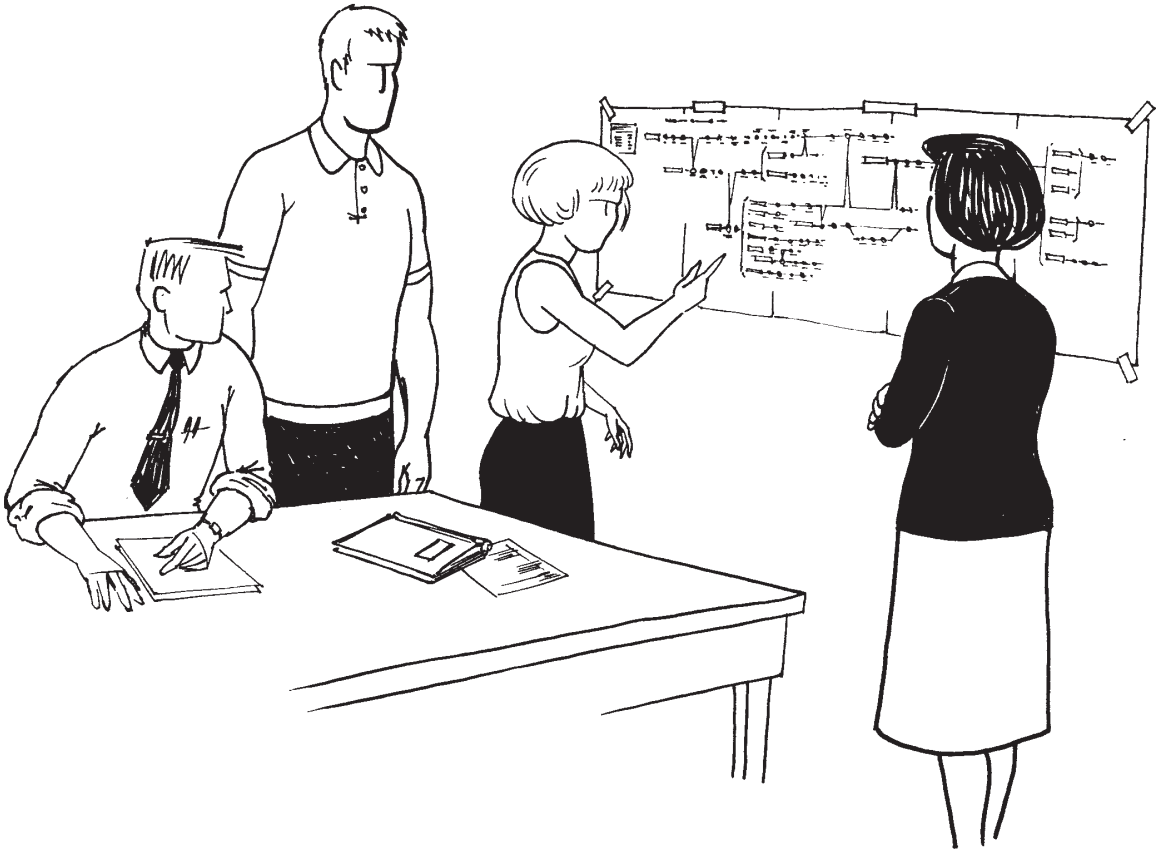
### ASSIGNMENTS

DESCRIPTION	PERSON

## IMPROVEMENT MEETING RECORD - INSTRUCTIONS

- Project Name**            The name the team has given to their project.
- Form Prepared By**    The person preparing the form will usually be the Recorder or the Facilitator.
- Date**                      The date of the improvement session.
- IDEAS**                    An improvement team can fill a meeting room with ideas and, at the end of their meeting, feel that they are close to putting together an excellent process. If they don't record their ideas they will find themselves rehashing the same thoughts at their next meeting and making little progress. Recording ideas is essential to effective team effort.
- As you complete this form, do not think of it as a device for keeping minutes of improvement sessions. Listen carefully to the discussion and concentrate on hearing those parts of the discussion that involve ideas for improvement. Don't expect the team members to preface their comments with statements like, "Hey, I've got an idea." You must listen carefully. In fact, if you listen carefully enough you may actually hear good ideas that team members don't even realize they offered. For that matter, an idea might even be imbedded in a sidewise glance. Be alert!!!
- ASSIGNMENTS**        Occasionally the team may be pursuing a possibility and want further information such as how often something happens, or the specific wording of a policy, or a price, etc. The team leader may ask one of the team members to look into it. Make note of these assignments to keep them from being overlooked.
- Description**            A brief description of the assignment.
- Person**                    The name of the person who is going to complete the assignment.

