

# Business Requirements Document (BRD)

**Project Title:**

Traveler Workflow & Documentation Enhancement (TWD – Traveler Workflow Documentation)

**Prepared For:**

Stakeholders & Management

**Prepared By:**

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**Date:**

09/17/2025

## 1. Executive Summary

The **Traveler Workflow & Documentation Enhancement (TWD)** project aims to replace and improve the current process of Traveler creation in the EVO Application (legacy 1990s system). This document captures business requirements identified after review of the **SharePoint reference link**, **PCB images provided by customers**, **customer instructions**, and **revision versions**, as well as meetings with **Abhishek** and **Kris**.

The project will ensure standardization of traveler templates, define collected data points, improve revision tracking, and explore digital traveler solutions. The system supports organizational goals of **traceability, efficiency, compliance, and scalability**.

## 2. Project Overview

Today, the Traveler is created in the **EVO Application**. Data is entered manually, and multiple stakeholders (Sales, Purchasing, Engineering, Assembly, Quality, and Shipping) rely on it for order execution. However, the process lacks proper **traceability, template standardization, BOM integration, and barcode-based tracking**.

The project seeks to document **exact data points collected, how they are used**, and to define clear templates and process sequences to enable replication and digital transition.

## 3. Business Objectives

- Standardize Traveler creation with **2–3 optimized templates**.
- Document and use **all required data points** from customer input, PO, BOM, and revisions.
- Integrate **labor timing, coating process, and revision tracking**.
- Implement **barcode-based tracking** for parts, boards, and travelers.

- Ensure revision history and old traveler versions remain accessible.
- Enable preparation for a digital traveler system for future efficiency.

## 4. Scope

### In-Scope

- Traveler creation in EVO.
- Data point documentation (PCB details, BOM, instructions, revisions, job numbers, etc.).
- Traveler types: PCB, Parts, Assembly, Cable.
- Preparation checklist, kitting, packing slips.
- Color-coded order travelers and slip codes.
- Cable traveler real-time process definition.

### Out-of-Scope

- Replacement of EVO system (covered in future phases).
- Integration with ERP or CRM at this stage.

## 5. Stakeholders

- **Praful** – Traveler Creation & EVO Operations
- **Max** – Complex PCB Procurement & Oversight
- **Adam** – Engineering Guidance & Written Instructions
- **Abhishek** – Quality & Process Assurance
- **Kris** – Assembly & Testing Operations
- **Bruce** – Business Analysis

## 6. Current Challenges

- Legacy EVO system limits functionality.
- Manual entry increases risk of error.
- Inconsistent traveler templates.
- Limited visibility into revisions and history.
- Missing barcode tracking for real-time control.

## 7. Proposed Solution

- Define and collect **all required data points** systematically.
- Standardize traveler templates across order types.
- Implement barcode labels on Traveler and Board.
- Introduce **revision log fields & history**.
- Expand documentation (labor, coating, BOM, job numbers).
- Lay foundation for digital traveler migration.

## 8. Business Requirements

### Core Requirements

1. Collect and use **PCB details** (customer drawings, images, revision versions).
2. Capture **Purchase Order (PO)** data (customer, PO #, date, job #).
3. Integrate **BOM data** directly into traveler.
4. Document **labor timing per step**.
5. Track **coating process** (sent, received, inspected, tracking #).
6. Record **instructions**:
  - a. Typed (Praful)
  - b. Written (Engineers or Abhishek)
7. Implement **barcode tracking** (Traveler + Board).
8. Ensure **revision history logging**.
9. Maintain **templates** for PCB, Parts, Assembly, Cable.
10. Include **checklists** (PCB, parts, stencil, tools, glue).
11. Provide **packing slips** and enforce **kitting**.
12. Enforce **order color codes** (Premium, Standard, Class 3, Engineering).
13. Define **Cable Traveler real-time flow** with first article approval.

### 9. Non-Functional Requirements

- **Performance:** EVO traveler generation must not exceed 3 seconds.
- **Scalability:** Must handle 5,000+ active jobs.
- **Availability:** Target 99% uptime of EVO traveler module.
- **Security:** Travelers must be revision-locked and only editable by authorized users.
- **Compliance:** Must comply with audit logging and documentation retention.

