daffodil

Developing a custom performance management system (E-PMS) for Chennai Petroleum Corporation Limited

Customer	Country	Industry
Chennai Petroleum Corporation Limited	India	Oil & Energy

About The Client

Chennai Petroleum Corporation Limited (CPCL) is one of the leading group companies of Indian Oil Corporation with a 10.5 million metric tons per annum (MMTPA) refinery designed to produce fuels and lube base stock. It is a publicly listed refining company and is one of the largest refineries, producing an array of value-added petroleum products.

CPCL has pioneered initiatives in several areas such as process optimization, technology absorption, wasteland reclamation, energy conservation, and environment management. Its first-of-it's-kind achievements include installing a Zero Discharge Plant, implementing a Sulpher Recovery Plant, implementing a Biturex unit, iterating process unit for total energy conservation, etc.

Technology Stack

Java | ANGULAR

Business Situation

CPCL had an e-Performance Management System in place. However, the features and workflows of the existing processes weren't mapped with the functionality of the PMS system. This was impacting the efficiency and timelines of their annual work plans, appraisal systems, performance plans, etc.

To work around these limitations, CPCL wanted to re-engineer the E-PMS with the latest technologies and design elements while retaining the existing E-PMS features, functionalities, and workflows. With this new system in place, CPCL aimed at reducing the person-hours spent on completing the performance management activities in the software by the end-users (which includes employees, HRs, and other roles administrating the performance cycle).

Hence, CPCL was on the look around for a technology partner who could help them to design, develop, deploy, and maintain an E-PMS on a relatively new technology stack. One of the key requirements included migrating data from the existing solution to the software while maintaining data integrity and security.

CPCL chose Daffodil software due to its extensive experience in custom software development and expertise in developing similar solutions for public sector companies.

Team Daffodil, as a technology partner to CPCL, was expected to deliver the following:

- ✅ Develop an application that can create a stronger alignment of individual's performance with organizational goals and achieve a higher degree of transparency, uniformity, and process efficiency.

- ✅ Reengineer the PMS with the latest technologies and frameworks. The application was required to have an intuitive interface to enable rapid adoption.

- ✅ Propose a mechanism to extract, transform, and load data from the existing system to the newer one and migrate the data.

- ✅ Ensure security and right ownership of features to all the roles in the application.

The Solution

Team Daffodil developed a SaaS-based performance management system mirroring the features, functionalities, and workflows of the existing system of CPCL to manage the annual performance appraisals and other associated activities.

The PMS has 5 key roles to manage the performance cycle: Appraise, Appraiser, Reviewer, Countersigning Officer, and Facilitator/Administrator. The new PMS is upgraded with the following functionalities:

UI/UX:
The application is renewed with a user-rich, interactive interface with the usage of tables, real-time dashboards, graph charts, notifications, fonts, and other visual elements.

Technology:
Using Java and Angular as core technologies, a mobile and web-based system was developed for CPCL that is capable of handling 300+ concurrent users at any point in time. New software architecture was designed to address the future scalability requirements in terms of both application infrastructure (to add new modules) and backend (to add more users).

Security:
The new PMS solution is hosted on the cloud. The application follows MSP compliance and is protected against security issues such as DDoS, malware injection, insider, or any other attack. Along with regression testing, the application has been thoroughly tested for performance, endurance, and load.

Data Migration:

Team Daffodil defined a mechanism to extract, transform, and load data to the new system. A new employee master database was created with all required fields (including employee profile, functional attributes for appraisal-related activities, and other details needed for the application to function and deliver the required experience).

The new PMS enables the CPCL team to manage performance at different levels (performance planning, performance period, and final appraisal & feedback). Also, the system records employees' KPIs or KRAs, and competencies (skills and abilities) which help the HR team manage the performance management cycle with ease.

For the CPCL team to get started with the application, onsite training was provided by team Daffodil. Moreover, fixes and issue resolution is provided for any functional and technical deformity in the application (as a part of annual maintenance).

The Impact

The PMS has automated and streamlined the performance management at CPCL. The modernized platform provides data-driven insights into employee performance, such as growth patterns, areas of improvement, and identifying high performers for recognition & development. With the new, technology-centric solution, the CPCL team can process performance appraisals, faster. The employees can easily access their performance metrics- goals, feedback, and evaluations which has increased the transparency in the appraisal cycle, and boosted engagement & retention.

Services Used

Software Product Engineering

Client Speak

"Though we identified Daffodil Software as our vendor to develop our Performance Management System through an open tendering process, we are really happy to have them on board. The work is progressing in a better-than-expected phase especially considering our rigid timelines. I believe the team will deliver sooner than expected. Keep raising the standards team."

Ganesh R
Senior Officer - Personnel