**Enterprise Procurement Management System**

**Definition of Done (DoD) – Enterprise Procurement Management System**

The **Definition of Done (**DoD) is a list of criteria that must be met in order for a product backlog item to be considered "done” and its ready for release.

The **Definition of Done (DoD)** is a set of criteria that must be met for a user story, task, or feature to be considered **completed and ready for release**. It ensures consistency, quality, and adherence to business requirements across the development lifecycle.

* Deliver high-quality, production-ready features
* Maintain alignment with business and user expectations
* Ensure code is tested, reviewed, and deployable
* Reduce technical debt and improve maintainability

**1. Produced Code for Presumed Functionalities**

* The development team has written and committed the necessary code for features like **Supplier Management, Purchase Order & Approval Workflow, Invoice Processing & Payment Tracking, and Reporting & Analytics**.
* All major business rules, workflows, and validations are implemented as per requirements.

**2. Assumptions of User Story Met**

* Each user story is implemented as per business expectations.
* Edge cases and exceptions (e.g., supplier re-verification, PO cancellation, invoice dispute resolution) have been considered.
* User roles (procurement managers, finance teams, vendors) interact as defined in workflows.

**3. Project Builds Without Errors**

* The application compiles successfully without errors or missing dependencies.
* Build scripts, pipelines, and CI/CD processes execute without failures.

**4. Unit Tests Written and Passing**

* Developers have written **unit tests** for core business logic (e.g., PO approval rules, invoice matching).
* Test coverage meets project guidelines (e.g., at least **80% coverage** for critical modules).
* All unit tests pass without failures before the feature is marked as complete.

**5. Project Deployed on the Test Environment Identical to Production**

* The feature is deployed in a **staging/test environment** that mirrors the production setup (same database, APIs, authentication methods).
* Performance, security, and integration testing are conducted on this environment.

**6. Tests on Devices/Browsers Listed in the Project Assumptions Passed**

* The system has been tested on all **required browsers (Chrome, Edge, Firefox) and devices (desktop, tablets, mobile screens)** to ensure compatibility.
* Procurement managers, finance teams, and suppliers can access the system without UI issues.

**7. Feature Ok-ed by UX Designer**

* The UX/UI team has reviewed the **supplier onboarding screens, PO workflow UI, invoice processing forms, and reporting dashboards** to ensure usability and adherence to design guidelines.
* Any UI improvements requested have been implemented before final approval.

**8. QA Performed & Issues Resolved**

* The **QA team** has tested the feature against **functional, integration, regression, and performance** test cases.
* Any critical/blocker issues have been resolved before deployment.

**9. Feature is Tested Against Acceptance Criteria**

* Each **user story's acceptance criteria** are met.
* For example:
  + A **supplier should receive a confirmation email** after registration.
  + A **purchase order should not proceed without manager approval** if it exceeds a certain threshold.
* Automated and manual acceptance tests are conducted.

**10. Feature Ok-ed by Product Owner**

* The **Product Owner (PO)** has reviewed and approved the feature based on business expectations.
* No further changes are required before moving to production.

**11. Refactoring Completed**

* Any **code improvements (performance optimization, redundant code removal)** have been done after implementation.
* Example: Optimizing database queries in invoice tracking to **reduce load time from 5s to 2s**.

**12. Any Configuration or Build Changes Documented**

* Changes to **APIs, database schema, environment variables, or deployment scripts** are documented.
* Example: If a new **currency conversion API** is added for international suppliers, its integration details are recorded.

**13. Documentation Updated**

* **User guides, API documentation, and process workflows** are updated.
* Example: The **procurement approval matrix** and new system behaviour are documented for finance teams.

**14. Peer Code Review Performed**

* Code has been reviewed by at least **one senior developer** before merging.
* Best practices, security, and scalability considerations are checked.
* Example: SQL queries in invoice reports are optimized after peer review to prevent slow performance.

**Product Vision**

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| **Scrum Project Name:** | **Enterprise Procurement Management System (EPMS)** | | |
| **Venue:** | FLEX, Chennai | | |
| **Date:13/03/2025** | **Start time:**  Mar 2025 | **End time:**  OCT 2025 | **Duration:**  8 Monts |
| **Client:** | COEPD, Hyderabad | | |
| **Stakeholder list:** | Business Owners / Executives | Procurement Department | Finance & Accounting Team |
| Product Owner | Scrum Master | Development Team |
| QA Team | IT & Infrastructure Team | Compliance & Legal Team |
| Vendors / Suppliers | End Users (Procurement Officers, Finance Managers, etc.) | |
| **Scrum Team** | | | |
| **Scrum Master:** | Mr. Naveen |  |  |
| **Product owner:** | Mr. Kumaran |  |  |
| **Scrum Developer 1:** | Mr. Vagai Selvan |  |  |
| **Scrum Developer 2:** | Mr. Kathir |  |  |
| **Scrum Developer 3:** | Mr. Mogan |  |  |
| **Scrum Developer 4:** | Ms. Roopashri |  |  |
| **Scrum Developer 5:** | Mr. Paranthaman |  |  |

