Statement of Work

Soren's Project

1. PROJECT OVERVIEW

Move a customer from Oracle to SAP

2. SCOPE OF WORK

This Statement of Work outlines the deliverables and services to be provided for the Soren's Project project. It includes detailed requirements, implementation tasks, acceptance criteria, timeline, and costs.

3. REQUIREMENTS

Requirement 1: Warranty Claims Processing

The system must support the entire warranty claims process, from initial claim submission by Field Service Technicians to final approval and financial reporting. Technicians should be able to submit claims including customer information, product details, problem description, root cause analysis, parts used, and labor hours. The system should support a review and approval process for claims exceeding a specified threshold (e.g., $500). Integration with inventory management is required to track parts usage. The system should generate financial reports based on warranty claims data, categorized by product line, failure type, and component. The system should also maintain a complete history of all warranty claims, including status, approvals, and associated documentation.

Requirement 2: Warranty Performance Reporting

The system must generate various reports related to warranty performance, including warranty costs, extended warranty profitability, and failure analysis. These reports should be customizable by product line, warranty type, and other relevant criteria. The system should provide data visualization capabilities to identify trends and patterns in warranty claims. Reports should include metrics such as failure rates, top failure modes, and mean time to failure. The system should also facilitate the integration of warranty data with manufacturing data for comprehensive analysis.

Requirement 3: System Integration with other Business Systems

The new system must integrate with other relevant business systems, such as ERP, CRM, and Finance systems. This integration should enable seamless data exchange between systems and avoid manual data entry. The system should support real-time updates to inventory levels, customer information, and financial records. The integration should be robust and reliable to ensure data consistency and accuracy across all systems. The system should also adhere to industry best practices for system integration.

Requirement 4: Extended Warranty Sales Management

The target system must support the sale and management of extended warranties. This includes allowing sales representatives to present and document extended warranty options during initial product sales and for post-purchase sales. The system must integrate with VertexCore ERP to verify product eligibility for extended warranties. It should facilitate the completion and processing of extended warranty applications, generate invoices for extended warranties in VertexCore ERP, and track extended warranty sales information. The system should automate the process of verifying product eligibility, generating invoices, and updating relevant records, replacing the manual process involving "Extended Warranty Application Form" and "Extended Warranty Tracking.xlsx". Reporting functionality on extended warranty sales and profitability is also required.

Requirement 5: Recall and Service Bulletin Management

The target system must support the management of product recalls and service bulletins. This includes identifying the need for a recall or service bulletin based on warranty claim patterns, documenting the issue and corrective action, coordinating with Product Engineering, drafting the notice, and obtaining approval from the Director of Operations. The system should facilitate the extraction of affected customer lists from VertexCore ERP, notification of customers, scheduling of preventive service visits, and tracking of completion status. This functionality should replace the manual spreadsheet "Recall Tracking.xlsx" and provide reporting and analysis capabilities related to recalls and service bulletins.

Requirement 6: Integration with CustomerConnect CRM

The target system must integrate with the CustomerConnect CRM system to access customer history and information. This integration is essential for assessing customer history during goodwill repair requests. The system should be able to retrieve relevant customer data from CustomerConnect CRM, such as past purchases, warranty claims, and service interactions, to inform decision-making regarding goodwill repairs.

Requirement 7: Warranty Cost Analysis and ROI Calculation

The system must provide comprehensive warranty cost tracking and analysis capabilities. It should capture all cost dimensions, including parts, labor, shipping, and administrative overhead. These costs should be allocable to specific products, manufacturing lots, or even production shifts to facilitate root cause analysis of quality issues. The system must also calculate the ROI of warranty programs, including extended warranties, by tracking revenue against claims costs. Furthermore, it should support the implementation of custom Key Performance Indicators (KPIs) to correlate warranty satisfaction with customer retention and lifetime value, enabling a more complete understanding of the financial impact of warranty programs.

