INTRODUCTION

Travancore Cements Ltd (TCL) started manufacture of grey cement in 1949. In 1959 TCL started production of White Portland Cement also. But since 1974 TCL is manufacturing only good quality White Cement. Even today it is a reputed brand in the Kerala market.

During the last 60 years of its existence, TCL has diversified its activities to related areas by adding ''Vembanad' brand ordinary Portland cement, 'Super Shelcem' brand Cement Paint and recently they included wall putty too into their product range. Thus TCL has a track record of effecting change in its operations and products.

EXISTING IT INFRASTRUCURE

1. Hardware include around 40 PCs mostly Intel dual core based. The networking is not structured.

2. TCL has certain "islands" of systems running at its plant in Kottayam. These legacy systems are FoxPro based. They are meant for Billing, Inventory and Accounts with limited or little integrations.

3. Lack of proper integration across systems result in
   a) delay of regular reports,
   b) no timely information flow to the top management,
   c) delay in corrective action whenever needed,
   d) customer dissatisfaction.

4. An ERP solution expected to have the capability to bring employees from various departments in TCL as one team, sharing the same data set and communicating effortlessly

THE ERP DEPLOYMENT PROJECT

1. TCL has conceptualized the project to deploy an ERP (Enterprise Resource Planning) system to automate and integrate its processes end to end with built in best practices.

2. The key outcome of this ERP implementation project are linked to improved business efficiency, visibility & compliance

3. **Business efficiency**

    a) Proactive and tighter adherence to production plans in order to achieve operational consistency, optimum quantity and costs.
    b) Maintain highest product quality
    c) Customer satisfaction and attracting more customers by offering compelling price and incentives
    d) Delivery (Quantity, Quality and Time)

4. **Visibility & Compliance**

    a) Efficiency must be visible so as to help management to make evidence based timely decision. Creating suitable Key Performance Indicators (KPI)
    b) Implement stringent standards of Accreditation bodies, Regulatory bodies and Statutory bodies
    c) Adherence to standard government norms in all transactions.

OBJECTIVES

1. STANDARDIZATION - The standardization of similar process of different departments, documents etc.

2. PROVEN SOLUTION
    a) There are many references of successful deployment of ERP solutions in manufacturing segment. Hence the solution offered must be one already implemented in process manufacturing segment for SMEs.

b) INTEGRATION PROCESS - The ERP solution must provide an IT platform to integrate seamlessly all process of TCL so that data duplication doesn't happen. It is expected to bring employees from various departments in TCL as one team, sharing the same data set and communicating effortlessly

c) BEST PRACTICES - The ERP is expected to have built in best practices in the areas of Production Accounting, Procurement, Inventory, Marketing and Sales.

d) NON-FUNCTIONAL REQUIREMENTS - Nonfunctional requirements express the properties including security, reliability, robustness. These also must be considered along with critical functional requirements.

3. FUTURE REQUIREMENTS OF EVOLVING ORGANIZATION - Keeping in view of the changing situations, like availability of Raw Materials, change in Production process, diversification of Products etc., the ERP solution also must be flexible enough to adapt to such situations.

SCOPE OF ERP PROJECT DEPLOYMENT

1. SCOPE OF ERP SOLUTION

The scope and characteristics of the ERP solution to be proposed by the bidders to meet the requirements of TCL, will cover the flowing aspects.

    a) Process coverage of functional units of TCL
    b) User base of TCL
    c) Solution capabilities and features
    d) Solution Integration
    e) Future expansion

2. **SCOPE OF WORK FOR THE IMPLEMENATION**

   a) Selection of proper platform for ERP implementation
   b) Sizing the hardware and system software for the ERP system and installing ERP
   c) Configure/Customize ERP as per TCL requirements
   d) Integration of ERP with biometric systems after independently proving faultless, purposeful functioning of biometric system.
   e) Data migration of useful data from the existing applications
   f) Training the users and facilitating the adoption of ERP system
   g) Providing application support for one year from completing the system.

3. **THE FUNCTIONAL UNITS OF TCL**

   The process of the following functional units of TCL will be part of the ERP project with current level of operations.

   a) HR and Payroll
   b) Accounts and Finance
   c) Production and Quality Control
   d) Plant Maintenance
   e) Projects
   f) Procurement and Material Management
   g) Marketing and Sales

4. **ON PERMISES OR CLOUD COMPUTING**

   On premises computing is the method of installing the ERP software and data base on company's own server and accessing the same over a local area network.

   Cloud computing is the method of storing and processing data using remote servers hosted on Internet. This data and programs are accessible via the Internet at any time and from anywhere. Normally, monthly user subscription payments are associated to this model.

5. THE USER BASE

a) The proposed ERP solution are expected to cover the following user base of TCL
b) The ERP should address the process or the operations carried out by the users listed in the user base

Functions/Divisions of TCL	ERP Users	LA Users*	Total
Administration			
HR and Payroll			
Accounts and Finance			
Production & Quality Control			
Maintenance			
Projects			
Procurement and Material Management			
Marketing and Sales			

* Limited Access users

TRAINING

a) Training of all the users identified by TCL Management
b) Preparation of Training documents
c) Training of key executives for monitoring the performance and effective use of reports

SUPPORT SERVICES

a) Help desk support : Immediate telephonic response and support for usage related and other minor problems.
b) Dial –in support : For handling user mistakes and fixing minor bugs
c) On-site support : For crash recovery operations, performance tuning, bug fix etc.