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| **Vision** |
| The **Enterprise Procurement Management System (EPMS)** aims to **streamline and automate procurement workflows**, ensuring **efficiency, transparency, and compliance** across all purchasing activities. By leveraging **Agile and the SCRUM framework**, the system will deliver an intuitive, scalable, and secure platform for managing supplier interactions, purchase orders, approvals, invoices, Payments and reporting—empowering businesses to optimize procurement operations and reduce costs. |

**Target Group**

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| **Target Group** | **Description** |
| **Procurement Teams** | Manage supplier selection, purchase orders, and approvals. |
| **Finance Departments** | Oversee invoice processing, payments, and cost control. |
| **Department Heads & Approvers** | Approve purchase requests/Orders and manage budgets. |
| **IT Teams** | Ensure system integrations, security, and compliance. |
| **Suppliers & Vendors** | Register, submit quotations, receive purchase orders, and track payments. |
| **Regulatory & Audit Bodies** | Ensure compliance with procurement policies and financial regulations. |

**Needs**

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| **Need** | **Why It’s Important?** |
| **Automation of Procurement Workflows** | Reduces manual efforts and human errors in procurement processes. |
| **Improved Cost Control** | Ensures better budget allocation and prevents unnecessary spending. |
| **Supplier Performance Management** | Tracks vendor reliability, delivery timelines, and compliance. |
| **Compliance & Audit Readiness** | Ensures all procurement activities meet internal and regulatory requirements. |
| **Seamless ERP & Financial System Integration** | Enables smooth data exchange between procurement, accounting, and inventory systems. |
| **User-Friendly Experience** | Provides an intuitive platform for procurement teams and suppliers to collaborate efficiently. |

**Product & Their Value**

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| **Product Feature** | **Value Delivered** |
| **Supplier Management** | Ensures seamless vendor onboarding, contract management, and performance tracking to enhance supplier relationships and mitigate risks. |
| **Purchase Order & Approval Workflow** | Reduces processing time for purchase orders, prevents unauthorized spending, and ensures proper approval hierarchies. |
| **Invoice Processing & Payment Tracking** | Automates invoice verification, 2-way/3-way matching, and payment tracking, reducing financial discrepancies and manual errors. |
| **Reporting & Analytics** | Provides real-time insights into procurement trends, supplier performance, and cost savings, enabling data-driven decision-making. |
| **System Integrations** | Ensures seamless connectivity with **ERP, accounting, inventory, and compliance systems**, reducing duplicate data entry and improving efficiency. |

**User stories**  
 User Stories are a representation of the customer need and are expressed as a small, concise statement of a feature needed to deliver value.

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| **User story No:US101**  Supplier Management | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want to register new suppliers so that they can be onboarded into the procurement system. | | | |
| **BV: 100** | | **CP: 5** | |
| **Acceptance criteria:**   * Supplier details captured and verified. * Supplier profile created. | | | |

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| **User story No:US102**  Supplier Management | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Compliance Officer, I want to verify supplier compliance before approval so that only qualified suppliers can transact. | | | |
| **BV: 200** | | **CP: 8** | |
| **Acceptance criteria:**   * Suppliers must submit mandatory documents (e.g., Tax ID, Business License). * Compliance documents uploaded and verified. | | | |

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| **User story No:US103**  Supplier Management | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want to log into the supplier portal so that I can manage my profile and documents. | | | |
| **BV: 100** | | **CP: 3** | |
| **Acceptance criteria:**   * Supplier login credentials generated. Approval or rejection with comments is recorded. * Profile editing enabled. | | | |

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| **User story No:US104**  Supplier Management | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Procurement Manager, I want a rating system for suppliers so that I can track their reliability. | | | |
| **BV: 50** | | **CP: 5** | |
| **Acceptance criteria:**   * Suppliers must submit mandatory documents (e.g., Tax ID, Business License). * Approval or rejection with comments is recorded. * Notifications sent to suppliers on approval/rejection. | | | |

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| **User story No:US105**  Supplier Management | **Tasks:1** | | **Priority: Low** |
| **Value statement:**  As a Compliance Officer, I want to blacklist unreliable suppliers so that they cannot participate in procurement. | | | |
| **BV: 20** | | **CP: 1** | |
| **Acceptance criteria:**   * Blacklist functionality implemented | | | |

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| **User story No:US106**  Supplier Management | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want to upload a catalog so that buyers can view available products/services. | | | |
| **BV: 10** | | **CP: 3** | |
| **Acceptance criteria:**   * Supplier catalog upload features available. | | | |

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| **User story No:US107**  Supplier Management | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want to receive notifications on new RFQs so that I can submit bids in time. | | | |
| **BV: 100** | | **CP: 5** | |
| **Acceptance criteria:**   * Automated RFQ notifications sent. | | | |

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| **User story No:US108**  **Supplier Management** | **Tasks:1** | | **Priority: Medium** |
| **Value statement:**  As a Procurement Officer, I want to manage supplier contracts so that I can track agreements. | | | |
| **BV: 5** | | **CP: 1** | |
| **Acceptance criteria:**   * Suppliers must submit mandatory documents (e.g., Tax ID, Business License). * Contract details saved and tracked. | | | |
| **User story No:US109**  **Supplier Management** | **Tasks:1** | | **Priority: Low** |
| **Value statement:**  As a Finance Team Member, I want to verify supplier bank details so that payments are processed securely. | | | |
| **BV: 10** | | **CP: 3** | |
| **Acceptance criteria:**   * Bank details verification completed. | | | |
| **User story No:US110**  Supplier Management | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want to update my business details so that the procurement team always has accurate information. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * Supplier profile update option available. | | | |

