Analysis Reports

Problem Analysis

A report that presents readers with a detailed description of problems in areas such as personnel, equipment, products, and services.

Its main goal is to provide objective information so that the readers can choose the next step. Any opinions must be well supported by facts.

ABC Format: **Problem Analysis**

- **ABSTRACT:** Purpose of report
  - Capsule summary of problems covered in report discussion
- **BODY:** Background on source of problems
  - Well-organized description of the problems observed
  - Data that support your observations
  - Consequences of the problems
- **CONCLUSION:** Brief restatement of main problems (unless report is so short that such restatement would seem repetitious)
  - Degree of urgency required in handling problems
  - Suggested next step

Case Study

- Harold Marshal, a longtime M-Global employee, supervises all technical work aboard the Seeker II, a boat that M-Global leases during the summer. Staffed with several technicians and engineers, the boat is used to collect and test soil samples from the ocean floor. Different clients purchase these data, such as oil companies that must place oil rigs safely and telecommunications companies that must lay cable.
- After a summer on the Seeker II, Harold has severe reservations about the safety and technical adequacy of the boat. Yet he knows that his supervisor, Jan Stillwright, will require detailed support of any complaints before she seriously considers negotiating a new boat contract next season. Given this critical audience, Harold focuses on specific problems that affect(1) the safety of the crew, (2) the accuracy of the technical work performed, and (3) the morale of the crew. He believes that this pragmatic approach, rather than an emotional appeal, will best persuade his boss that the problem is serious.

TO: Jan Stillwright, Vice President of Research and Training
FROM: Harold Marshal, Technical Supervisor **HM**
DATE: October 15, 2012
SUBJECT: Boat Problems During Summer Season

INTRODUCTORY SUMMARY

Gives abstract (or *summary*) in first paragraph.

We have just completed a one-month project aboard the leased ship, *Seeker II,* in the Pacific Ocean. All work went just about as planned, with very few delays caused by weather or equipment failure.

Provides *capsule listing* of problems discussed in report.

However, there were some boat problems that need to be solved before we lease *Seeker II* again this season. This report highlights the problems so that they can be brought to the owner's attention. My comments focus on four areas of the boat: drill rig, engineering lab, main engine, and crew quarters.

DRILL RIG

Opens with most *important point*—then qualifies it. Explains problem in *layperson's language*, indicating possible consequences.

Thus far, the rig has operated without incident. Yet on one occasion, I noticed that the elevator for lifting pipe up the derrick swung too close to the derrick itself. A quick gust of wind or a sudden increase in sea height caused these shifts. If the elevator were to hit the derrick, causing the elevator door to open, pipe sections might fall to the deck below.

I believe the whole rig assembly needs to be checked over by someone knowledgeable about its design. Before we put men near that rig again, we need to know that their safety would not be jeopardized by the possibility of falling pipe.

Bedroom

Three of the top bunks had such poor springs that the occupants sank 6 to 12 inches toward the bottom bunks. More important, five of the bunks are not structurally sound enough to keep from swaying in medium to high seas. Finally, most of the locker handles are either broken or about to break.

Describes three problem areas in great detail—knowing the owner will want facts to support complaints.

Bathroom

Poor pressure in three of the commodes made them almost unusable during the last two weeks. Our amateur repairs did not solve the problem, so I think the plumbing leading to the holding tank might be defective.

Laundry Room

We discovered early that the filtering system could not screen the large amount of rust in the old 10,000-gallon tank. Consequently, undergarments and other white clothes turned a yellow-red color and were ruined.

CONCLUSION

As noted at the outset, none of these problems kept us from accomplishing the major goals of this voyage, but they did make the trip much more uncomfortable than it had to be. Moreover, in the case of the rig and engine problems, we were fortunate that injuries and downtime did not occur.

Briefly restates problem, with emphasis on *safety* and *profits*.

I strongly urge that the owner be asked to correct these deficiencies before we consider using *Seeker II* for additional projects this season.

Ends with specific recommendation.

Equipment Evaluation

- An informal report that provides objective data about how equipment has, or has not, functioned.
- The report may cover topics such as machinery, tools, vehicles, office supplies, computer hardware, and computer software.
- Like a problem analysis, an equipment evaluation may focus only on problems; or like a recommendation report, it may go on to suggest a change in equipment. Whatever its focus, an equipment evaluation must provide a well-documented review of the exact manner in which equipment performed.

Equipment Evaluation

ABC Format: **Equipment Evaluation**

- **ABSTRACT:** Purpose of report
  - Capsule summary of what your report says about the equipment
  - Reason for the evaluation
- **BODY:** Thorough description of the equipment being evaluated
  - Well-organized critique, either analyzing the parts of one piece of equipment or contrasting several pieces of similar equipment according to selected criteria
  - Additional supporting data, with reference to any attachments
- **CONCLUSION:** Brief restatement of major findings, conclusions, or recommendations

Case Study

- Like other firms, M-Global relies on word processing for almost all internal and external documents. It is an evaluation of a new word-processing package used on a trial basis. Melanie Frank, office manager in San Francisco, conducted the trial in her office and wrote the report to the branch manager, Hank Worley. Note that she analyzes each of the software's five main features and then ends with a recommendation, much as in a recommendation report.

MEMO

DATE: July 25, 2013
TO: Hank Worley, Project Manager
FROM: Melanie Frank, Office Manager *MF*
SUBJECT: Evaluation of Best Choice Software

Uses optional first heading for abstract section of ABC format. Gives background, main points, and scope statement.

