SA&D – PHASE 1

Field	Value
Consulting Team	Orion Consulting Group
Project Title	SCI Service & Inventory Management System - Phases 1 & 2 Requirements
Client	Systems Consulting, Inc. (SCI)
Date	2025-09-07
Prepared For	SCI Leadership
Prepared By	Orion Consulting Group (Charan Kumar Nemalipuri, Goutham Karri, Lourdu Bala Showry Kata, Subhashchandra Poleboina)
Document Purpose	Make the business case, define As-Is, identify improvements, and list System Requirements.

SCI's Most Pressing Problems:

- No formal tracking of customer requests; technicians rely on 'pings' and memory, so tasks get forgotten or delayed.
- Long/variable response times create customer inconvenience and increase SCI's costs.
- Inventory control is minimalist FIFO with no formal records, only periodic counts for accounting.
- Risk of over/under-stocking due to rapid tech/price changes; excess inventory can 'pull the company down'.
- Lack of integrated linkage between field work performed and inventory used; after-the-fact reconciliation is manual.
- RMA/returns tracking with vendors is manual, limited visibility of status, costs, and associated customer jobs.
- Customer communication (status, scheduling, completion) is ad hoc; no centralized system of record.
- Limited management reporting for workload, SLAs, utilization, margin by job, and inventory turnover (case overall).

As-Is Overview

- Customers contact SCI with issues, upgrades, or equipment requests. Office staff logs basic details informally; technicians receive 'pings' to do the work.
- Technicians self-manage tasks from pings remembering what to do and when; there is no formal queue, schedule, or audit trail.
- Service Request Form exists in the case material, but actual intake/assignment is inconsistently captured in practice.
- System Specifications Sheet captures onsite details/specs; after completing work the employee notes hardware used so accounting can update inventory and bill the customer.
- Inventory follows a minimalist FIFO approach; no perpetual records are kept; items are counted only periodically.

- RMA Form is used to return/repair items with a vendor; tracking is manual and not tied to customer jobs or inventory valuation.

System Requirements

ID	Requirement (what is required)	Justification (why, include case page)	Data Requested (what is needed)
1	Create a central Service Request (SR) record for every customer contact	No formal means of tracking/recording requests; tasks forgotten.	SR_ID, timestamp, customer, contact info, channel, summary, priority, location
2	Standardize SR fields using the existing Service Request Form	Form specified in case; normalize intake.	Request type, description, due date, attachments, special notes
3	Assign each SR to a technician and track status through lifecycle	Currently each employee 'remembers' tasks; no queue/assignments.	Assigned tech, status, timestamps, SLA target, notes
4	Provide a technician work queue with due dates and reminders	Requests are sometimes forgotten or put off.	SR_ID, due date, reminder flags, escalation rules
5	Log all customer communications and status updates on the SR	Ad-hoc communication; need single source of truth.	Comm log (who/when/channel), message text, next action
6	Calendar/scheduling support for on-site work with travel time	Techs self-manage; need structured scheduling to reduce delays.	Tech calendar, travel time estimates, appointment windows
7	Capture labor start/stop times on site	System Specifications Sheet captures work details.	Labor time entries, job notes, approvals
8	Maintain perpetual inventory with item master and on-hand by location	Minimalist FIFO; no formal records; only periodic counts.	Item master (SKU, desc, cost), stock by bin/location, reorder points