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| **User story No:US111**  **PO Creation** | **Tasks:5** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want to create a PO so that I can initiate the procurement process. | | | |
| **BV: 200** | | **CP: 13** | |
| **Acceptance criteria:**   * PO created with line items, pricing, and supplier details. | | | |
| **User story No:US112**  **PO Creation** | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a Finance Manager, I want an approval workflow for POs so that only authorized purchases are processed. | | | |
| **BV: 100** | | **CP: 5** | |
| **Acceptance criteria:**   * Multi-level approval implemented. | | | |

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| **User story No:US113**  Purchase Order & Approval Workflow | **Tasks:1** | | **Priority: Low** |
| **Value statement:**  As a Procurement Officer, I want to amend existing POs so that corrections can be made before final approval. | | | |
| **BV: 20** | | **CP: 2** | |
| **Acceptance criteria:**   * PO editing enabled before approval. | | | |

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| **User story No:US114**  Purchase Order & Approval Workflow | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want auto-generated PO numbers so that I can track purchases easily. | | | |
| **BV: 200** | | **CP: 5** | |
| **Acceptance criteria:**   * Suppliers must submit mandatory documents (e.g., Tax ID, Business License). * Approval or rejection with comments is recorded. * Notifications sent to suppliers on approval/rejection. | | | |

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| **User story No:US115**  Supplier Management | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a User, I want to convert purchase requisitions into POs so that I can avoid redundant data entry. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * Suppliers can log in and update contact details, licenses, and certifications. * System notifies procurement team of any critical updates. | | | |

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| **User story No:US116 PO Creation** | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want to receive notifications when a PO is issued so that I can start processing orders. | | | |
| **BV: 100** | | **CP: 8** | |
| **Acceptance criteria:**   |  | | --- | | * System generates performance reports for each supplier. | | * Vendors receive periodic feedback reports. | | * Procurement teams can mark "preferred" suppliers based on Performance | | | | |

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| **User story No:US117 Purchase Order & Approval Workflow** | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want to create POs in different currencies so that I can work with international suppliers. | | | |
| **BV: 100** | | **CP: 13** | |
| **Acceptance criteria:**   * System restricts PO creation to pre-approved vendors. * Purchase request must include item details, quantity, and estimated cost. | | | |

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| **User story No:US118** Purchase Order & Approval Workflow | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want to search and filter POs so that I can find specific transactions quickly. | | | |
| **BV: 200** | | **CP: 7** | |
| **Acceptance criteria:**   * Approvers receive real-time notifications * Approvers can approve/reject via web or mobile. * Approval logs are maintained for audit purposes. | | | |

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| **User story No:US119** Purchase Order & Approval Workflow | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Officer**, I want to verify budget availability before approving a purchase order so that I can ensure controlled spending. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * System checks available budget for the department before approval. * Approver gets an alert if budget is exceeded. | | | |

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| **User story No:US120** Invoice Processing & Payment Tracking | **Tasks:6** | | **Priority: High** |
| **Value statement:**  As a **Finance Manager**, I want to automate 3-way invoice matching (PO, invoice, and goods received) so that I can minimize payment discrepancies. | | | |
| **BV: 100** | | **CP: 8** | |
| **Acceptance criteria:**   * System matches invoices with POs and goods received records. * Discrepancies trigger alerts for manual review. * Approved invoices proceed for payment. | | | |

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| **User story No:US121** Invoice Processing & Payment Tracking | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Supplier**, I want to receive automated payment status updates so that I can track my pending invoices. | | | |
| **BV: 50** | | **CP: 3** | |
| **Acceptance criteria:**   * Payment status updates sent via email/SMS. * Suppliers can log in to view payment history. | | | |

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| **User story No:US122** Reporting & Analytics | **Tasks:4** | | **Priority: High** |
| **Value statement:**  As a **Procurement Analyst**, I want to generate spend analysis reports so that I can identify cost-saving opportunities. | | | |
| **BV: 100** | | **CP: 13** | |
| **Acceptance criteria:**   * Reports include total spend by department, category, and supplier. * System highlights areas with potential cost reduction. | | | |

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| **User story No:US123** Reporting & Analytics | **Tasks:1** | | **Priority: High** |
| **Value statement:**  As a **Compliance Officer**, I want to track and audit procurement activities so that I can ensure adherence to regulations. | | | |
| **BV: 20** | | **CP: 1** | |
| **Acceptance criteria:**   * System maintains logs of all procurement actions. * Users can filter audit trails by date, user, and action type. | | | |

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| **User story No:US124** System Integrations | **Tasks:3** | | **Priority: Medium** |
| **Value statement:**  As an **IT Administrator**, I want to ensure single sign-on (SSO) integration with our corporate directory so that users can log in securely. | | | |
| **BV: 50** | | **CP:8** | |
| **Acceptance criteria:**   * Users can log in using corporate credentials. * Multi-factor authentication (MFA) is enabled. | | | |

