REQUEST FOR PROPOSAL

An Artificial Intelligence Solution

Predictive and Prescriptive Maintenance of Manufacturing Unit

RFP No: FP779889
Issued by: Insights & Data Analytics Team
Issued on: March 23, 2022
Response Due by April 22, 2022

Insights & Data Analytics

██████ ██████ Singapore Pte. Ltd.,

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Singapore 199555

Contents

1. Introduction

The purpose of this Request for Proposal (RFP) is to notify experienced and qualified service providers that ██████████████ Pharmaceuticals, Inc. ████ is looking for an Artificial Intelligence Solution to predict equipment degradation and upcoming breakdowns. As a result, we are looking for a supplier who can deploy an AI application and assist us in our efforts to become more efficient and sustainable.

2. Company Profile

██████████████ Pharmaceuticals, Inc. ████ is a global group of companies with a varied range of cultures and societies. ██ is one of the largest pharmaceutical firms in the world, and the largest private one, as of 2022. It is headquartered in ███████ and employs over 47,700 people around the world with 146 affiliates. There are five research and development facilities and 20 manufacturing units spread over 13 countries. Since Albert ████████ founded the company in Ingelheim am Rhein, Germany, almost 130 years ago, our focus has been on long-term performance rather than short-term profits.

BIPI is committed to promoting high-quality innovative therapies, maintaining clinical excellence, improving patient health outcomes in medical fields of interest and providing preventive animal healthcare.

Visit https://www.██████████████.com/about-us to learn more about us.

3. Project Goal

The goal of this project is to develop an independent, verifiable application that can predict equipment degradation and send early warning notifications and diagnose errors days, weeks, or months before they fail. This project's success will be measured in terms of reduced downtime, increased dependability, improved performance, and lower manual operations and maintenance expenses.

4. Project Overview

This solution will have a single repository for data collected from numerous sources around the world. The response must include a description of the Data Lake platform and tools that will be utilized to construct this one repository of data, as well as backup and recovery procedures for this Data Lake. Data sources will be provided to Suppliers, and Suppliers will be responsible for collecting data on equipment from multiple production sites and moving it to this Data Lake. The supplier is also in charge of cleaning and preparing the data that will be used in the AI solution. The supplier will construct a dashboard to indicate equipment health and frequent inspections, which will be delivered to management in BI Tools for better comprehension.

5. Work Requirments

5.1 Description of Work

The Supplier will be responsible for developing and maintaining the project task plan and schedule, as well as the methodology and tools that the proposer has successfully used in previous engagements. The Supplier will be responsible for providing frequent status reports, as well as communicating the risks and necessary remedial steps. The Supplier must present a standard architecture framework as well as configuration details for this repository's construction.This data flow process should be automated by the supplier. Before giving the data to the AI solution, as well as before delivering the reports to management, a data quality check must be performed.Project releases are scheduled every two weeks in sprints. Suppliers should have a project management tool to track progress and show where project deliverables are in the process. Supplier is required to provide post-implementation support for this application.
The following is a list of data sources that need to be integrated.

Data System	Database Type
BIPS.net - ERP System	Microsoft SQL Server 2008
ITAM - IT Asset Management	Oracle 12C
MSI - Manufacturing System Information	SAP HANA

The following project staffing is planned to be maintained:

1. In Agile, the Scrum Manager must be a Certified Scrum Master.
2. Project Managers must have at least 8 years of project management experience.
3. A Certified Professional in Data Science is required for a Data Scientist.
4. Data Architects must have at least 8 years of experience building Datalake Architecture.
5. Data Analyst with at least 6 years of expertise analyzing data and creating interactive visualizations is required.
6. A Data Engineer must be a Big Data Certified Professional.

5.2 Deliverables

➢ Low-Level Design Document
➢ Source to Target Mapping Document
➢ Data Lake Modeling Document
➢ Data Modeling Document
➢ Documentation of Minutes of Meeting for each call
➢ Design Document for Visualization and Reporting
➢ Go-live before end of project date (2nd June2023)
➢ IT Support maintenance after Go-Live

5.3 Timeline

We intend to start our Data Science Project as soon as possible, on 4[th]June 2022 and our anticipated project end date is 2[nd]June2023. If the supplier fails to deliver this AI solution by the deadline, there will be a consequence.For appropriate reasons, there may be certain flexibility provided to extend the delivery date at no additional cost to this project.

5.4 Budget

BIPI allocates CAD 100,000 to complete this project. Before it can be funded, the supplier must create a cost allocation plan and have it approved. Funding is not available for the areas that is listed under Unallowed expenses below.

5.4.1 Allowed Expenses

> - Billing for resources
> - Cost of data acquisition and integration
> - Data management and Analytics Software
> - Project Supplies
> - Essential Travels
> - Other authorized expenses by BIPI

5.4.2 Unallowed Expenses

> - Administrative expenses
> - Personal protective equipment
> - Food
> - Expert dues
> - Indirect costs

6. AdministrativeRequirements

Principal Point of Contact (If you have any questions, please contact the people listed below)	**Primary:** ▮▮▮▮▮▮▮▮ Asst. Director Insights & Data Analytics ▮▮▮▮▮▮▮▮▮, Singapore +65 – 95883345 sowmya.g@▮▮▮▮▮▮▮.sg **Secondary:** Suganya Arumugam Manickam Director Insights & Data Analytics ▮▮▮▮▮▮▮▮, Singapore +65 – 96542350 suganya.am@▮▮▮▮▮▮▮.sg
Vendor Profile Information (Include this information in email body in the same order)	Company Name Principal officers Contact Information Mailing address
Submitting a Proposal	Responses should be sent to rfp.admin@▮▮▮▮▮▮ .com with following subject line: "RFP #FP779889 - Artificial Intelligence Solution" in PDF format
Contents of the Proposal	- Background and Qualifications of the Company - Executive Summary, Personnel Resume, and Contact Information - Accomplishments, Awards, and Recognition - Three client references with name, address, and contact details are required. - Technical Approach to Project - Technical Team details with their credentials - Project Plan - Price Quotation - Additional details as needed

7. Selection Process

Our goal is to evaluate each application fairly and without bias, using the stringent selection procedure outlined below.

Our experts will assess proposals that are complete and responsive. Two reviewers with the same competence will look at each submission. Based on both the proposal and the presentation, the reviewers will provide a score and comments for each evaluation criteria (see Table 1). Proposals sent through other channels will not be considered. Proposals sent after the deadline (see Table 2) will not be accepted.

Table 1: Key Dates for this RFP

RFP Posting Date	23-Mar-22
Deadline for sending Queries	20-Apr-22
Date for RFP Response Submission	22-Apr-22
Date of announcement of shortlisted RFP responses	29-Apr-22
Date of the Proposer's Presentation	2-May-22
Date of Result Announcement	9-May-22

Table 2: Matrix for determining a potential supplier

Evaluation Matrix for Selection	Weight	Score	Notes
Experience & Recognition	10%		
Understanding of Scope	20%		
Project Methodology	15%		
Technical Team Structure	20%		
Completeness of RFP	10%		
Timing Schedule	10%		
Cost	15%		
Total Score	100%		