INTRODUCTORY SUMMARY

When the office purchased one copy of Best Choice Software last month, you suggested I send you an evaluation after 30 days' use. Having now used Best Choice for a month, I have concluded that it meets all our performance expectations. This memo presents our evaluation of the main features of Best Choice.

Notes five main criteria to be evaluated.

HOW BEST CHOICE HELPED US

Best Choice provides five primary features: word processing, file management, spreadsheet, graphics, and a user's guide. My critique of all five features is included here.

Begins paragraph with most important point. Supports claim with evidence.

Word Processing

The system contains an excellent word-processing package that the engineers as well as the secretaries have been able to learn easily. This package can handle both our routine correspondence and the lengthy reports that our group generates. Of particular help is the system's 90,000-word dictionary, which can be updated at any time. The spelling correction feature has already saved much effort that was previously devoted to mechanical editing.

Uses specific example to document opinion.

File Management

The file-manager function allows the user to enter information and then to manipulate it quickly. During one three-day site visit, for example, a field engineer recorded a series of problems observed in the field. Then she rearranged the data to highlight specific points I asked her to study, such as I-beam welds and concrete cracks.

Gives simple explanation of how spreadsheet works.

Spreadsheet

Like the system's word-processing package, the spreadsheet is efficient and quickly learned. Because Best Choice is a multipurpose software package, spreadsheet data can be incorporated into letter or report format. In other words, spreadsheet information can be merged with our document format to create a final draft for submission to clients or supervisors, with a real savings in time. For example, the memo I sent you last week on budget projections for field equipment took me only an hour to complete; last quarter, the identical project took four hours.

Graphics

The graphics package permits visuals to be drawn from the data contained in the spreadsheet. For example, a pie chart that shows the breakdown of a project budget can be created easily by merging spreadsheet data with the graphics software. With visuals becoming such an important part of reports, we have used this feature of Best Choice quite frequently.

Shows relevance of graphics to current work.

User's Guide

Eight employees in my group have now used the Best Choice user's guide. All have found it well laid out and thorough. Perhaps the best indication of this fact is that in 30 days of daily use, we have placed only three calls to the Best Choice customer-service number.

Supplies strong supporting statistic.

CONCLUSION

Best Choice seems to contain just the right combination of tools to help us do our job, both in the field and in the office. These are the system's main benefits:

Wraps up report by restating main points.

- Versatility—it has diverse functions
- Simplicity—it is easy to master

The people in our group have been very pleased with the package during this 30-day trial. If you like, we would be glad to evaluate Best Choice for a longer period.

Offers follow-up effort.

Feasibility Studies

- A document written to show the practicality of a proposed policy, product, service, or other change within an organization. Often prompted by ideas suggested in a proposal , a feasibility study examines details such as costs, alternatives, and likely effects.

- Although they must reflect the objectivity of a report, most feasibility studies also try to convince readers either:

  - (1) to adopt or reject the one idea discussed or
  - (2) to adopt one of several alternatives presented in the study.

ABC Format: Feasibility Study

- **ABSTRACT:** Capsule summary of information for the most important readers (i.e., the decision makers)
  - Brief statement about who has authorized the study and for what purpose
  - Brief mention of the criteria used during the evaluation
  - Brief reference to your recommendation
- **BODY:** Details that support whatever conclusions and recommendations the study contains, working logically from fact toward opinion
  - Organization that compares advantages and disadvantages of each option
  - Description of evaluation criteria used during your study
  - Description of exactly *what* was evaluated and *how*, especially if you are comparing several items
- **CONCLUSION:** Wrap-up in which you state conclusions and recommendations resulting from the study

Feasibility Studies

- Feasibility studies guide readers toward a particular action.
- It can be either in-house or external.
- Feasibility studies are usually solicited by the reader who needs to make a decision. Therefore, they do not advocate strongly for a single solution. Instead, they compare alternatives in such a way that a reader can make an informed decision about a course of action.
- Feasibility studies are often part of a larger process. They may be preceded by a problem analysis and a recommendation report or proposal.
- Once a problem has been identified and analyzed and a response has been suggested, a feasibility study may be conducted to determine if the proposed action is appropriate for the particular situation in the organization. If the proposed action is feasible and desirable, the feasibility study may be followed by a plan of action, including the development of guidelines and training materials

Feasibility of Using Open-Source Software at M-Global

Uses formal document format appropriate for scope of project and length of report.

Prepared for:
Greg Bass, Director of Information Systems

Prepared by:
Kellen Holmes and Kate Newman

MEMO

To: Greg Bass
From: Kellen Holmes and Kate Newman
Date: April 20, 2012
Subject: Feasibility Report for Open-Source Software

Enclosed is the study that you requested of the feasibility of open-source software at M-Global. There are many options available to us, but we believe that some open-source software could meet our needs and save on license fees.

We should, however, be aware of the limitations of such software and of the different nature of technical support with this kind of software. We will not be able to turn to a vendor for technical support; instead, we will need to look to the community of users or create our own solutions. We believe that M-Global has the resources to support open-source software and even to contribute to the open-source software community.

We will be happy to meet with you to discuss our findings.

Explains context of the feasibility study.

Includes sources that are not cited in the report, but that may have provided useful background information

Invites follow-up meeting.