

3J Enterprises

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Project Summary

This document outlines the terms and conditions for a project aimed at assisting Wide World Importers (WWI) in effectively monitoring and maintaining their refrigerated vehicles. The project involves the provision of services, which include the installation of IoT devices, the establishment of an alert dashboard, and comprehensive training for leadership and drivers on the new monitoring system. Additionally, 3J Enterprises will provide ongoing maintenance support for the refrigerated trucks to ensure optimal performance and reliability.

The client for this project is Wide World Importers, a company dedicated to enhancing its operational efficiency and vehicle maintenance capabilities. The contractor responsible for delivering these services is 3J Enterprises, a firm specializing in IoT solutions and fleet management systems.

This document serves as a contract establishing the expectations, deliverables, and responsibilities of both parties for the duration of the project.

Project Objectives

Every year, \$1 trillion are lost to faulty refrigeration transit worldwide. Within Wide World Importers, \$10 million was lost in 2023 during transport of the Chilly Chocolate product. Despite this, Chilly Chocolates accounted for 14% of WWI revenue in 2023, and chilled edible novelty products accounted for the fastest growing consumer food product. 3J Enterprises' refrigeration monitoring solution comprehensively diminishes these losses by offering extensive IoT monitoring, complex machine learning and survival analysis applications to predict and replace faulty parts before they fail, on-the-road trailer maintenance and replacement, access to our extensive national network of high quality service providers, and a custom notification system tailored directly to your needs. This proven solution is ready to launch within eight weeks. By increasing reliability of refrigerated transport, WWI will be able to increase their chilled edible novelty product offerings and expand in this highly lucrative market.

Scope of Work

Upon contract agreement, 3J Enterprises' on-site technicians install and troubleshoot IoT devices in existing WWI truck trailers, and backend system setup will be conducted remotely. Notification system customization is planned, and 3J's engineering team takes care of the rest, with the ability to be updated if things change. In phase 2, 3J's training team will conduct management training on location at WWI headquarters or where most convenient. Phase 3 will have driver onboarding training that is conducted remotely with online support staff to assist and answer any questions. Phase 4 will conclude testing, and the system will be turned online and be ready to use by WWI.

Project Tasks

Phase 1 (Weeks 1-3): Initial Setup

During initial setup, 3J Enterprises' technicians will begin installing IoT temperature sensors in the trailers of WWI's refrigerated shipping fleet. At the same time, 3J's data engineering team will set up the databases for WWI in the backend systems and begin entering WWI's fleet into the databases.

Initial setup will also include gathering requirements on how management wishes to be alerted in the event of a failure. This will include who wishes to be contacted, by what method do they wish to be contacted, and in what circumstances they should be contacted.

Phase 2 (Weeks 4-5): Management Onboarding

During Phase 2, 3J Enterprises' training team will arrive on site and begin onboarding and training management on the new systems. The training team will teach the management how the temperature monitoring system works, what happens in the event of a failure, and how the truck maintenance scheduling system operates. These courses will be offered in person at the WWI headquarters in San Francisco, and an additional virtual training program will be offered for those unable to attend.

Phase 2 will also see the 3J Enterprises' installation team completing installation of the IoT temperature monitoring devices in the WWI fleet.

Phase 3 (Weeks 6-7): Driver Onboarding and Device Testing

Phase 3 has the 3J training team beginning onboarding for the drivers. This onboarding is different to the management training, focusing more on the operation of the devices and what the driver's responsibilities will be in the event of a system failure. This training will be offered on-site at WWI headquarters, but as it is unreasonable to expect the entire team of drivers to be able to attend in person, 3J additionally offers virtual training courses. The virtual training courses are offered both in virtual synchronous meetings where the drivers can ask questions to the training team, and in virtual asynchronous training sessions where drivers can learn about the systems at their own pace and schedule.

Additionally, Phase 3 will see the 3J Technology team fully assessing the IoT temperature sensors. This testing is to ensure that the devices are both producing accurate results and that those results are being logged in the backend database systems.

Phase 4 (Week 8): Launch

Phase 4 will see the entire system being turned online, and assessed once again to ensure that there are no failures. Assuming there are no failures, the keys to the system will be handed over to the WWI team, and operations can proceed as normal with the 3J Temperature Monitoring Solution protecting the refrigerated goods.

Location of Work:

The work will take place onsite at WWI headquarters in San Francisco, CA, and offsite at 3J headquarters in Portland, OR.

Project Schedule:

Project schedule consists of an eight-week timeframe, starting from the day the contract is signed through the completion of the project.

Deliverables:

The major deliverables of the project include: IoT temperature sensors in all WWI refrigerated trailers, robust temperature monitoring and alert system in the event of a refrigeration failure, preventative refrigeration component maintenance based on advanced machine learning models, refrigeration truck repair, and temporary trailer replacements.

Payment Terms:

The initial payment of \$400,000 is required within 30 days following the execution of the agreement. Subsequently, monthly fees of \$90,000 will be due on the 15th of each month, covering services for two hundred truck trailers, and will continue to be invoiced until the contract is formally canceled. Timely payment is essential to maintain the terms and conditions outlined in the agreement. This pricing structure is scalable, allowing adjustments based on the evolving needs of Wide World Importers.

Project Completion:

The project will be completed when the system is fully operational. This status is confirmed by the system going online, and the functionality testing returns zero errors. The testing standards for the IoT temperature sensors are as follows: 1) temperature logged by the sensor is accurate to the actual temperature; 2) IoT sensors will send an alert if the temperature crosses a predetermined threshold; 3) IoT devices are communicating with the backend systems correctly, and correct & accurate data is being streamed by the device; and 4) in the event of a failure, alerts will be sent out to the correct parties in the correct contact methods specified by the company. All testing will be done by 3J employees with our suite of backend testing technologies and automated tests.

Project Requirements:

The contractor or supplier must utilize specific software and processes to effectively complete the project. The project requires the use of an SQL Server, with appropriate access permissions to manage and manipulate the database.

Additionally, Power BI proficiency is required to access dashboards for data visualization and reporting. Relevant certifications, such as Microsoft SQL Server Certification and Power BI Certification, are necessary to ensure the provider has the requisite knowledge and skills. If the project involves overseeing sensitive or classified data, the contractor or supplier must also possess the appropriate security clearances to ensure secure management of information.

Dependencies:

The successful implementation of the refrigeration monitoring project for Wide World Importers (WWI) relies on several key dependencies. The scheduling of training sessions for both management and drivers is contingent upon the availability of WWI personnel to participate. Moreover, the project is dependent on successful installation and rigorous testing of the IoT devices and backend systems. Compliance with relevant regulations regarding data security and vehicle maintenance standards must be addressed throughout the project.

Constraints:

Several constraints will guide the execution of the refrigeration monitoring project, shaping its scope and timeline. The availability of personnel for training and ongoing support is a critical factor that may hinder the execution of planned sessions. Regulatory compliance must be observed, ensuring adherence to data handling and transportation safety regulations, which could impose additional requirements or limitations. Lastly, the project must navigate the challenges of change management; any alterations in project scope or requirements during implementation may result in delays or increased costs, emphasizing the need for careful planning and client engagement throughout the process.