Business Requirements Document (BRD)

Integrated Production and Service Management Platform.

August 2024

Version: 1.0 (Anonymized Version)

***This document is an anonymized representation of the real project; to comply with non-disclosure policies, all real names, identifiers, and sensitive data have been changed.**

Business Requirements Document

Project Name	Integrated Production and Service Management Platform
Version	1.0 (Anonymized Sample)
Author	Sonal M. Khobragade
Date	October 2024
Status	Approved

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1.Executive Summary

This Document is about the Integrated Production and Service Management Platform is a strategic initiative to transform …….. existing manual, email-driven order handling into a modern, centralized digital system. By automating order intake, workflow assignment, file management, real-time status tracking, and customer communications, the platform will deliver a 60% reduction in processing time, a 40% improvement in SLA compliance, and a 25% increase in customer satisfaction. This project safeguards major client relationships representing 80% of revenue, drives annual savings of over $400,000, and provides a scalable foundation for 40% business growth without proportional staffing increases.

2.Project Background / Overview

……..specializes in embroidery digitizing, vector graphics, and custom embroidered patches, serving two major US-based clients that account for approximately 80% of annual revenue. Today's order management relies entirely on unstructured emails and spreadsheets, resulting in errors, delayed deliveries, inconsistent quality, and lack of visibility for both internal teams and customers. Competitive pressures and the risk of SLA violations threaten client retention and revenue stability. The new platform will automate and standardize key processes, ensuring accuracy, transparency, and scalability.

3.Business Objectives

1. Reduce Order Processing Time
    - From 4 hours to 90 minutes (60% reduction) within six months of go-live.
2. Improve SLA Compliance
    - Increase on-time delivery rate from 72% to 95% within six months.
3. Enhance First-Pass Quality
    - Raise first-pass yield from 78% to 96%, cutting rework by 75% within four months.
4. Boost Customer Satisfaction
    - Elevate average satisfaction from 7.2/10 to 9.0/10 within one year.
5. Enable Scalable Growth
    - Support a 40% increase in order volume without adding full-time staff within 12 months.
6. Achieve Financial ROI
    - Realize $400,000+ in annual operating savings and achieve payback within nine months.

4.Project Scope

4.1 In-Scope:

- Automated web-form order intake with data validation and file uploads
- End-to-end workflow engine for assignment, status tracking, and escalation
- Secure, versioned file management and cloud storage integration
- Role-based dashboards for operations, design, QA, and executives
- Automated communication engine for status updates, SLA alerts, and customer notifications
- Integrations with email systems, accounting software, and CRM
- Comprehensive audit trail and reporting capabilities

4.2 Out-of-Scope:

- Legacy data migration beyond active projects
- Mobile-only native app (web-responsive only)
- Advanced AI-driven design tools (Phase 2+)
- Third-party marketplace integrations