### 10. User Roles & Permissions

- **Traveler Creator (Praful):** Enter top details, job #, typed instructions.
- **Quality (Abhishek):** Provide written instructions and updates.
- **Purchasing (Pratiksha, Bob, Max):** PCB/parts procurement entry.
- **Assembly (Kris):** Confirm assembly readiness, barcode scans, labor time logs.
- **Engineer (Adam):** Approve revisions, first article, and inspections.

### 11. Data & Integration Requirements

#### Data Points Collected in EVO Today:

- PO#, Customer Name, Job #
- Traveler Type (PCB, Parts, Assembly, Cable)
- BOM Details (materials, quantities, suppliers)
- PCB images, customer instructions, revision versions
- Sequences (steps: coating, assembly, inspection, shipping)

- Labor hours (per process)
- Coating details (sent, received, inspected)
- Packing slip info (ship-to, kitting confirmation)
- Barcode ID (Traveler + Board)
- Revision log (date, time, responsible person, details)

## How Data is Used:

- Generates Traveler pages in EVO.
- Feeds assembly steps and sequences.
- Creates job # linked to PO and BOM.
- Provides traceability through barcode scan.
- Produces packing slip at shipping stage.

## Integrations:

- Currently manual; future integration with ERP/CRM planned.

## 12. Process Flows & Use Cases

### Use Case – Traveler Creation:

1. Customer sends PO, images, instructions, and revisions.
2. Praful verifies PO and creates Traveler in EVO.
3. Templates selected (PCB/Parts/Assembly/Cable).
4. BOM data imported and signed.
5. Barcode generated and linked to Traveler & Board.
6. Assembly & Quality teams execute process steps.
7. Traveler revision history updated for all changes.
8. Packing slip generated for shipment.

## 13. Business Rules

- All travelers must have a **job#**.
- Travelers without a **revision log** are invalid.
- Premium orders must always use **red traveler**.
- 1st article (cable) must not proceed without **Quality approval**.

## 14. Acceptance Criteria

- Traveler includes **all defined data points**.
- Traveler can be generated from EVO template within **3 minutes**.
- Barcode is scannable and linked to correct traveler record.
- Revision log captures **all edits** with timestamp & user.

## 15. Glossary / Definitions

- **Traveler:** Document that accompanies a job through all stages.
- **EVO Application:** Legacy system currently used to generate Travelers.
- **Sequence:** The steps and processes followed in manufacturing (e.g., Coating, Assembly, Inspection).
- **BOM (Bill of Materials):** Complete list of parts/materials required.
- **Packing Slip:** Document included with shipment showing items and job #.
- **Kitting:** Process of preparing all components needed for assembly.
- **1st Article:** Initial build/sample of a cable or part for approval.
- **Color Codes:** Traveler identifiers based on order type (Red, Green, Orange).

## 16. Risks & Mitigations

- **Risk:** Incomplete data collection.
  - *Mitigation:* Checklist validation.
- **Risk:** Resistance to barcode adoption.
  - *Mitigation:* Training & pilot program.
- **Risk:** EVO limitations.
  - *Mitigation:* Document requirements for future system migration.

## 17. Dependencies

- Customer provides **PCB images, instructions, and revisions.**
- EVO system remains operational during requirement implementation.
- SharePoint link documents remain accessible.

## 18. Success Metrics

- 100% of travelers contain complete BOM and revision log.
- Barcode scan traceability for 95%+ of jobs.
- Reduced manual re-entry by 50%.
- Consistent traveler template usage across departments.

## 19. Reporting & Dashboards

- Traveler completion reports.
- Revision history logs.
- Labor timing and efficiency dashboards.
- Coating process status tracking.

## 20. Change Management & Training Plan

- Conduct training for Traveler creation, barcode scanning, revision entry.
- Develop SOPs and checklists for all roles.
- Establish help desk support during transition.

## 21. Future Enhancements

- Full migration from **EVO Application** to a modern ERP/MES traveler system.
- Cloud-based traveler system with real-time tracking and digital sign-off.
- Predictive analytics for resource planning and labor efficiency.

## 22. Sign-Off

This BRD has been reviewed and agreed upon by stakeholders.

Praful - Praful Date: 9/24/25

Max - Max Date: 9/24/25

Kris - Kris Date: 9/24/25

Abhishek - Abhishek Date: 09/24/25

Adam - Adam Date: 9/24/25

Bruce - Bruce Date: 9/24/25