Requirement 8: Streamlined Warranty Claims Processing

The system must streamline the warranty claims process for the service team. This includes providing mobile access for technicians to instantly verify warranty coverage at the customer site, document issues with photos and notes, and process claims on the spot. The system should automate the approval workflow based on configurable business rules, with escalation paths for exceptions. Integration with inventory management is required for efficient parts ordering for warranty repairs. The system must track the status of open warranty claims, providing visibility to all stakeholders, especially for repairs requiring multiple visits or parts orders. This streamlined process should significantly reduce manual effort and improve service efficiency.

Requirement 9: Real-time Data Visibility and Reporting

The system must provide near real-time data visibility and reporting capabilities, leveraging in-memory database technology. This real-time access to data will enable proactive identification of emerging issues and faster decision-making. Dashboards and reports should reflect current data, allowing stakeholders to monitor warranty performance and identify trends as they develop. This is crucial for timely intervention and preventing widespread quality problems. The system should be able to handle large datasets and still provide real-time analytics.

Requirement 10: Warranty Parts Management

The system must manage warranty parts, including inventory tracking, purchase requisitions, and order tracking. This includes checking parts availability, reserving parts for work orders, and generating purchase requisitions when parts are out of stock. The system should provide notifications for low stock levels and track the status of open orders. Integration with the purchasing system is required to streamline the procurement process. The system should also support expedited parts requests and provide updates to customers regarding parts availability.

Requirement 11: Data Migration from Legacy Systems

The system must facilitate the migration of existing warranty data from the legacy systems, including VertexCore ERP, Excel spreadsheets, CustomerConnect CRM, QualityTrack, and ServicePro. This includes extracting data from various sources, transforming it into a compatible format, and loading it into the new system. Data integrity must be maintained throughout the migration process. A comprehensive data validation plan should be implemented to ensure the accuracy and completeness of the migrated data. The migration process should minimize disruption to existing business operations.

Requirement 12: RMA Process Automation

The target system must automate the Return Material Authorization (RMA) process. This includes generating unique RMA numbers, creating and managing RMA records, facilitating communication between Customer Service Representatives (CSRs), the Receiving Department, and Quality Control. The system should allow CSRs to initiate an RMA request, verify warranty coverage, assign an RMA number, and automatically generate and send RMA forms with shipping instructions to the customer. Upon receipt of the returned product, the Receiving Department should be able to update the RMA record with the receipt date and transfer the product to Quality Control. Quality Control should then be able to document evaluation findings, authorize replacement or repair for valid warranty claims, and generate quotes for non-warranty repairs. All updates and actions within the RMA process should be tracked and logged within the system, eliminating the need for manual spreadsheets like "RMA Tracking.xlsx". The system should also provide reporting capabilities on RMA metrics.

Requirement 13: Goodwill Repair Management

The target system must provide functionality to manage goodwill repairs. Service Managers should be able to review out-of-warranty repair requests, assess customer history, product age, and the nature of the failure, and document their decision with justification within the system. The system should allow for specifying the percentage of coverage for approved goodwill repairs (e.g., 50%, 100%). This functionality should replace the manual spreadsheet "Goodwill Repairs.xlsx" and provide reporting and tracking capabilities for goodwill repair approvals and associated costs. Integration with CustomerConnect CRM for accessing customer history is also required.

Requirement 14: Integration with VertexCore ERP

The target system must seamlessly integrate with the existing VertexCore ERP system. This integration is crucial for retrieving customer information, product details, warranty eligibility, and generating invoices. Data exchange between the two systems should be automated and reliable to ensure data consistency and accuracy. Specific integration points include verifying product eligibility for extended warranties, generating invoices for extended warranties, and extracting customer lists for recalls and service bulletins.

Requirement 15: Warranty Period and Terms Tracking

The system must accurately track warranty periods and terms for all product lines within a single, integrated system. This includes supporting different warranty structures for precision machinery (tiered warranties with optional extended coverage up to 5 years), industrial pumps (24-month base warranty with varying terms based on operating conditions), and automation components (18-month warranties with varying service level agreements). The system should manage multiple overlapping warranties (e.g., base + extended) and clearly indicate coverage under each. It should also allow for rule-based determination of warranty validity based on factors such as product type, customer, and installation date. This centralized tracking will eliminate the current fragmented approach using disparate systems and spreadsheets, providing a single source of truth for warranty information.

