

# Chapter 12

## Implementation of Integrated Enterprise Asset Management Systems (IEAMS): Key Challenges and Lessons Learned

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### EXECUTIVE SUMMARY

*The chapter focuses on the challenges encountered and strategy used during Integrated Enterprise Asset Management (IEAMS) project from its inception to Go-Live. It has integrated all of the related processes from the project initiation to Asset Write-off (project initiation/ approval, asset creation/ operation/ maintenance/ write-offs, contract initiation/ execution/ payments) with the involvement of all concerned stakeholders.*

*IEAMS has replaced over 100 legacy, standalone, and custom applications with Maximo®. The consolidation of these applications and associated data represented a challenge in data integrity, cleansing, transformation, migration, and upload to Maximo® as a unified data repository.*

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### ***Implementation of Integrated Enterprise Asset Management Systems (IEAMS)***

*A comprehensive training program was carried out before Go Live of the system to train all prospective users of the system. The extensive change management program included comprehensive campaigns, game shows to promote awareness about IEAMS in the company. A number of key personnel in their respective organizational units were designated as Change Agents to promote IEAMS and to ensure smooth transition upon Go Live.*

## **ORGANIZATION BACKGROUND**

It is a major oil and gas company having the responsibilities of exploration, drilling, and production of hydrocarbon resources. The company is also involved in the storage of crude oil and its delivery to tankers for export.

*The company maintains a wide variety of asset types including:*

- Sub Surface Facilities (Reservoirs, Wells).
- Surface Facilities (Gathering Centers/ Booster Stations, Water treatment, and Injection Plants).
- Export Facilities (Tank Farms, Export Terminals/ Marine Fleet) .
- Infrastructures (Pipe Lines/ Cables, Roads, Office Building, and Staff Accommodation).
- Workshops (Machining/ Fabrication/ Repairs).
- Transports (Heavy Equipment/ Light Vehicles).
- IT (Communication, Computers [Servers, Workstations], Accessories, and Software).
- Medical services for the staff.

All of these asset types and their distinct process for asset management have been covered within the scope of IEAMS project.

## **SYSTEM BACKGROUND**

The company has always been at the forefront in using information technology for business process and productivity improvements. Prior to year 2000, separate applications were used for Supply Chain, Maintenance, Finance, and Human Resources.

A project to transform all of these applications and associated processes was initiated in late 1990s with the aim to implement the best of breed applications to meet growing business requirements and make use of the latest technologies available at that time. The project consisted of the following streams:

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