5. Stakeholders

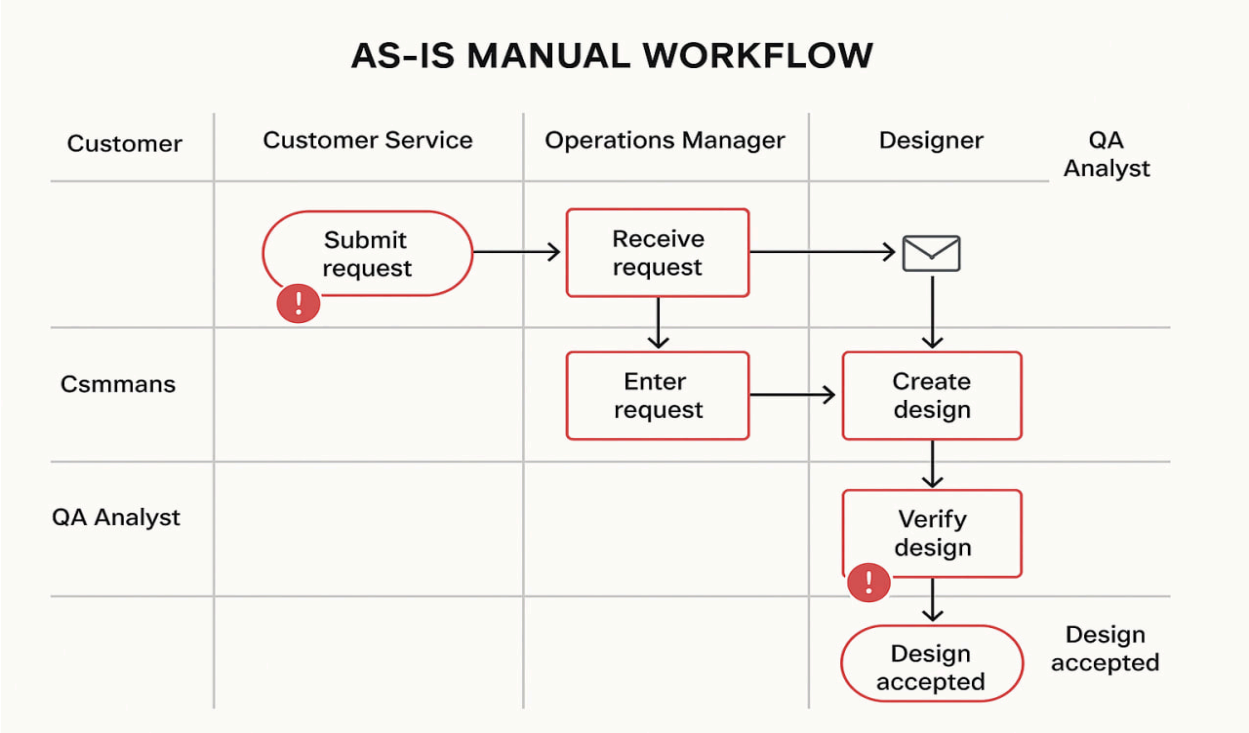
Executive Sponsor	Exec_01 (Redacted Sponsor Role)
Programme Manager	PM_Alpha (Redacted Programme Lead)
Product Owner	PO_Xen (Redacted Product Owner Role)
QA Analyst	QA_Tau (Redacted Quality Analyst)
Data Analyst	DA_Nebula (Redacted Data Specialist)
Business Analyst	Sonal M. Khobragade
Major Client Representatives	ClientA, ClientB (anonymized)

6. Business Requirements

ID	Requirement	Priority	Acceptance Criteria
BR-1	Automate order intake and validation	Must	100% of orders through system, <2% intake errors
BR-2	Real-time status visibility for all stakeholders	Must	All orders trackable end-to-end in dashboard
BR-3	Dynamic workflow assignment according to skill, workload, and SLA	Must	95% correct routing; <1hr assignment
BR-4	Automated notifications for status, delays, and completions	Must	95% on-time comms, <30min customer replies
BR-5	Centralized file storage/version control with permissions	Must	All files retrievable/auditable; history intact
BR-6	Capture dashboards/KPIs on TAT, SLA, quality, revenue	Should	Metrics display live, support strategic review
BR-7	Robust security and data access controls	Must	Zero critical breaches, full audit trails
BR-8	User feedback and issue reporting interface	Should	≥90% feedback captured, issues triaged in 1d
BR-9	Integration: accounting, email, cloud storage	Must	
BR-10	Support for core roles (admin, operator, designer, QA, client view)	Must	RBAC works, test cases pass for all role views