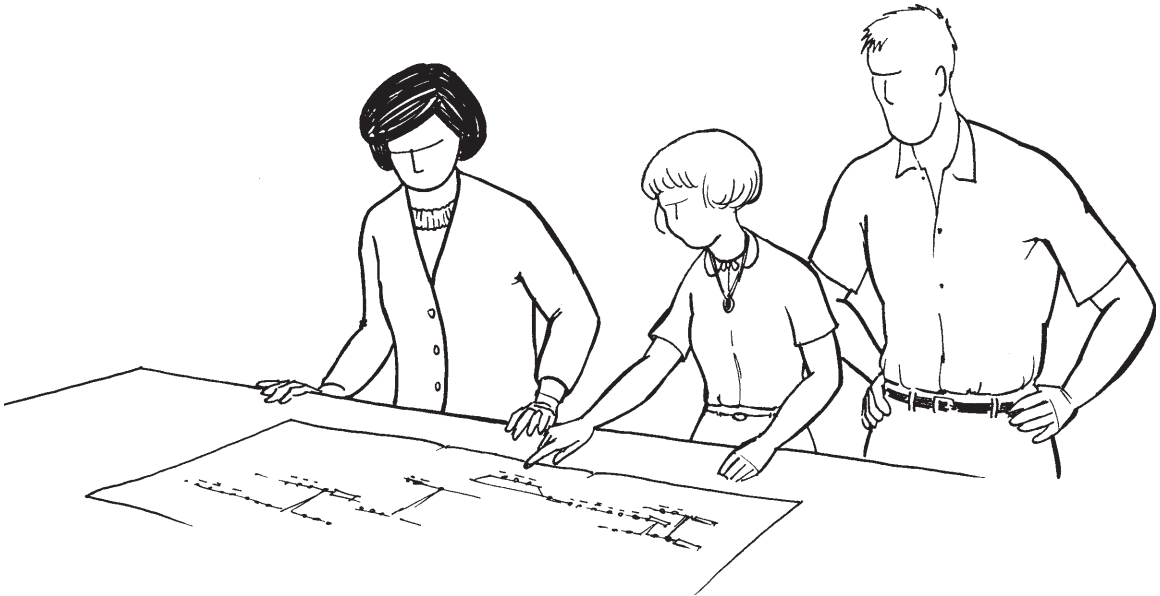
## Developing the “To-Be” Chart



- After each meeting, rechart the process incorporating the ideas of the team. On Improvement and Standardization projects you may go directly from your “As-Is” chart to the “To-Be”. On Renewal and Development projects you will typically have several interim (Work in Process) charts between the “As-Is” and the “To-Be”.
- Your final chart is the “To-Be” Chart.



