BUSINESS REQUIREMENTS DOCUMENT (BRD)

AI-Based Document Analysis & Reporting System

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1. Document Overview

Project Name: AI-Based Document Analysis & Reporting System
Document Type: BRD + PRD
Project Type: Independent Project Execution Case Study
Prepared By: Sugnik Tarafder
Role: Project Coordinator / Associate Project Manager

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2. Business Background

Organizations frequently handle large volumes of business documents such as financial reports, operational summaries, invoices, compliance files, and internal reports. Manual analysis of these documents leads to delays, inconsistencies, and higher operational effort.

This project aims to address this challenge by introducing an AI-based system that automates document analysis, extracts key insights, identifies risks, and generates structured daily and weekly reports for business users and decision-makers.

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3. Business Objectives

- Reduce time spent on manual document analysis
- Improve accuracy and consistency of reporting
- Enable faster access to insights and risks
- Support informed decision-making using AI-generated summaries
- Provide a scalable internal intelligence solution

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4. Stakeholders

Stakeholder	Description
Project Owner	Plans and executes the project
Business Users	Upload and review documents
Decision Makers	Consume reports and insights
QA / Validation	Validate output accuracy
AI System	Performs automated analysis

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5. Business Scope

In Scope

- Upload and processing of business documents
- AI-based analysis and summarization
- Risk and sentiment identification
- Daily and weekly report generation
- Visual dashboards and analytics
- Data export for reporting and audits

Out of Scope

- Custom AI model training
- Real-time enterprise integrations
- Mobile application development
- Role-based access control

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6. Business Success Metrics

- Reduction in manual review effort
- Accurate and consistent report generation
- Timely availability of daily and weekly reports
- Acceptance of reports during UAT

PRODUCT REQUIREMENTS DOCUMENT (PRD)

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7. Product Overview

The AI-Based Document Analysis & Reporting System is a web-based internal application that allows users to upload business documents and receive AI-powered insights, risk assessments, and executive-ready reports through an intuitive dashboard.

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8. User Personas

1. Business User

- Uploads documents
- Reviews summaries and insights

2. Decision Maker

- Reviews daily and weekly reports
- Focuses on risks and trends

3. System Administrator (Conceptual)

- Manages system settings
- Oversees data export and cleanup

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9. Functional Requirements

FR-01: Document Upload

- System shall allow users to upload multiple documents
- Supported formats: PDF, CSV, Excel, Text
- System shall validate file size and format

FR-02: Document Text Extraction

- System shall extract readable text from uploaded documents
- System shall handle extraction errors gracefully

- System shall support PDFs, spreadsheets, and text files

FR-03: AI-Based Analysis

- System shall analyze extracted text using AI
- System shall generate:
  - Summary
  - Key points
  - Risks
  - Opportunities
  - Sentiment
  - Confidence score
- System shall provide fallback analysis if AI is unavailable

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FR-04: Risk & Sentiment Classification

- System shall classify documents into risk levels (Low / Medium / High)
- System shall assign sentiment labels (Positive / Neutral / Negative)

FR-05: Daily Report Generation

- System shall generate a daily executive report
- Report shall include:
  - Document count
  - Total value
  - Risk alerts
  - Key insights
- Report shall be viewable within the application

FR-06: Weekly Report Generation

- System shall generate a weekly executive summary
- Report shall include trends, projections, and recommendations

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FR-07: Analytics Dashboard

- System shall display charts and visualizations
- Dashboards shall include:
  - Risk distribution

    - Sentiment analysis
    - Financial summaries
    - Category breakdowns

FR-08: Data Export

- System shall allow export of analysis results in CSV format
- System shall allow export of analysis data in JSON format

FR-09: Session Management

- System shall maintain session-level data for analyzed documents
- System shall allow clearing of session data

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10. Non-Functional Requirements

Performance

- System shall process documents within reasonable time limits
- System shall handle multiple document uploads per session

Usability

- UI shall be intuitive and dashboard-driven
- Reports shall be readable by non-technical users

Reliability

- System shall handle AI/API failures gracefully
- Fallback analysis shall ensure continuity

Security

- API keys shall be managed securely using environment variables
- Uploaded documents shall not be permanently stored

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11. Assumptions & Constraints

- System is intended for internal analysis and learning purposes
- AI accuracy depends on input document quality

- Internet connectivity is required for AI services

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12. Acceptance Criteria

- Documents upload successfully
- AI analysis completes without system crashes
- Daily and weekly reports generate correctly
- Risk and sentiment labels are visible
- Data export works as expected

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13. Traceability (High-Level)

Business Objective	Related Features
Automate analysis	FR-02, FR-03
Identify risks	FR-04
Executive reporting	FR-05, FR-06
Insights visualization	FR-07
Audit & records	FR-08

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14. Sign-Off

This document confirms agreement on the business and product requirements for the AI-Based Document Analysis & Reporting System.

Name	Role	Signature	Date
Sugnik Tarafder	Project Owner	Sugnik Tarafder	18th January, 2026