

# **VENDOR PORTAL**

## **Project Overview:**

The Vendor Management Portal is an end-to-end platform designed to streamline vendor onboarding, document verification, purchase requests, invoice tracking, and communication between vendors and the internal procurement team.

The system integrates multiple backend services using WSDL-based SOAP APIs as well as .NET Core REST APIs to fetch and update vendor-related data in real time.

The portal ensures centralized control, transparency, and automation throughout the vendor lifecycle, reducing manual intervention and improving operational efficiency.

## **Role & Responsibility:**

### **Application Development**

- Developed responsive UI pages using **ASP.NET MVC, HTML5, Bootstrap, and jQuery** for vendor registration, login, dashboard, invoice management, and document upload.
- Implemented client-side validations and dynamic functionality using JavaScript/jQuery.

### **Backend Development**

- Built and enhanced controller actions, business logic classes, and service layers using **C#**.
- Designed the full data flow from MVC to database using repository patterns and service-oriented architecture.

### **Integration (SOAP + REST)**

- Consumed **WSDL/SOAP services** for vendor authentication, vendor master data, purchase order details, and invoice status.
- Developed **.NET Core REST APIs** to integrate with internal systems for real-time data sync.
- Implemented mapping and transformation logic for SOAP-to-REST and REST-to-SOAP communication.

### **Database Management**

- Designed SQL tables, stored procedures, functions, and optimized queries for high-performance data processing.
- Handled bulk upload and update operations for vendor and purchase order data.

### **Security & Authentication**

- Implemented **role-based authentication** to control access for Vendors, Admins, and Procurement Officers.
- Secured SOAP and REST API communication with token & API key validation.

## **Error Logging, Testing & Deployment**

- Added structured logging for exceptions, API failures, and vendor activity logs.
- Performed functional testing, integration testing, and API testing.
- Managed deployment on **IIS** and supported environment configuration.

## **Key Objective:**

- Simplify and automate the entire vendor lifecycle process.
- Provide real-time visibility into purchase orders, approvals, and invoice status.
- Reduce manual paperwork, phone calls, and email follow-ups between vendor and procurement teams.
- Ensure secure and reliable data exchange between portal and internal ERP systems.
- Improve transparency, compliance, and record tracking.

## **Core Features**

### **◊ Vendor Registration & Login**

- Online vendor onboarding with document upload and validation.
- Secure login using SOAP-based authentication service.

### **◊ Vendor Dashboard**

- Overview of purchase orders, pending actions, new requests, and payment updates.

### **◊ Purchase Order Management**

- Vendors can view POs received via SOAP/REST API integration.
- Ability to acknowledge or reject POs based on business rules.

### **◊ Invoice Submission & Tracking**

- Online invoice upload with validation rules.
- Real-time tracking of invoice approval and payment release status.

### **◊ Communication & Notifications**

- Email/SMS alerts for PO release, invoice approval, expiry of documents, etc.

#### ◊ **Document Management**

- Upload and manage compliance documents like GST, PAN, bank details, etc.

#### ◊ **Admin & Procurement Panel**

- Manage vendors, verify documents, update PO status, and track invoices.

#### ◊ **Integration Layer**

- SOAP services consumed for vendor master data and POs.
- .NET Core APIs for syncing vendor records with internal ERP.

## **Technology Stack**

- **Frontend:** html5, css3, Bootstrap, jQuery/Javascript
- **Backend:** .NET CORE API, C#, ASP.NET MVC
- **Database:** SQL SERVER
- **SERVICE:** SOAP Service

## **Results:**

- Reduced vendor onboarding time by **60–70%** due to complete digitalization of the process.
- Achieved seamless real-time sync with ERP systems using SOAP & REST integrations.
- Improved vendor satisfaction with transparent invoice status tracking.
- Decreased manual workload for procurement team by automating routine processes.
- Increased compliance and accuracy through centralized data validation and record keeping.
- Enabled a scalable architecture capable of supporting thousands of vendor transactions monthly.