Requirement 16: Enhanced Warranty Reporting and Analytics

The system must provide enhanced reporting and analytics capabilities for warranty data. This includes standard reports on metrics such as claim frequency, average cost per claim, and time-to-resolution. The system should also support customizable dashboards, tailored to different stakeholders (executives, product engineers, etc.), combining warranty data with quality management and financial data. These dashboards should provide near real-time visibility into warranty performance, leveraging in-memory database technology. Furthermore, the system should support trend analysis and predictive analytics to identify emerging quality issues before they escalate into widespread problems. The required reports should include failure rates by product, component, manufacturing batch, manufacturing line, and shift.

Requirement 17: System Integration with Existing Systems

The new SAP S/4HANA system must integrate seamlessly with existing systems, including sales, service, inventory, manufacturing, and finance modules within SAP. For any external systems that need to remain in place, APIs must be developed for data exchange. This integration is crucial for ensuring data consistency and avoiding data silos. During the implementation process, historical warranty data from the legacy system must be migrated to the new system to maintain continuity in reporting and ensure ongoing warranty coverage for existing customers.

Requirement 18: Mobile Access for Technicians

The system must provide mobile access for service technicians, enabling them to perform key warranty-related tasks in the field. This includes verifying warranty coverage, documenting issues with photos and notes, and processing claims directly from the customer site. The mobile interface should be user-friendly and intuitive, even for technicians who are not particularly tech-savvy. This mobile access will significantly improve service efficiency and reduce the time required to resolve warranty claims.

Requirement 19: Data Migration from Legacy System

The implementation must include a comprehensive data migration process to transfer historical warranty data from the legacy system to the new SAP S/4HANA system. This migration should ensure data integrity and completeness, preserving all relevant historical warranty information. The migrated data should be readily accessible for reporting and analysis, enabling continuity in tracking warranty performance and maintaining accurate records of existing customer warranties. This is crucial for providing seamless warranty coverage and avoiding disruptions during the transition.

Requirement 20: API for External System Integration

The system must provide APIs (Application Programming Interfaces) to facilitate data exchange with external systems that are not part of the SAP S/4HANA landscape. These APIs should allow for secure and reliable data transfer between the warranty management system and external systems, ensuring that all relevant warranty information is accessible and up-to-date. The APIs should support both real-time and batch data exchange, and should be well-documented to facilitate integration efforts. This requirement ensures that the warranty management system can interact with any necessary legacy systems or third-party applications.

Requirement 21: Comprehensive Training Program

A comprehensive training program must be provided to all users of the warranty management system. This program should include role-based training tailored to the specific needs of different user groups, such as service technicians, customer service representatives, and management. The training should cover all aspects of the system, from basic navigation to advanced features. Detailed documentation and ongoing support should also be provided to ensure users can effectively utilize the system. A "super user" program should be established to provide advanced training to selected team members who can then provide day-to-day support to their colleagues.

Requirement 22: Integration with SAP S/4HANA Modules

The warranty management system must be fully integrated with existing SAP S/4HANA modules, including Sales, Service, Inventory, Manufacturing, and Finance. This integration should enable seamless data flow between these modules, eliminating manual data entry and ensuring data consistency across the organization. For example, when a product is sold, the warranty information should automatically be registered in the warranty management system. When a warranty claim is processed, the relevant inventory and financial transactions should be automatically updated. This integration is crucial for real-time visibility into warranty costs, claims processing, and overall warranty performance.

Requirement 23: Historical Warranty Data Migration

The implementation must include a process for migrating historical warranty data from existing systems into the new SAP S/4HANA warranty management system. This migration should ensure data integrity and completeness, preserving all relevant historical warranty information, including warranty claims, repairs, and customer interactions. The migrated data should be validated to ensure accuracy and consistency. This historical data is essential for maintaining continuity in reporting, analyzing trends, and honoring existing warranty obligations to customers.

Requirement 24: Phased Implementation Approach

The implementation of the warranty management component should follow a phased approach. The first phase should focus on establishing the core warranty terms and validation processes. The second phase should build out the claims processing workflows. The final phase should implement the advanced analytics and reporting capabilities. This phased approach allows for iterative development, testing, and user feedback, minimizing risks and ensuring a smooth transition to the new system.