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| **User story No:US125** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 50** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US126** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 50** | | **CP: 8** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US127** Supplier Performance Report | **Tasks:1** | | **Priority: low** |
| **Value statement:**  As a Procurement Officer, I want to generate reports on supplier performance so that I can evaluate reliability. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * Report includes supplier ratings, on-time delivery, and contract adherence. * Invoices update in the financial system automatically. * Supplier Performance must be Evaluated | | | |

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| **User story No:US128** Payment | **Tasks:4** | | **Priority: Medium** |
| **Value statement:**  As a Finance Team Member, I want invoices to be automatically matched with POs so that payment verification is seamless. | | | |
| **BV: 100** | | **CP: 3** | |
| **Acceptance criteria:**   * System matches invoices with Poss. | | | |

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| **User story No:US129** System Integrations | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Finance Manager, I want alerts for overdue invoices so that I can take corrective action. | | | |
| **BV: 200** | | **CP: 21** | |
| **Acceptance criteria:**   * System generates overdue alerts. | | | |

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| **User story No:US130** Payment | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Finance Manager, I want to automate payments so that manual errors are minimized. | | | |
| **BV: 100** | | **CP: 13** | |
| **Acceptance criteria:**   * Automated payment processing integrated. | | | |

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| **User story No:US131** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a Finance Team Member, I want tax information validated before payments are processed. | | | |
| **BV: 200** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US132** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US133** Multi-Payment Method Support | **Tasks:5** | | **Priority: High** |
| **Value statement:**  As a Supplier, I want payments through multiple methods so that I can choose my preferred option. | | | |
| **BV: 500** | | **CP: 21** | |
| **Acceptance criteria:**   * Bank transfers, credit cards, and digital wallets supported. * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US134 Recurring Payments Setup** | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Finance Manager, I want to set up recurring payments for long-term contracts. | | | |
| **BV: 100** | | **CP: 3** | |
| **Acceptance criteria:**   * Recurring payment schedules implemented. * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US135** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 20** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US136** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 60** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US137** Audit Log Report | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a Compliance Manager, I want an audit log report so that I can track all system activities for compliance purposes. | | | |
| **BV: 60** | | **CP: 3** | |
| **Acceptance criteria:**   * system records all user activities with timestamps. Invoices update in the financial system automatically. | | | |

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| **User story No:US138** System Integrations | **Tasks:2** | | **Priority: High** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 60** | | **CP: 3** | |
| **Acceptance criteria:**   * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

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| **User story No:US139** System Integrations | **Tasks:2** | | **Priority: Low** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 100** | | **CP: 5** | |
| **Acceptance criteria:**   * Automated tax validation completed for invoices * Invoices update in the financial system automatically. | | | |

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| **User story No:US140** Bank Payment Integration | **Tasks:2** | | **Priority: Medium** |
| **Value statement:**  As a **Finance Team Member**, I want the system to integrate with our ERP’s general ledger so that purchase transactions are automatically recorded. | | | |
| **BV: 50** | | **CP: 3** | |
| **Acceptance criteria:**   * Payment requests sent to the bank system. * Invoices update in the financial system automatically. | | | |

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| **User story No:US141** System Integrations | **Tasks:3** | | **Priority: High** |
| **Value statement:**  As a Procurement Officer, I want supplier data to be updated automatically through external databases. | | | |
| **BV: 100** | | **CP: 8** | |
| **Acceptance criteria:**   * Supplier database syncs with third-party registries. | | | |

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| **User story No:US142** E-Signature Integration for Approvals | **Tasks:4** | | **Priority: High** |
| **Value statement:**  As an Approver, I want to digitally sign POs and invoices so that I can approve transactions securely. | | | |
| **BV: 200** | | **CP: 13** | |
| **Acceptance criteria:**   * E-signature functionality implemented for approvals. * Approved POs sync with the general ledger. * Invoices update in the financial system automatically. | | | |

**Agile PO Experience**

**Product Owner**

Product Owner is the role on the team that represents the interests of all stakeholders, defines the features of the product, and prioritizes the product backlog. He is responsible for defining the product's features, functionalities, and overall vision, ensuring it aligns with the business goals and customer needs.

❖ In Scrum, a product owner serves as the liaison between multiple areas of an organization. This person communicates with business stakeholders and collaborates closely with Scrum teams to keep all areas of the business informed on a project's development.

❖ The product owner develops a vision of a product's function and operation, which in turn allows this Scrum team member to define product features and break those features into product backlog items.

❖ As a Product Owner Following are my responsibilities in this project Enterprise Procurement Management System (EPMS)

**1. Market Analysis**

**Key Contributions:**

* Conducted a **competitive analysis** to compare existing procurement solutions (SAP Ariba, Coupa, Jaggaer) with our EPMS.
* Engaged with **stakeholders (Procurement, Finance, IT, Suppliers)** to identify gaps in current procurement processes.
* Identified **key differentiators** such as:
  + Streamlined **supplier onboarding** with automated compliance checks.
  + AI-driven **spend analysis and cost-saving recommendations**.
  + Integration with existing **ERP and accounting systems**.

**Challenges & Solutions:**

**Challenge:** Lack of clear market data on procurement pain points.  
**Solution:** Conducted surveys with key users to validate assumptions and define **real user needs**.