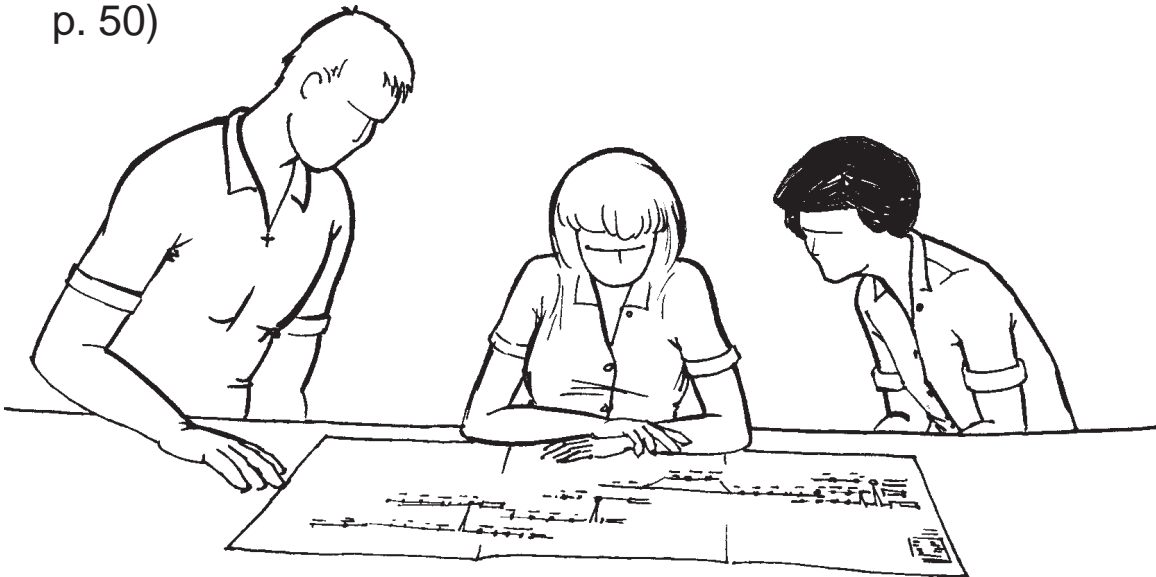
# VALIDATION



## ***Reality Check***

Think of the final chart review as your “**Reality Check**”. Test the proposed changes against the first-hand experience of the team. Carefully think through the consequences of each change.

- Improvement projects - This review is usually rather quick because the number of changes is small.
- Renewal and development projects - So much is new that the charts must be reviewed thoroughly.
- Standardization projects - These are usually similar to improvement projects but occasionally they may be like renewal projects.
- Documentation and maintenance projects - This review is usually quick because there are no proposed changes and when the team signs off the project is finished. (Proceed to p. 50)