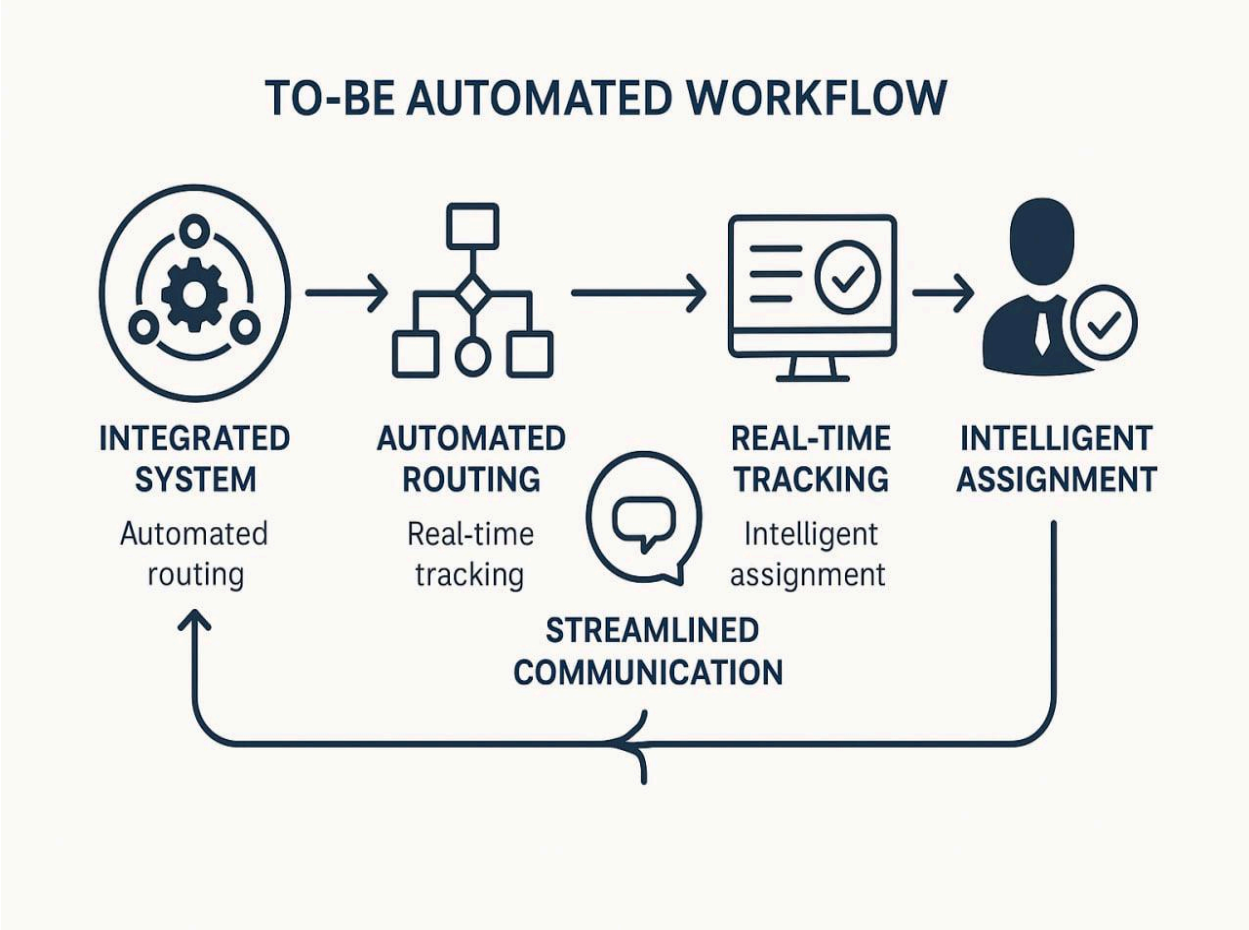
7. Process Flow Diagrams.

7.1 As-Is Process: The current workflow relies entirely on manual email coordination and spreadsheet tracking, causing 4+ hour processing delays and 8% error rates. Orders flow through disconnected steps requiring constant human intervention, from email receipt through manual data entry, file organization, work assignment, and customer communication.



7.2 TO-BE Process: The automated platform transforms operations through intelligent workflow orchestration, reducing processing time to 90 minutes with real-time tracking and proactive notifications.

Digital order intake feeds directly into automated assignment algorithms that route work based on skills and capacity, while integrated quality workflows ensure consistent standards



8. Functional Requirements:

8.1 MVP (Phase 1) – Critical Path

- User registration/login, password reset, RBAC
- Customer management and order creation (web form)
- File uploading with format/size checks
- Dashboard: order status, service type, SLA visualization
- Workflow: auto-assignment, manual override, in-platform comms
- Delivery module: packaging, email trigger, status update
- Audit logs
- API: order, file, and status endpoints (REST, JSON)
- Standard reports and export

8.2 Later Phases (Phase 2+)

- Advanced self-service client portal
- Cost tracking and quoting engine
- Vendor/PO/GRN modules
- Predictive workflow, smart quality, and analytics

9. Non-Functional Requirements

- Performance: Page loads <3s, API <2s; File uploads <2min for 50MB
- Security: AES-256 encryption, 2FA for admins, full audit trail
- Uptime: 99.5% business hours, not less than 99% overall
- Scalability: Handles triple volume (users, files, orders)
- Accessibility: WCAG 2.1 AA for public/user-facing screens
- Documentation: System and user manuals, data dictionary

10.Assumptions.