**2. Enterprise Analysis**

**Key Contributions:**

* Analysed **business workflows** to align EPMS with organizational goals.
* Defined **KPIs** such as **procurement cycle time reduction, supplier compliance rate, and invoice processing time**.
* Collaborated with **finance, legal, and IT teams** to ensure compliance with **procurement policies and regulatory requirements**.

**Challenges & Solutions:**

**Challenge:** Resistance to process automation from traditional procurement teams.  
**Solution:** **Change management strategy** with **training sessions and pilot rollouts**.

**3. Product Vision and Roadmap**

**Key Contributions:**

* Created a clear Product Vision:
  + *“A seamless, automated, and intelligent procurement system that enhances supplier collaboration, reduces processing time, and ensures compliance.”*
* Developed a **product roadmap** in phases:
  + **Phase 1**: Supplier onboarding & PO workflow.
  + **Phase 2**: Invoice automation & ERP integration.
  + **Phase 3**: Advanced analytics & AI-driven insights.

**Challenges & Solutions:**

**Challenge:** Conflicting feature demands from different departments.  
**Solution:** Used **MoSCoW prioritization** to ensure focus on high-impact features.

**4. Managing Product Features**

**Key Contributions:**

* Defined **key modules**:
  + **Supplier Management**
  + **Purchase Order Workflow**
  + **Invoice Processing**
  + **Reporting & Analytics**
* Ensured each feature had **clear business goals and acceptance criteria**.

**Challenges & Solutions:**

**Challenge:** Overlapping features with existing ERP.  
**Solution:** Mapped dependencies and ensured non-duplicative functionalities.

**5. Managing Product Backlog**

**Key Contributions:**

* Maintained a **well-defined backlog** categorized into:
  + **New Features**
  + **Enhancements**
  + **Technical Debt**
  + **Bugs**
* Conducted **backlog refinement meetings** to ensure all items were updated.

**Challenges & Solutions:**

**Challenge:** Frequent scope changes from business teams.  
**Solution:** Established a **change control process** with impact assessment.

**6. Prioritization of User Stories**

**Key Contributions:**

* Used **Value vs. Effort matrix** for prioritization.
* Prioritized based on:
  + **Business Value (BV)**
  + **Complexity Points (CP)**
  + **User Impact**
  + **Regulatory Requirements**

**7. Reprioritization Based on Stakeholders' Needs**

**Key Contributions:**

* Conducted **regular stakeholder meetings** to reassess priorities.
* Adjusted backlog based on **market trends, compliance updates, and feedback**.

**8. Epics Planning**

**Key Contributions:**

* Defined high-level Epics:
  + EPIC-001: Supplier Management
  + EPIC-002: Purchase Order Workflow
  + EPIC-003: Invoice Processing & Payment
* Broke epics into manageable user stories.

**Challenges & Solutions:**

**Challenge:** Dependencies between epics caused delays.  
**Solution:** Implemented cross-team coordination sessions to resolve blockers.

**9. Managing Overall Iteration Progress**

**Key Contributions:**

* Used burn-down charts & velocity tracking to monitor progress.
* Adjusted sprint scope based on team velocity & stakeholder feedback.

**10. Sprint Progress Review**

**Key Contributions:**

* Ensured demo-ready increments were delivered.
* Evaluated sprint success based on working software and business impact.

**11. Reprioritization of Sprints and Epics If Needed**

**Key Contributions:**

* Reprioritized based on:
  + Urgent compliance needs
  + Integration challenges
  + Customer feedback
* Adjusted the roadmap for maximum value delivery.

**12. Sprint Retrospectives with Business Analyst**

**Key Contributions:**

* Identified process improvements for backlog refinement.
* Addressed bottlenecks in requirement clarification.

**13. Agile Ceremonies Managed**

| **Meeting** | **Your Role as Product Owner** |
| --- | --- |
| **Sprint Planning** | Ensured user stories met **Definition of Ready (DoR)** |
| **Daily Scrum** | Monitored team progress, resolved blockers |
| **Sprint Review** | Validated delivered features, gathered feedback |
| **Sprint Retrospective** | Identified process improvements |
| **Backlog Refinement** | Updated and prioritized stories |

**14. User Stories Creation (Structure & Elements)**

**Key Contributions:**

* Ensured user stories followed **INVEST (Independent, Negotiable, Valuable, Estimable, Small, Testable)**.
* Created well-structured stories including:
  + **Story No**: US-101, US-102...
  + **Tasks**: Development, Testing, UX Design...
  + **Priority**: High, Medium, Low
  + **Acceptance Criteria**: Clear, testable conditions
  + **Business Value (BV) & Complexity Points (CP)**: Prioritization based on ROI

**Example User Story:**

**Story No**: US-101  
**Feature**: Supplier Onboarding  
**As a** Procurement Manager  
**I want to** approve/reject supplier applications based on compliance criteria  
**So that** only qualified vendors are onboarded.

**Acceptance Criteria**:

* Supplier must submit Tax ID & Business License.
* Approval/Rejection must be recorded.
* Supplier receives a notification.