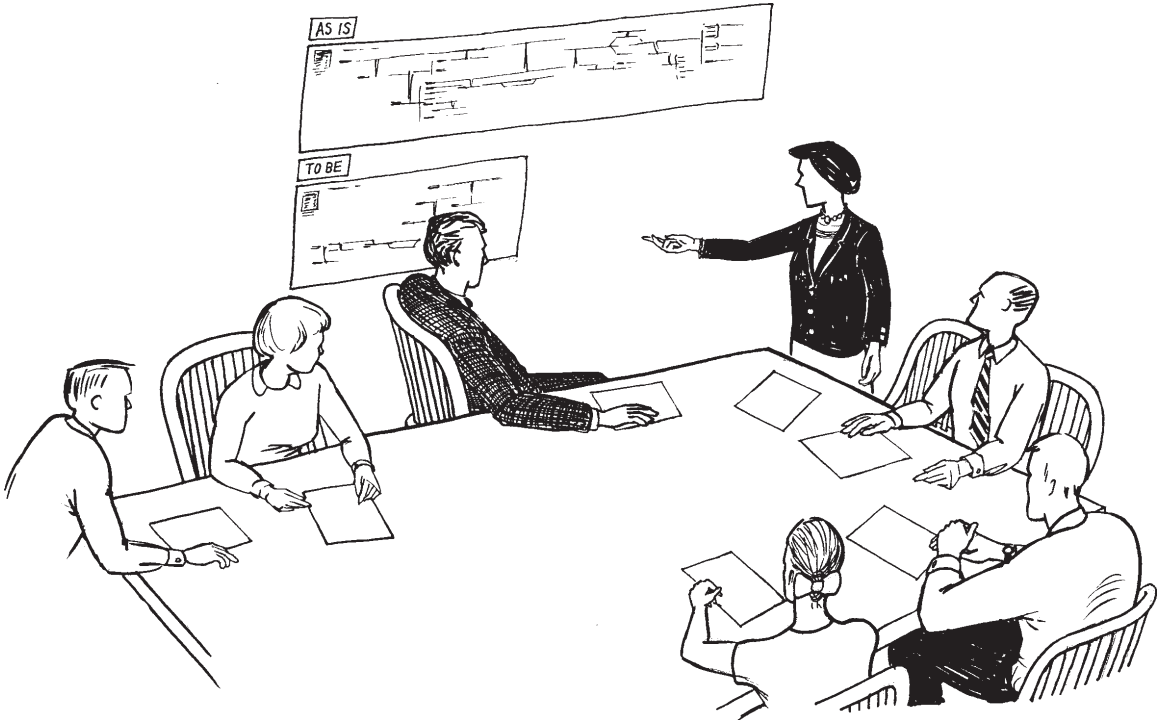
## ***System Review***

On renewal and development projects you may set up test situations or walkthroughs to validate the expected results. These generally involve creating a hypothetical case that contains potential problems, and processing it in mock-up fashion, creating records and completing transactions.





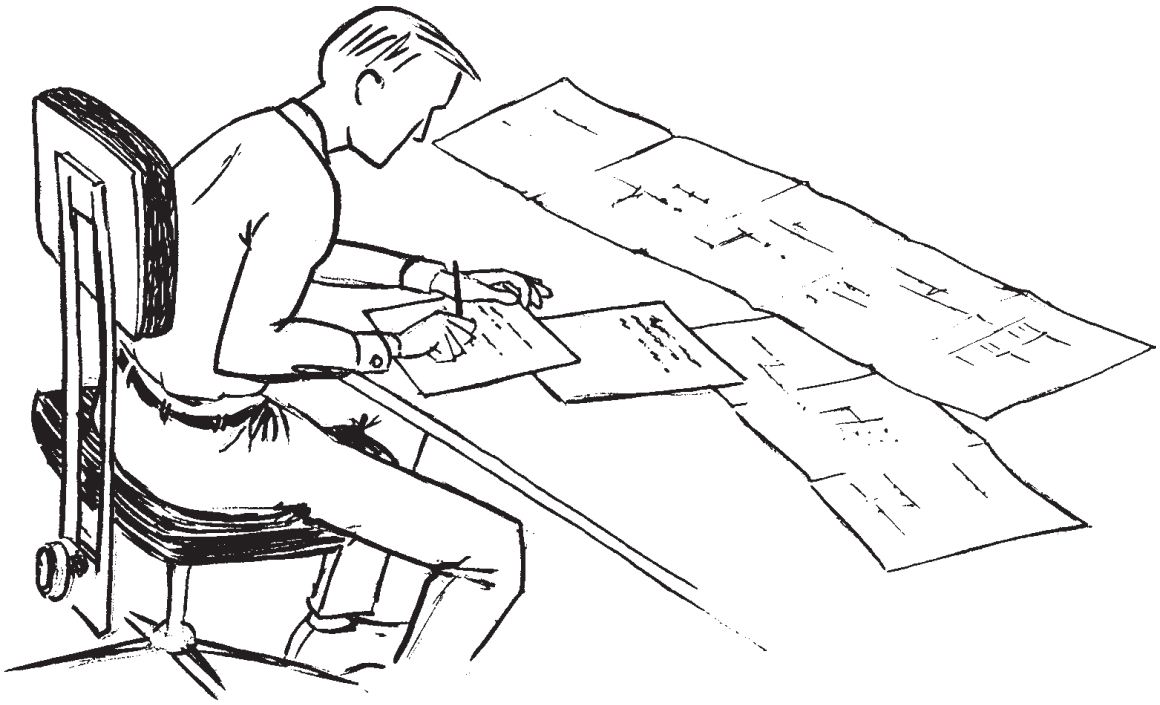
# PRESENTATION



## ***Preparing a Draft List of Changes***

Prepare a list of the differences between the “As-Is” and the “To-Be” charts. You can do this easily because you drew the charts. Examples of draft changes are:

- Combine the requisition and the purchase order.
- Eliminate checking operations on purchases under \$x.
- Deliver statements directly to Accounting.



