Chapter 5

The Design and Implementation of Paperless Medical System (PMS) for Offshore Operating Company:
A Structured Approach

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EXECUTIVE SUMMARY

Application software development has always been viewed as a massive challenge by companies that view IT services as a support function rather than a core function. The term "core" here implies that IT plays an enabler role to facilitate technology and services that support users to meet set business objectives in an efficient way. Furthermore, IT development is perceived by many managers as a burden; hence, they prefer the fast track implementation of specialized packages to deliver the majority of service levels over the long wait for systems to be built in-house, even though the latter option is more advantageous in the long run, as it offers a much better fit to all user requirements. With this dilemma in mind, this case is an example of how an in-house development solution was implemented. The case touches on positive and negative aspects of the decision to build the application and covers a range of issues encountered during every phase of the development life cycle.

CASE STUDY OBJECTIVES

This case study highlights issues and challenges pertaining to the different phases of the "System Development Life Cycle—SDLC," with emphasis on the cultural constraints and limitations encountered at each phase.

The case study aims at providing the audience with examples on how cultural and regional factors could affect the SDLC regardless of the technology and methodology used.

For organization, the case study is divided into the following sections: 1) setting the stage, 2) background of the business requirements, 3) the project starting days, 4) the analysis phase, 5) the design and development phase, 6) the go-live phase, 7) achievements, and 8) lessons learnt.

SETTING THE STAGE

The company is multi-site organization with operational sites distributed over a wide geographical area. It employs thousands of employees and contractors, with working conditions being risky in most of the company's locations. Medical Services is a unit of the company that serves employees and contractors in all locations on 24 by 7 basis.

The assignment of Medical resources to the project was mostly based on availability since the welfare of patients was an objective that could not be compromised under all conditions.

BACKGROUND OF THE BUSINESS REQUIREMENTS

The Medical Services unit of the company required a system that would enable its Medical Officers to offer the expected service levels to all employees and contractors with emphasis on aspects such as personal health, particularly for employees suffering from "chronic diseases" and "allergies" as well as hazards caused by the nature of the job or job location.

Due to the fact that the system was to be developed in-house, a number of project pre-requisites were not completely adhered to. One such critical pre-requisite was the "Project Charter," where the project team accepted to start the project from the point when the project plan was prepared.

The system was expected to deliver the following:

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