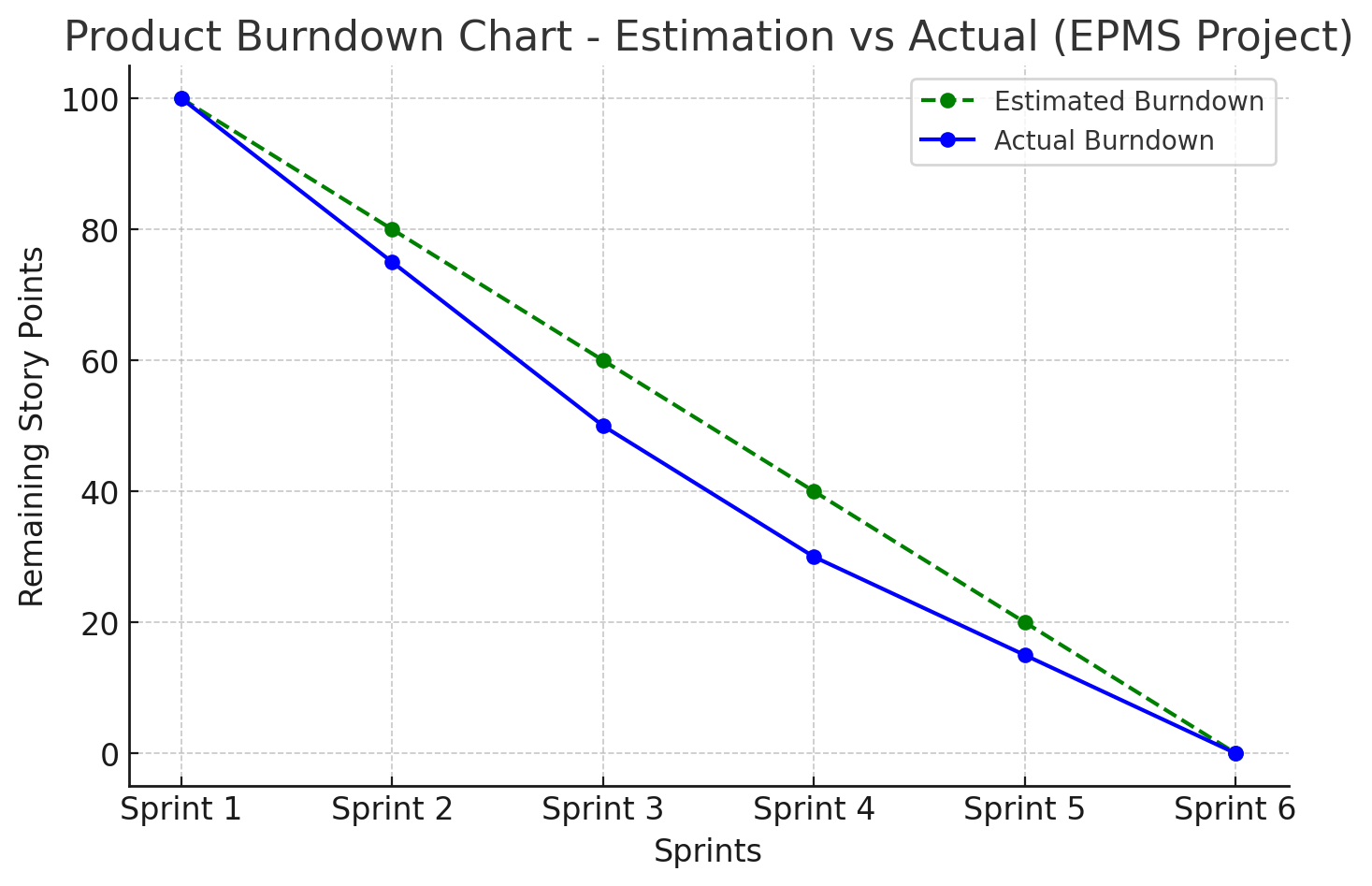
**BV=80; CP: 5**

**Product backlog:**

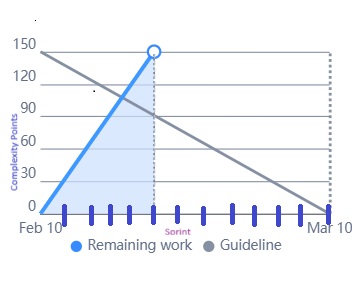
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **User Story ID** | **User Story** | **Tasks** | **Priority** | **BV** | **CP** | **Sprint** |
| **US-101** | As a Procurement Manager, I want to onboard suppliers by verifying compliance documents, so that only qualified vendors can be added. | - Develop supplier registration form  - Implement document upload feature  - Create approval workflow  - Send notifications on approval/rejection  - Test supplier onboarding process | High | 90 | 5 | Sprint 1 |
| **US-102** | As a Procurement Officer, I want to create and submit a purchase order, so that procurement requests can be processed. | - Develop PO creation UI  - Implement PO submission workflow  - Validate PO details before submission  - Test PO submission process | High | 85 | 5 | Sprint 1 |
| **US-103** | As a Department Head, I want to approve or reject purchase orders, so that only valid orders proceed. | - Develop approval UI  - Implement approval logic  - Send notifications on approval/rejection  - Test approval workflow | High | 80 | 5 | Sprint 2 |
| **US-104** | As a Finance Manager, I want to match invoices with purchase orders, so that payments are only made for verified transactions. | - Develop invoice processing module  - Implement PO-invoice matching logic  - Create exception handling for mismatches  - Test invoice verification | High | 95 | 8 | Sprint 2 |
| **US-105** | As a Supplier, I want to track my invoices and payment status, so that I can monitor my transactions. | - Develop invoice tracking dashboard  - Integrate payment status updates  - Test invoice tracking feature | Medium | 70 | 6 | Sprint 3 |
| **US-106** | As a Procurement Analyst, I want to generate reports on procurement trends, so that I can analyse spending patterns. | - Develop reporting module  - Implement data visualization for trends  - Test report generation | Medium | 75 | 7 | Sprint 3 |
| **US-107** | As a System Admin, I want to manage user roles and permissions, so that system access is controlled. | - Develop user role management UI  - Implement role-based access control (RBAC)  - Test user access permissions | High | 85 | 6 | Sprint 4 |
| **US-108** | As a Compliance Officer, I want to audit procurement transactions, so that I can ensure regulatory compliance. | - Develop audit log feature  - Implement search & filtering for audits  - Test compliance tracking | Medium | 70 | 6 | Sprint 4 |