Requirement 25: Warranty Coverage Verification

The system must provide a mechanism to verify warranty coverage based on product, purchase date, installation environment (for Industrial Pumps), and any extended warranty purchased. This functionality should be accessible by both Customer Service Representatives and Field Service Technicians. The system should be able to determine the applicable warranty period based on product line and specific product details. For Industrial Pumps, the system must consider the installation environment (normal, corrosive, high-temperature) to determine coverage. The system should also handle cases where the standard warranty has expired but an extended warranty is in place. Finally, the system should provide a clear indication of the warranty status (active, expired, or other relevant status).

Implementation Tasks:

- Define warranty rules and parameters (40 hours)
- Configure warranty material master data (24 hours)
- Develop warranty check custom function (80 hours)
- Test warranty check scenarios (40 hours)
- Integrate warranty check in service transactions (32 hours)

Acceptance Criteria:

- Given a customer has purchased an Industrial Pump with a 2-year standard warranty
And the pump is installed in a normal environment
When the customer requests warranty coverage information
Then the sy...

- Given a customer has purchased an Industrial Pump with a 2-year standard warranty
And the pump was installed in a normal environment
And the standard warranty period has expired
When the customer requ...

- Given a customer has purchased an Industrial Pump with a 2-year standard warranty
And the customer has also purchased a 3-year extended warranty
And the pump is installed in a corrosive environment
An...

- Given a customer has purchased an Industrial Pump with a 2-year standard warranty
And the pump is installed in a high-temperature environment which is outside the valid installation parameters
When th...

- Given a customer has purchased a product that does not have any warranty information in the system
When the customer requests warranty coverage information
Then the system should indicate that no warr...

Requirement 26: Return Material Authorization (RMA) Process

The system must manage the Return Material Authorization (RMA) process, including generating RMA numbers, tracking returned products, and managing the evaluation process. This includes verifying warranty coverage, assigning RMA numbers, providing shipping instructions to customers, and tracking the status of returned products. The system should integrate with the Quality Control process to document evaluation findings and determine the validity of warranty claims. The system should maintain a complete history of all RMAs, including customer information, product details, reason for return, and evaluation results.

Requirement 27: Warranty Registration Management

The system must manage warranty registrations, including capturing customer and product information, extended warranty details, and supporting documentation. This includes validating product serial numbers against shipping records and providing confirmation to the customer. The system should allow for various submission methods (email, fax, mail) for the registration form. Data captured should include customer details, product details (including model and serial number), purchase date, and any extended warranty information. The system should generate a unique registration identifier and store a copy of the registration form. Finally, the system should automate the confirmation email to the customer upon successful registration.

Implementation Tasks:

- Create Warranty Registration custom object (8 hours)
- Implement serial number validation integration (24 hours)
- Build multi-channel registration submission support (32 hours)
- Set up automated registration confirmation emails (8 hours)
- Test warranty registration functionality (16 hours)

Acceptance Criteria:

- Given a customer has a product that requires warranty registration
When the customer submits the registration form with valid product and customer details
Then the system should create a new warranty ...

- Given a customer submits a warranty registration form
When the system checks the product serial number against the shipping records
Then the system should confirm the serial number is valid
And allow ...

- Given a customer submits a warranty registration form
When the system checks the product serial number against the shipping records
And the serial number is not found
Then the system should reject the...

- Given a customer needs to submit a warranty registration
When the customer submits the registration form by email, fax, or mail
Then the system should accept the registration through any of these chan...

- Given a customer has purchased an extended warranty for their product
When the customer submits the warranty registration form
Then the system should capture the extended warranty details
And store th...

4. TIMELINE AND MILESTONES

Project Start: 4/15/2025
Estimated Completion: 7/14/2025

Key Milestones:
• Requirements Finalization: 4/29/2025
• Development Phase: 5/30/2025
• Testing and QA: 6/29/2025
• Final Delivery: 7/14/2025

5. COSTS AND PAYMENT

Item	Amount
Total Estimated Hours	304 hours
Hourly Rate	$150/hour
Total Estimated Cost	**$45,600**