## ***Team Rewrite***

The team reads the draft list of changes and rewrites them into a list of recommendations and a proposal.

- Each recommendation is assigned to the team member whose work is most closely related to the change.
- During the rewrite, the team agrees on the wording that will be used in the presentation.
- If there is disagreement about a recommendation, the preferences of the team member or members whose work is affected by the change take precedence.

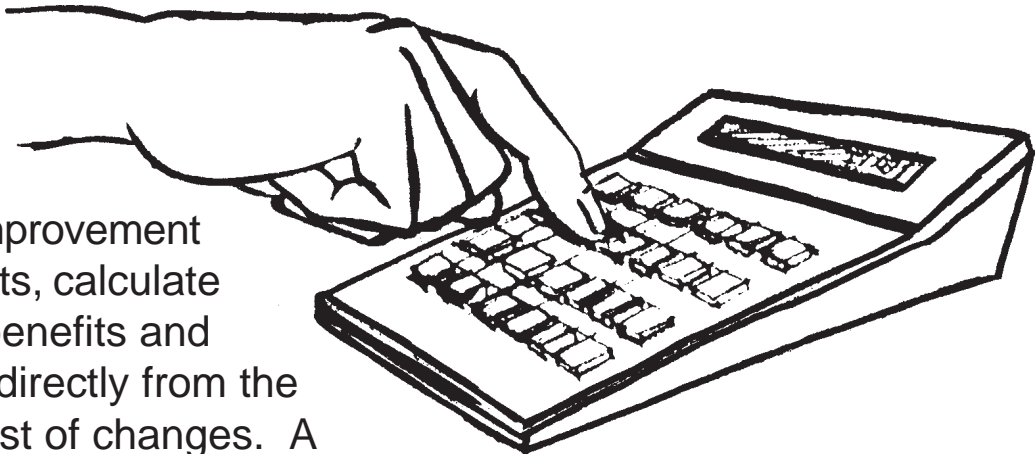


Restrict the written proposal to one page focusing on what the changes are.

## ***Determining Benefits and Costs***

Working with the team, analyze the recommendations to determine benefits and costs, using the following spreadsheets and checklist. Then add the benefits and costs to the recommendations and total them to determine the “bottom line”. The examples previously given in draft might appear as follows:

- Combine the requisition and the purchase order. Reduces labor costs by \$xx,xxx and material costs by \$x,xxx per year. Also eliminates xx,xxx pieces of paper per year.
- Eliminate checking operations on purchases under \$x. Reduces labor costs by \$x,xxx and material costs by \$xxx per year. Also eliminates x,xxx pieces of paper per year.
- Deliver statements directly to Accounting. Reduces processing time by xx hours.



(On improvement projects, calculate your benefits and costs directly from the draft list of changes. A formal proposal is not usually required.)















## ***Benefits Checklist***

After completing the benefit-and-cost spread sheets, review the proposal against this checklist. Occasionally one of these items will call attention to an outstanding benefit.

- Processing time reduction can produce benefits such as:
  - Main mission improvements (sales revenue - more customers on the books sooner, health in hospitals, learning in schools, justice in courts, security in military and police and fire, etc.
  - Reduction in interest paid.
  - Reduced inflationary costs.
  - Reduced discounts lost.
  - Reduced rental, lease, demurrage payments.
- Error reduction can produce:
  - Main mission improvements listed as above.
  - Less labor and material cost for correction and disposal.
- Legal risk.
- Comfort/morale.
- Flexibility.
- Reduced maintenance.
- Reduced need for overtime or temporary help.
- Reduced credit and theft losses.
- Floor Space – may be valued per-foot. Check with Engineering.

Most of these items occur as benefits but they may also increase costs. Where common sense prevails the balance should be favorable.

## ***Preparing the Presentation***

### **Team Roles**

- The team leader will read the summary of the benefits and costs at the beginning of the presentation.
- Each recommendation will be read by the team member whose work area is most affected by it.
- The facilitator does not present the proposal.

**Rehearsal** - A rehearsal helps the team members to relax and gives them a chance to time the presentation. Since the presentation is only one page the reading is rarely more than two or three minutes.

