

Managing Kuwait Oil Fields Reconstruction Projects

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SYNOPSIS

This case describes the project of reconstructing the Kuwait Oil Company's oil fields following the Gulf War in 1991. The project was conceived in November 1990, before the Gulf War even began, and ended in June 1993. The case describes many of the challenges the project faced including the need for basic necessities (water, shelter, etc.), the organization of the project, and the various aspects of managing the project. The project ended a success, with all of the oil wells repaired, a huge amount of oil reclaimed, and production goals as desired. This case shows the importance of planning and the use of creative solutions to project challenges.

LEARNING OBJECTIVES

Through the study of this case and the associated discussion questions, students should gain a better understanding of:

- the management of a large project
- the importance of project schedule management
- the importance of infrastructure in a large project
- the challenges of managing a multinational multicultural project.

DISCUSSION QUESTIONS AND POSSIBLE ANSWERS

1. This project was a major undertaking. The challenges it faced ranged from providing the basics for being able to live in the desert (water and shelter) to finding creative methods for getting imports into the country through non-traditional routes. From the author's point of view, the project went rather smoothly. To which factors do you attribute the success of this project?
 - a. Planning—Planning for this project began in November 1990, well before the Gulf war and the implementation of the project on March 4, 1991.
 - b. Financial Resources—The author does not mention financial resources; however, knowing the importance of the oil reserves of Kuwait and the wealth of the country, one may easily infer that the project did not face economic restrictions.

c. Adequate Project Management—The planning process, the close relationship between engineering and construction teams, and the use of tools such as a work breakdown structure exemplify the use of project management.

d. The clear and attainable mission of the project.

CLARITY OF THE MISSION

2. This case describes an enormous undertaking made up of many different projects. Which of these projects can be considered the most important? Why?

a. The most important projects can be broken into two groups:

1. Those which must be accomplished chronologically before the others because the others are dependent on their completion. These include such projects as: extinguishing the well fires, and eliminating the risk of unexploded shells and mines.

2. Those which create the necessary infrastructure to accomplish the project as a whole such as the creation and distribution of housing, food, and water. Before any large-scale work on the recovery of the oil resources can begin, there must be the support for those accomplishing this work.

DIRECT ACTIVITIES
SUPPORT ACTIVITIES

3. One of the regular outputs of the development of the project plan is the work breakdown structure. Define the work breakdown structure and its benefits.

WBS

a. The *PMBOK Guide* defines the work breakdown structure in section 5.3.3, Outputs of Scope Definition. It states that: "A work breakdown structure is a deliverable oriented grouping of project elements that organizes and defines the total scope of the project: work not in the work breakdown structure is outside of the scope of the project." It continues: "Each descending level represents an increasingly detailed definition of a project component. Project components may be products or services."

b. In *Project Management: Strategic Design and Implementation* by Cleland, 2nd ed., Chapter 11, Project Planning, the work breakdown structure is defined as that which: "divides the overall project into work elements that represent singular work units, assigned either with the organization or to an outside organization such as a vendor."

WBS Defined

Some of the uses for a work breakdown structure are:

- summarizing all products and services comprising the project, including support and other tasks
- displaying the interrelationships of the work packages to each other, to the total project, and to other engineering activities in the organization
- establishing the authority-responsibility matrix organization
- estimating project cost
- performing risk analysis
- scheduling work packages
- developing information for managing the project
- providing a basis for controlling the application of resources on the project
- providing reference points for getting people committed to support the project.

4. How were the multinational relationships handled in this project?
 - a. Tasks were "tailor made" to suit a team available to handle that project. These teams thus were led and made up of members able to communicate with each other. Guidelines for these issues can be found in *PMBOK Guide*, section 9, Project Human Relations Management, and *PMBOK Guide*, section 10, Project Communications Management. These sections describe how these issues can be focused upon and successfully managed.
5. This project was handled by the Bechtel Corporation, a private company, and not the Kuwaiti government. List some of the advantages to this project being handled privately and not publicly.
 - a. Experience—Bechtel knew how to handle the various jobs
 - b. Multinational hiring ability—able to create the necessary work force
 - c. Cost and scheduling controls
 - d. Bechtel's existing resources and its ability to import resources to cover project necessities.
 - e. Ability to plan the project before it began (the Kuwaiti government was concerned with much more pressing matters)
6. Figure 1 shows the organization chart of the Al-Tameer project. What kind of organization does this represent?
 - a. The organization chart resembles a functional organization. However, the purpose of the whole organization is this single project. Therefore, each of the functions can be taken as subcomponents of the project and thus the chart might describe a project organization.

ADDITIONAL DISCUSSION POINTS:

The financial aspects of this project, although rarely mentioned in the case, obviously had an effect on how the project was carried out. Discuss how you believe finances may have driven the project, may have constrained the project, and may otherwise have affected the project.

*
Discuss