

Project Catalogue and Development Proposal

Prepared for: **Client**

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1. Project Overview

This document outlines the proposed system development for the client, which involves two primary projects:

- A **Web Scraping and Communication Automation System** to collect manufacturer details across India and initiate automated communication.
- A **Quote Management and Competitive Comparison Portal** for manufacturers and the client to manage and review purchase quotations.

Both systems are designed to improve communication efficiency, enhance data-driven decision-making, and streamline the vendor interaction process.

2. Project 1: Web Scraping and WhatsApp Automation System

2.1. Objective

To design and implement a comprehensive web-based solution that automatically collects data of manufacturers across India and initiates automated WhatsApp messages expressing buying intent.

2.2. Scope of Work

1. Develop a backend system to scrape manufacturer data from multiple online directories (e.g., IndiaMART, TradeIndia, Justdial, etc.).
2. Extract and structure key data fields such as:

- Company name and contact person
 - Location and product category
 - Contact number, email, and website (if available)
3. Store all scraped data in a centralized database.
 4. Integrate a WhatsApp messaging API (such as Twilio or Meta Business API) to send automated introductory or inquiry messages.
 5. Provide a simple dashboard for:
 - Viewing scraped data
 - Tracking communication status
 - Filtering by category or region
 6. Ensure compliance with platform data policies and ethical web scraping practices.

2.3. Deliverables

- Fully functional web scraping engine
- Database of manufacturer information
- WhatsApp automation integration
- Web-based dashboard for management
- Documentation for deployment and usage

3. Project 2: Manufacturer Quote and Comparison Portal

3.1. Objective

To develop a portal where manufacturers can submit product quotations and where the client can compare prices, product details, and competitiveness in a structured interface.

3.2. Scope of Work

1. Build a dual-access web portal:
 - **Manufacturer Interface:** Allows vendors to log in, upload quotations, and update details.
 - **Client Interface:** Allows viewing, filtering, and comparing multiple quotes.
2. Implement user authentication and access control for secure data management.
3. Develop backend APIs to manage and fetch quotation data.
4. Enable sorting and comparison by:
 - Product name and category
 - Quoted price
 - Vendor rating or history
5. Provide an admin control panel for overall monitoring and management.
6. Integrate analytics to display key performance indicators such as:
 - Lowest and highest quoted prices
 - Average cost per product
 - Number of active manufacturers

3.3. Deliverables

- Fully responsive quote management portal
- Separate manufacturer and client login systems
- Data comparison and analytics dashboard
- API documentation and deployment instructions

4. Maintenance, Support, and Upgradation Services

4.1. Objective

To ensure smooth operation, reliability, and continued improvement of the developed systems.

4.2. Scope of Work

- Regular system monitoring and bug fixing
- Database optimization and performance tuning
- Adding new web scraping sources as required
- Security updates and patching
- Implementation of new features or modules based on client feedback

4.3. Support Options

Ongoing support can be offered under a monthly or yearly agreement that includes maintenance, upgrades, and feature enhancements.

5. Conclusion

This proposal provides a complete technical outline for the development and long-term operation of a manufacturer data and quotation management system. The solution aims to enhance procurement efficiency, vendor competitiveness, and data transparency for the client.

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