**Preliminary Meeting with Manager** – Before the proposal meeting, meet with the manager whose authority spans the project. Describe the agenda and arrange for this manager to co-chair the meeting along with the team leader. This helps to assure that the meeting will produce action.



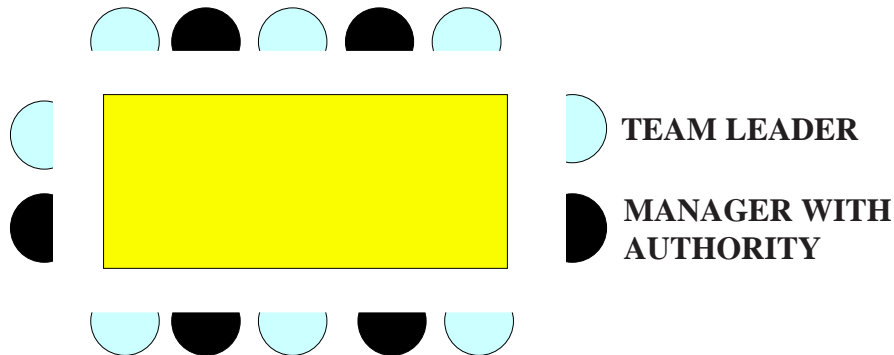
# Staging

## Agenda

- The **manager with authority** opens the meeting and covers the agenda (including that the team will read the entire proposal before discussion) – it takes x minutes.
- The **team leader** reads the summary of benefits and costs.
- **Team members** read recommendations about their areas.
- The **managers** question the **team**.
- The **manager with authority** reviews the recommendations for decision - summarizes the decisions - appoints the implementation coordinator - and closes the meeting.

## Room Preparation

- The room should be clean.
- Seating should have team members and managers interspersed and arranged so that they can see one another.



Interspersing the team members with the managers is accomplished easily. The team members arrive early and take every other seat. This avoids having the managers sitting together with the team members in another group.

## *Approvals*

A decision is made for each recommendation. It will be:

- Approved.
- Rejected.
- If they cannot decide, the manager with authority assigns the recommendation to the manager whose work it affects with a limit of five or ten days to accept or reject it.



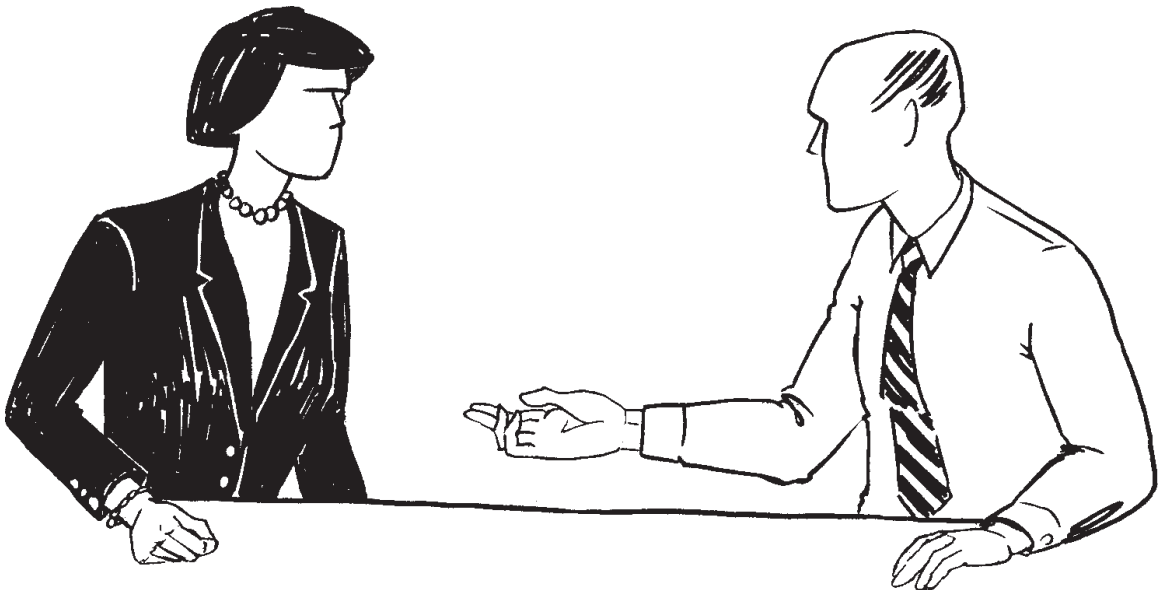
Managers are encouraged to accept those changes that they see as clearly favorable, to reject those that they see as clearly unfavorable and to accept those where they are indifferent, reversing an all-too-common attitude of avoiding changes. This change of attitude is justified by the careful study that the team members have done and the fact that they obviously favor the change.