**Sprint backlog:**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **User Story ID** | **User Story** | **Tasks** | **Owner** | **Status** | **Estimated Effort (Hours)** |
| **US-101** | As a Procurement Manager, I want to onboard suppliers by verifying compliance documents, so that only qualified vendors can be added. | - Develop supplier registration form  - Implement document upload feature  - Create approval workflow  - Send notifications on approval/rejection  - Test supplier onboarding process | Developer 1  Developer 2  QA Tester | In Progress | 16 |
| **US-102** | As a Procurement Officer, I want to create and submit a purchase order, so that procurement requests can be processed. | - Develop PO creation UI  - Implement PO submission workflow  - Validate PO details before submission  - Test PO submission process | Developer 3  QA Tester | To Do | 14 |
| **US-103** | As a Department Head, I want to approve or reject purchase orders, so that only valid orders proceed. | - Develop approval UI  - Implement approval logic  - Send notifications on approval/rejection  - Test approval workflow | Developer 4  QA Tester | In Progress | 12 |
| **US-104** | As a Finance Manager, I want to match invoices with purchase orders, so that payments are only made for verified transactions. | - Develop invoice processing module  - Implement PO-invoice matching logic  - Create exception handling for mismatches  - Test invoice verification | Developer 2  Developer 5  QA Tester | To Do | 18 |
| **US-105** | As a Supplier, I want to track my invoices and payment status, so that I can monitor my transactions. | - Develop invoice tracking dashboard  - Integrate payment status updates  - Test invoice tracking feature | Developer 3  QA Tester | To Do | 14 |
| **US-106** | As a Procurement Analyst, I want to generate reports on procurement trends, so that I can analyse spending patterns. | - Develop reporting module  - Implement data visualization for trends  - Test report generation | Developer 1  Developer 4  QA Tester | In Progress | 16 |



**Sprint Burndown Chart- Estimation Vs Actual**



Sprint Meetings  
**Sprint Planning meeting-EPMS**

|  |  |
| --- | --- |
| **Section** | **Details** |
| **Date** | 13/03/2025 |
| **Time** | 09.00 AM |
| **Location** | MS Teams |
| **Prepared By** | Product Owner |
| **Attendees** | Product Owner, Scrum Master, Development Team, QA Team, Procurement |

**Agenda Topics**

|  |  |  |
| --- | --- | --- |
| **Topic** | **Presenter** | **Time Allotted** |
| Overview of Sprint Goals | Product Owner | 10 min |
| Review of Product Backlog Items | Scrum Master | 15 min |
| Selection of User Stories for Sprint | Development Team | 20 min |
| Task Breakdown & Assignments | Development Team | 25 min |
| Story Point Estimation | Scrum Team | 15 min |
| Identifying Dependencies & Risks | Development Team & PO | 15 min |
| Definition of Ready & Done Review | Scrum Master | 10 min |
| Commitment & Sprint Plan Finalization | Scrum Team | 10 min |

**Other Information**

|  |  |
| --- | --- |
| **Section** | **Details** |
| **Observers** | [List of any additional stakeholders observing] |
| **Resources** | - Product Backlog  - Sprint Goal Document  - Agile Estimation Techniques (Story Points)  - Prior Sprint Reports (if applicable) |
| **Special Notes** | - Any last-minute backlog refinement  - Adjustments based on business priority changes |

|  |  |
| --- | --- |
| **Section** | **Details** |
| **Sprint Goal** | Implement procurement features such as supplier management, purchase order workflow, invoice tracking, and reporting for the current sprint. |
| **Planned User Stories** | **Example:**  - US-101: Supplier onboarding & compliance verification  - US-102: Purchase order creation & submission  - US-104: Invoice matching with purchase orders |
| **Task Breakdown** | Each user story is broken down into development, testing, and integration tasks. |
| **Effort Estimation** | Assign story points to each user story based on complexity (BV & CP values). |
| **Dependencies** | - Supplier approval API integration  - Finance system sync for invoice matching |
| **Definition of Ready** | User stories must be well-defined with clear acceptance criteria. |
| **Definition of Done** | - Code developed and tested  - Passed QA testing  - Reviewed by Product Owner  - Deployed in a test environment |
| **Sprint Commitment** | Development team commits to delivering agreed user stories within the sprint. |
| **Next Steps** | Assign tasks to developers & QA, update sprint backlog, begin development. |