9	Record parts/consumables used on each job and decrement inventory	After job, employee records hardware used for accounting and inventory.	Job parts list (item, qty, lot/serial), auto-decrement logic
10	Support FIFO costing and lot/serial tracking where applicable	Company uses minimalist FIFO approach.	Receipts with cost/lot, pick lists honoring FIFO, serials
11	Generate restock suggestions based on usage and reorder points	Must have supplies on hand, but avoid large, risky inventory.	Daily usage rates, lead times, min/max levels
12	Perform and reconcile cycle counts; adjust on-hand with audit trail	Currently only periodic counts; need accuracy.	Count sheets, variances, approval, reason codes
13	Create and track RMA requests with vendors end-to-end	RMA form/process exists but tracking is manual.	RMA_ID, vendor, item/serial, reason, ship/receive dates, status
14	Link RMAs to related SR/job and inventory adjustments	Need visibility of costs/disposition connected to jobs.	SR_ID/Job_ID reference, credit/replace flags, GL impact
15	Capture vendor credits/replacements and update inventory/costs	Inventory/cost control problem; avoid write-offs.	Credit amount, replacement SKU, cost basis, disposition
16	Produce a billable work order/invoice draft from the completed SR	Employee records hardware used so accounting can bill customer.	Labor hours/rates, parts (item, qty, cost), markups, taxes
17	Send invoice/quote to accounting for approval and posting	Accounting depends on accurate post-job info.	Invoice header, line items, customer terms, GL accounts
18	Provide dashboards for open SRs, overdue items,	Managers need visibility; current ad-hoc tracking.	Counts by status, age, technician utilization

	and technician load		
19	Report inventory turnover, stockouts, and aging	Avoid large/slow-moving inventory; rapid tech changes.	Receipts/issues history, current on-hand, aging buckets
20	Track SLA metrics: response time, time-to-complete, first-time-fix	Customer inconvenience and cost due to delays.	Timestamps, SLA targets, exception logs
21	Provide RMA cycle-time and recovery value reporting	Need visibility into returns efficiency and credits.	RMA timestamps, credit $, replacement lead time
22	Maintain a clean customer master linked to SRs and billing	Customer information central to all forms/interactions.	Customer ID, contacts, sites, contracts, tax terms
23	Support document attachments on SRs (photos, quotes, vendor emails)	Forms include notes; richer evidence improves accuracy.	File store, metadata, versioning
24	Provide role-based access (office staff vs. technicians vs. accounting)	Different users handle intake, field work, inventory, billing (case overall).	Roles, permissions matrix, audit logs
25	Offer mobile access for technicians to update jobs and parts used	Technicians work in the field; need timely updates.	Mobile UI, offline caching, sync of time/parts/notes
26	Require completion of the System Specifications Sheet fields before closure	Case emphasizes the sheet for specs and parts used.	Mandatory field checks, validation rules
27	Create standardized reasons/status codes for SRs and RMAs	Consistent tracking and analysis.	Code sets for statuses, reasons, dispositions

28	Escalate overdue SRs and low inventory situations	Requests are forgotten; inventory risk harms service.	Escalation tiers, notifications, recipients
29	Maintain vendor master and contact preferences for RMAs	RMA coordination requires vendor details.	Vendor ID, contact, RMA instructions, SLAs
30	Capture equipment serials at install and in inventory	RMA and warranty require serial traceability.	Serial registry linked to SRs, items, customers
31	Maintain an audit trail on SR changes, inventory moves, and RMAs	To control costs and prevent lost requests/parts.	Old/new values, who/when, reason
32	Log periodic inventory valuations and adjustments	Rapid price changes imply cost control needs.	Cost layers, adjustments, approval chain
33	Send automatic confirmations and status updates to customers	Improve communication; reduce inconvenience.	Templates, email/SMS, opt-in flags
34	Provide customer-facing summary on completion (work + parts)	Supports accurate billing and transparency.	Job summary PDF, signature capture, acceptance time

Recommendations:

- Adopt a lightweight service management system that unifies Intake → Scheduling → Field updates → Inventory → RMA → Billing.
- Use the existing case forms as blueprints for screen design and validations (SR, System Specifications, RMA).
- Introduce perpetual inventory with cycle counting and FIFO costing; enforce parts capture at job closure.
- Stand up simple dashboards for SR backlog, technician utilization, inventory health, and RMA cycle-time.
- Enable mobile updates by technicians to reduce lag and forgotten tasks.

Team and their Contributions:

Team Member	Contribution
Lourdu Bala Showry Kata	Led requirements definition, drafted intake/scheduling requirements and supported in RMA requirements
Goutham Karri	Did inventory/RMA requirements and reporting.
Charan Kumar Nemalipuri	Wrote As-Is/pressing problems sections
Subhashchandra Poleboina	Coordinated recommendations and prepared the whole document.