## ***Appointing the Implementation Coordinator***

At the close of the proposal meeting the manager with authority appoints a person to lead the implementation. This person should be:

- Someone from the work area – not the facilitator.
- Usually someone who was a team member, often the team leader.
- Implementation may require a good deal of time but support from the facilitator can help a busy operating person to manage it.

(On improvement projects, the team leader usually becomes the implementation coordinator.)



# IMPLEMENTATION



## ***Revise the “To-Be” Chart***

Following the proposal meeting you revise the “To-Be” chart to reflect any differences between what was proposed and what was approved. If no more changes occur during the implementation this will become the approved chart in your process chart library.



## ***Determine the Implementation Activities***

1. List the approved recommendations on an Activities Checklist for Implementation Form. (See next page.)
2. Talk through each recommendation with the team members and place checkmarks in the columns of the activities that will be required for implementation: Forms Needed, Equipment Needed, etc.
3. Then enter a brief description of the work required for each of the checkmarks on an Activity List (page 47) and the name of the person responsible for seeing that it will be done and a date when it will be done.



The Activity List is the key to a smooth implementation. It can usually be completed in less than an hour.



# ACTIVITIES CHECKLIST FOR IMPLEMENTATION

PROJECT TEAM

DATE

## INSTALLATION ELEMENTS

FORMS  
NEEDED

EQUIPMENT  
NEEDED

TRAINING  
NEEDED

POLICIES  
NEEDED

PROCEDURES  
NEEDED

PROGRAMMING  
NEEDED

FACILITIES/WORK  
PLACE NEEDED





## ***Schedule the Implementation***

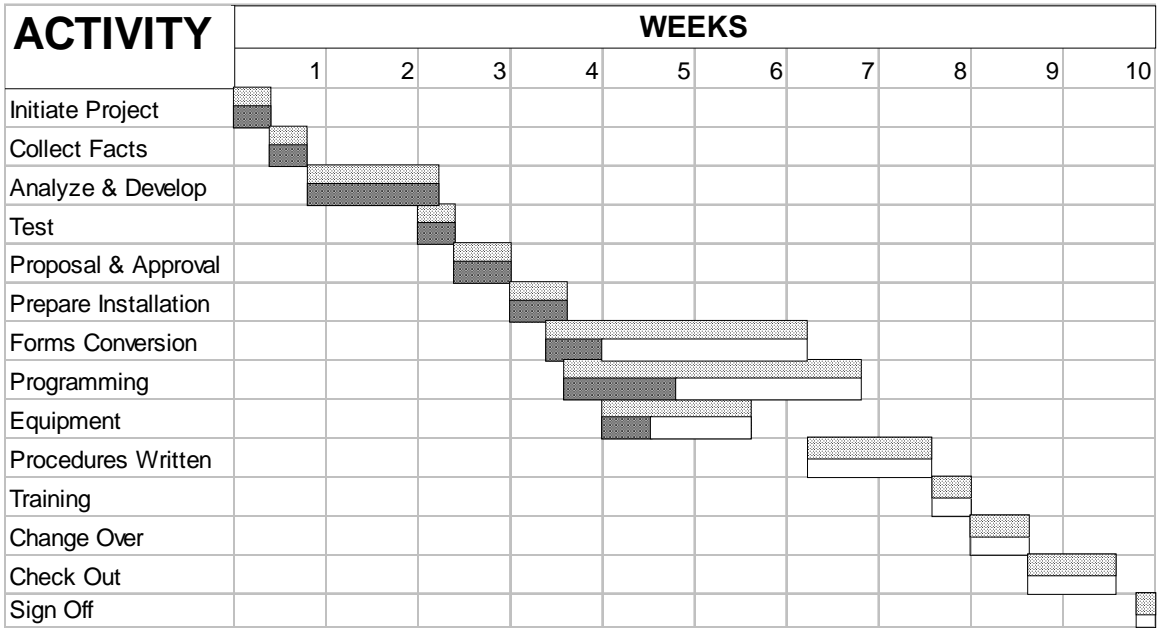
The methods needed to schedule the implementation depend on how complicated the implementation is.