10.1 Technical Assumptions:

- Existing IT infrastructure has adequate capacity to support the new platform

- Current network connectivity and bandwidth are sufficient for expected usage

- Integration APIs for accounting and email systems are available and documented Priority Medium

- Development team has necessary skills and experience with chosen technology stack

- Test and production environments can be provisioned within project timeline

10.2 Business Assumptions:

- Key stakeholders will be available for requirements validation and testing
- Users will participate in training programs and adopt new processes
- Current business processes can be optimized without fundamental changes
- Major clients will support transition to new system and processes
- Budget allocation will remain stable throughout project duration

10.3 Organizational Assumptions:

- Change management support will be provided by leadership
- Business operations can continue during system implementation
- Data quality in current systems is sufficient for migration
- Security policies and compliance requirements will not change significantly
- User feedback will be incorporated through iterative development approach

11. Project Timeline and Deliverables

11.1 High-Level Project Phases.

Phase 1 : Analysis and Design (8 weeks)

- Requirements gathering and validation
- Process design and workflow documentation
- Technical architecture and system design
- User interface mockups and wireframes
- Project planning and resource allocation

Phase 2 : Development and Integration (12 weeks)

- Core system development and coding
- Database design and implementation Integration with existing systems
- User interface development and testing
- Security implementation and validation

Phase 3 : Testing and Quality Assurance (6 weeks)

- System testing and bug fixes
- User acceptance testing with stakeholders
- Performance and security testing

- Training material development Deployment preparation and planning

Phase 4 : Deployment and Training (2 weeks)

- Production environment setup
- System deployment and configuration
- User training and knowledge transfer
- Go-live support and monitoring Post-implementation review and optimization

11.2 Critical Dependencies.

Internal Dependencies:

- Stakeholder availability for requirements sessions (November 2024)
- IT infrastructure assessment and preparation (December 2024)
- User availability for testing and training (February-March 2025)
- Management approval for process changes Ongoing)

External Dependencies:

- Accounting system API documentation (November 2024)
- Email system configuration access (December 2024)
- Cloud storage setup and security approval (January 2025)

- Third-party testing tool procurement (January 2025)

11.3 Risk Mitigation Timeline.

High-Risk Items:

- Integration Complexity: Early proof-of-concept development (December 2024)
- User Adoption: Continuous stakeholder engagement and training (Ongoing)
- Performance Requirements: Load testing and optimization February 2025
- Data Migration: Parallel system operation period (March 2025)

12 .Project Timeline and Deliverables.

Phase	Timeframe	Key Deliverables

Discovery & Design	Oct – Nov 2024	- Project Charter (Project_Charter.pdf)

- Stakeholder workshops
- Current state process maps (AS-IS_Process_BPMN.xml/.png)
- High-level wireframes (Order_Intake.png, Dashboard_Main.png) |
  | Development & Integration | Dec 2024 – Feb 2025 | - Functional Requirements Document (FRD_Integrated_Service_Platform.pdf)
- Automated workflow engine
- Database schema and DDL (MySQL_DDL_v1.sql, DataModel_V1_ERD.png)
- API layer and integration modules |
  | Testing & User Acceptance | Mar 2025 | - System testing reports
- UAT plan & test cases (UAT_TestCases.xlsx)
- User training materials |
  | Deployment & Hypercare | Apr 2025 | - Production deployment
- Cut-over plan and support
- Go-live monitoring dashboards (BI_Mockups.png) |
  | Post-Launch Review & Optimization | May – Jun 2025 | - Post-implementation review
- Continuous improvement backlog (JIRA_UserStories.csv)
- Final lessons learned report |

13. Glossary of Terms.

Term	Definition
Dashboard	Visual interface that displays key performance indicators, metrics, and data summaries in real-time
Digital Order Intake	Electronic process for receiving and recording customer service requests through structured web forms
API Application Programming Interface	Set of protocols and tools for building software applications that allows different software systems to communicate with each other
File Version Control	System for managing changes to files over time, maintaining history and enabling rollback to previous versions
KPI Key Performance Indicator	Quantifiable measure used to evaluate success in meeting business objectives
Order Lifecycle	Complete process flow from initial customer request through final service delivery and closure
Real-time Tracking	Immediate visibility into order status and progress without delays or manual update
REST API	Representational State Transfer - architectural style for web services enabling system integration
SLA (Service Level Agreement)	Contract defining expected service standards, response times, and performance metrics
SMTP	Simple Mail Transfer Protocol
TLS	Transport Layer Security
UX	User Experience
XML	Extensible Markup Language