**Sprint Review Meeting Document – EPMS**

|  |  |
| --- | --- |
| **Section** | **Details** |
| **Date** | 13/03/2025 |
| **Time** | 11.00 AM |
| **Location** | [MS Teams |
| **Prepared By** | Kumaran |
| **Attendees** | Product Owner, Scrum Master, Development Team, Business Analysts, QA Team, Key Stakeholders(Procurement & Finance) |

|  |  |  |  |
| --- | --- | --- | --- |
| **Sprint status** | **Things to demo** | **Quick updates** | **What’s next** |
| Supplier Registration & Profile Management | Supplier Registration, Supplier Performance Dashboard, PO Approval Notifications | Successfully implemented PO Approval Workflow | Enhancing Supplier Performance Reporting |
| Purchase Order Approval Notifications | Purchase Order Approval Workflow | Deployed PO Status Tracking & Notifications | Finalizing Automated Payment Processing |
| Invoice Processing | Automated Invoice Matching with POs | Completed UAT feedback for Supplier Management | Addressing backlog items from the current sprint |
| Procurement Dashboard Creation | Procurement Dashboard Enhancements |  | Addressing backlog items from the current sprint |

**Sprint Retrospective Meeting Document – EPMS**

|  |  |
| --- | --- |
| **Section** | **Details** |
| **Date** | 25/03/2025 |
| **Time** | 03.00 PAM |
| **Location** | MS Teams |
| **Prepared By** | Kumaran |
| **Attendees** | Scrum Master, Development Team, Product Owner |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agenda** | **What Went Well** | **What Didn’t Go Well** | **Questions** | **Reference** |
| Review Sprint Goals & Deliverables | **Supplier Registration & Profile Management** was successfully implemented and tested. | **ERP Integration delays** due to external vendor dependencies. | How can we improve collaboration with the **ERP vendor** to avoid delays in integration? | Sprint Backlog |
| Discuss What Went Well | **Purchase Order Approval Workflow** was completed with automated email notifications. | **Invoice Processing API response time issues** led to slower validation. | Can we allocate additional **QA resources** to ensure testing completion within the sprint? | Product Backlog |
| Identify Challenges & Improvement Areas | **Procurement Dashboard** enhancements provided better visibility of PO statuses. | **Testing for Automated Payment Tracking** was not fully completed due to unresolved defects. | Should we consider breaking down larger user stories into **smaller, more manageable tasks**? | UAT Reports |
| Define Action Items for Next Sprint | Stakeholders appreciated the **Reporting & Analytics module** for tracking expenses. | **Daily Stand-ups exceeded time limits**, reducing focus on action items. | How can we ensure **stand-ups remain concise and effective**? | Team Feedback, Stakeholder Inputs |

**Daily Stand-up Meeting Document – EPMS**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Question** | **Name** | **Week 11 (10-03-25 to 14-03-25)** | | | | | | |
| **Monday** | **Tuesday** | **Wednesday** | **Thursday** | **Friday** | **Saturday** | **Sunday** |
| **What did you do yesterday?** | Vagai Selvan | Completed PO approval workflow development | Conducted unit testing for PO approvals | Addressed UAT feedback for supplier management | Worked on payment tracking functionality | Completed documentation for supplier performance analytics | (Optional) | (Optional) |
| Kathir | Fixed bugs in invoice processing module | Worked on UI enhancements for procurement dashboard | Completed API testing for invoice matching | Refactored procurement workflow for efficiency | Fixed UI inconsistencies in PO tracking | (Optional) | (Optional) |
| Paranthaman | Integrated supplier onboarding API | Debugged ERP integration issues | Deployed updated reporting module to test environment | Conducted performance testing for large datasets | Reviewed and merged pull requests | (Optional) | (Optional) |
| **What will you do today?** | Vagai Selvan | Begin integration testing for PO & Invoice Sync | Deploy PO approval workflow to UAT | Conduct performance testing for PO approvals | Start developing automated payment reconciliation | Complete testing of procurement analytics module | (Optional) | (Optional) |
| Kathir | Work on supplier rating module | Implement automated notifications for order status | Finalize UI updates for supplier dashboard | Fix outstanding defects in invoice processing | Finalize feature deployment for stakeholder review | (Optional) | (Optional) |
| Paranthaman | Investigate database optimization for procurement analytics | Optimize API response times for invoice processing | Address pending integration bugs | Refactor backend logic for purchase tracking | Document API changes for finance team | (Optional) | (Optional) |
| **What (if any) is blocking your progress?** | Vagai Selvan | Waiting for API access from finance team | ERP team delay in data sync testing | Approval pending for UAT deployment | Missing test data for large-scale transactions | Load testing tools not configured | (Optional) | (Optional) |
| Kathir | Need stakeholder confirmation on UI changes | Unclear acceptance criteria for supplier reports | External API rate limits causing failures | Waiting for feedback on dashboard design | Need clarification on discount calculation rules | (Optional) | (Optional) |
| Paranthaman | Pending database credentials for testing | Deployment environment not available | Security testing delays from IT team | Dependency on invoice processing service fixes | Awaiting sign-off from procurement team | (Optional) | (Optional) |