

Graduation Project Proposal Form

1. **Project Information**

- **Project Title:** Digital transformation in Petro Power Refining Co
- **Course/Track:** Google Project Management & ERP
- **Team Members:** Eman Gomaa Mahmoud Mabrouk

2. **Project Overview**

- **Objective:**

Implementing an integrated ERP system to standardize and integrate business processes across departments and locations, improve collaboration among departments. Centralize and Unify data management, enhance visibility and give better insights into key business processes, for better resources management and decision-making to increase productivity and profitability.

- **Scope of Work:**

Planning and Preparation Define Project Scope , Key stakeholders, business requirements ,select and evaluate ERP system to meet requirements ,Define Project Timeline , Establish Milestones and deliverable & Set Budget.

Team Members selection in addition to analyzing current business processes, identify pain points.

Set Change Management plan to ease transition to the new system

Requirements Gathering and Analysis Collect business requirements through workshops or Online meetings with stakeholders and business process owners. Identify between current processes and ERP system capabilities.

Implementation and Testing System Design system and Modules configuration ,Plan data migration from Legacy system

Conduct system integration testing and user acceptance testing (SIT and UAT).

Training and Deployment Provide end users training on the new ERP system and start change management activities with users.

Deploy the ERP system to production

Provide post-implementation support, including issue resolution and system maintenance.

Project Closure and Evaluation

Submit Project documentation and Define lessons learned.

Expected Outcomes:

Standardized business processes, Resources management ,improve operational efficiency & supply chain management including procurement and inventory management.

Better Financial reporting, production and maintenance cost reduction & Real-time visibility into operations, enabling better decision-making and increased sales which will lead to business growth, & increased profitability

Problem Statement

Petro Power refining company, is facing significant challenges in managing its operations, supply chain, and financials due to the lack of an integrated ERP system as The current systems used for finance, inventory management, maintenance and Production are causing inefficiencies and data discrepancies which leads to delays in decision-making and Inefficient resource management

3. **Proposed Solution**

Implementing Best practice Integrated ERP system which require the following :-

- **Technologies Used:**

- **Cloud-based Platform:** Amazon Web Services (AWS) or Microsoft Azure
- **Supported Operating Systems : Windows Server 2016,**
- **Database Management :** SAP HANA ,Oracle or Microsoft SQL Server
- **Programming Languages:** The system will be developed using a combination of programming languages, including Java, Python, and JavaScript.

- **System Architecture**

- **Presentation Layer:** A web-based user interface that provides access to the system's functionality and data.
- **Application Layer:** A set of business logic components that manage data processing, validation, and workflow automation.
- **Data Access Layer:** A layer that interacts with the database management system to retrieve and update data.
- **Database Layer:** A relational database management system that stores and manages data.
- **Security Layer:** A layer that ensures data security, authentication, and authorization using encryption, firewalls, and access controls.

4. **Resources Needed • Hardware/Software:**

Servers: A minimum of two servers are required (Additional servers may be needed for load balancing, disaster recovery, and testing).

Data Migration Tools: Data migration tools, such as SAP Data Services or Oracle Data Integrator
Network, PCs, Printers and Scanners

5. **Approval**

- **Instructor/Advisor:**

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- **Signature:**

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