**Simple Implementations** – Where there are only eight or ten activities, as in most improvement projects, use the Implementation Activities List to keep track of the work. (See previous page.)

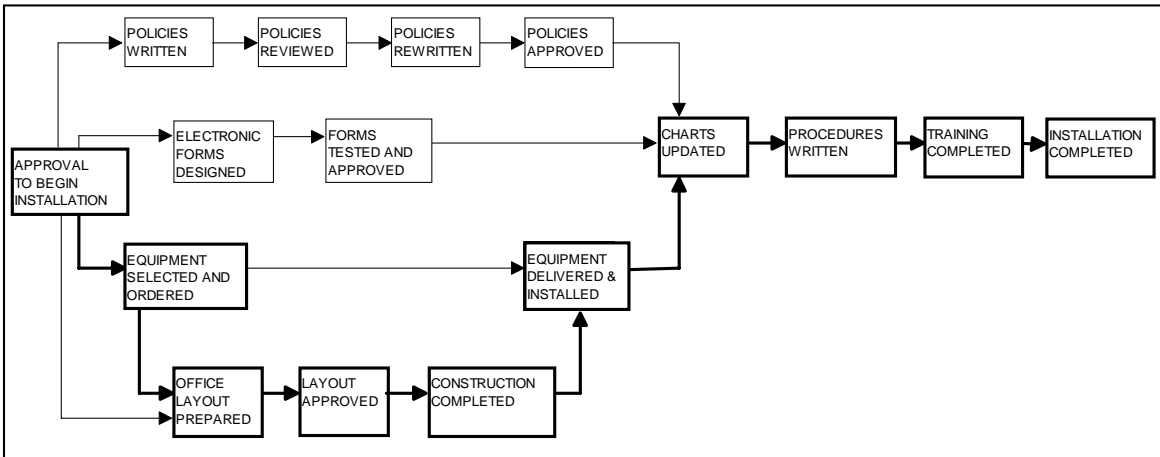
**Complicated Implementations** – For more complicated implementations you may choose to organize the activities on a Gantt chart or a critical path - network type chart (See following page). There are many software packages available for preparing and maintaining these charts.

Network/critical path charts permit you to keep track of all of the implementation activities while focusing your primary efforts on those that are most critical. Each day, throughout the implementation, you know the one activity that must be kept on schedule - the activity of the critical path that is currently being worked on. From time to time you check the activities that are currently being worked on in the other paths to make sure that those paths do not fall behind and become critical. This permits you to keep large, complicated implementations on schedule.

### GANTT CHART for PROJECT PLANNING



### NETWORK CHART for PROJECT PLANNING



## ***Close the Project***

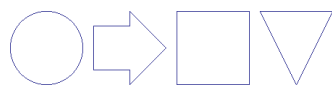


### **Process Chart Library -**

Make a final check to assure that the “To-Be” chart reflects what has actually been implemented. If necessary, update the chart to reflect what is actually being done. This becomes the current approved chart in your electronic process chart library.

For Documentation and Maintenance projects, the validated chart is placed into the library as the current approved chart.

**Project Folder -** Then collect the project documentation from the team recorder and the implementation coordinator. Assemble the important pieces in a project folder as your hard copy record of the project.



**The Ben Graham Corporation**