Product Requirements Document (PRD)

Product Name: Kambaa Knowledge Base Portal (KKBP)

Version: 1.0

Prepared For: Kambaa Internal Team

Purpose: Internal Knowledge Sharing & Customer Solution Repository

1. Overview

1.1 Problem Statement

Kambaa teams solve multiple customer problems and implement solutions frequently, but these learnings are scattered across emails, chats, documents, and individual knowledge. This results in:

- repeated troubleshooting
- loss of best practices
- slower onboarding for new employees
- inconsistent solution delivery

1.2 Goal

Build a **central internal knowledge base portal** where employees can:

- register using Kambaa email ID
- submit solution articles / use cases
- store knowledge in a structured database (MySQL)
- allow admins to approve and publish content
- allow all employees to view approved knowledge articles

2. Objectives & Success Metrics

2.1 Objectives

- Provide a searchable internal portal for customer solutions and best practices
- Encourage consistent documentation culture
- Ensure content quality through admin approval workflow

2.2 Success Metrics (KPIs)

KPI	Target
Articles published per month	≥ 50
Average search-to-solution time	Reduced by 40%
Employee adoption rate	≥ 80% active users
Duplicate issue resolution rate	Reduced by 30%
Admin approval SLA	< 48 hours

3. Scope

3.1 In Scope (MVP)

- User registration using **Kambaa email ID**
- User login/authentication
- Submit knowledge articles (draft → pending approval)
- Admin approval/rejection workflow
- Approved articles visible to all
- Categories/tags
- Search + filters
- MySQL database backend
- Basic user profile

3.2 Out of Scope (Phase 2+)

- Integrations (Jira/ServiceNow/Slack)
- Multi-language support
- AI auto-suggestions

- Public external access
- Advanced analytics dashboards

4. User Roles & Permissions

4.1 Roles

1. **Employee (Contributor / Viewer)**
2. **Admin (Approver / Publisher)**

4.2 Permission Matrix

Feature	Employee	Admin
Register/Login	✅	✅
View approved articles	✅	✅
Create article	✅	✅
Edit own draft/pending article	✅	✅
Delete own draft	✅	✅
Approve/Reject article	❌	✅
Publish article	❌	✅
Manage categories/tags	❌	✅
Manage users	❌	✅

5. Key Use Cases

5.1 Employee Use Cases

- Register with Kambaa email ID
- Create and submit a knowledge article
- Track approval status (Pending/Approved/Rejected)
- View published knowledge base articles
- Search solutions quickly by keyword/category/tag
- Edit and resubmit rejected articles

5.2 Admin Use Cases

- Review pending submissions
- Approve and publish articles
- Reject with comments/feedback
- Edit articles before publishing (optional)
- Manage categories/tags
- View submission history

6. Functional Requirements

6.1 Authentication & Registration

FR-1: User must register using **@kambaa.com** email ID only

FR-2: Email verification should be mandatory

FR-3: Login via email/password (MVP)

FR-4: Password reset functionality

6.2 Article Management (Knowledge Post)

FR-5: User can create an article with:

- Title
- Problem statement
- Customer/Project (optional)
- Solution steps
- Root cause
- Tools/Technologies used
- Attachments (screenshots/docs)
- Tags
- Category
- References/links

FR-6: Article status lifecycle:

- Draft
- Submitted (Pending Approval)
- Approved (Published)
- Rejected

FR-7: Only approved articles are visible to all employees

6.3 Approval Workflow

FR-8: Admin can view all pending articles

FR-9: Admin can approve/reject

FR-10: Admin rejection must include feedback comment

FR-11: Contributor should get email notification on approval/rejection

6.4 Search & Browse

FR-12: Full text search on title and content

FR-13: Filter by:

- category
- tags
- author
- date range

FR-14: Sort by:

- latest
- most viewed (Phase 2)
- most useful (Phase 2)

6.5 Portal UI Pages

FR-15: Pages required:

- Home (Latest + Categories)
- Search Results
- Article Details Page
- Submit Article Page
- My Articles (draft/pending/rejected/published)
- Admin Dashboard
- Pending Approval Queue
- Category/Tag Management (Admin)

7. Non-Functional Requirements

7.1 Performance

- Search response < 2 seconds for 10k articles
- Page load < 3 seconds on internal network

7.2 Security

- Access restricted to Kambaa employees only
- HTTPS enabled
- Password hashing (bcrypt/argon2)
- Role-based access control (RBAC)

7.3 Availability

- 99.5% uptime
- Daily DB backup

7.4 Compliance

- Internal-only portal
- Audit logs for approvals and edits

8. Data Requirements (MySQL Schema - High Level)

8.1 Tables

1. **users**
- id (PK)
- name
- email
- password_hash
- role (EMPLOYEE/ADMIN)
- status (ACTIVE/INACTIVE)
- created_at

2. **articles**
- id (PK)
- title
- problem_statement
- solution
- root_cause
- category_id
- created_by (FK users.id)
- status (DRAFT/PENDING/APPROVED/REJECTED)
- approved_by (FK users.id)
- approved_at
- rejection_reason
- created_at
- updated_at

3. **categories**
- id
- name
- description

4. **tags**
- id
- name

5. **article_tags**
- article_id
- tag_id

6. **attachments**
- id
- article_id

- file_path
- file_name
- uploaded_at
7. **audit_logs**
- id
- action
- entity_type
- entity_id
- performed_by
- performed_at

9. UI/UX Requirements

9.1 Design Principles

- Simple, clean internal UI
- Mobile responsive
- Easy article submission (template-based)

9.2 Article Template

A guided form with required fields:

- Title (required)
- Category (required)
- Problem (required)
- Solution (required)
- Tags (recommended)

10. Workflow Summary

10.1 Contributor Flow

1. Register → verify email
2. Login
3. Create article (draft)

4. Submit for approval
5. Admin approves → article becomes visible
6. If rejected → user edits and resubmits

10.2 Admin Flow

1. Login
2. Admin dashboard shows pending queue
3. Open article → review
4. Approve & publish OR reject with comments
5. User notified

11. Assumptions & Dependencies

11.1 Assumptions

- Employees have Kambaa email IDs
- Portal is internal access only
- Admins are pre-assigned

11.2 Dependencies

- Email service (SMTP / Office365 / Google Workspace)
- File storage for attachments (local server/S3/internal NAS)
- Hosting environment (internal server or cloud)

12. Risks & Mitigations

Risk	Impact	Mitigation
Low adoption	Low KB value	Add incentives + onboarding
Poor quality articles	Confusion	Approval workflow + templates
Admin backlog	Delay publishing	Multiple admins + SLA
Security leakage	High	Restrict to internal domain, RBAC

13. Roadmap

Phase 1 (MVP - 4 to 6 weeks)

- Authentication, registration with domain restriction
- Article creation + approval workflow
- Search + categories/tags
- Admin dashboard
- MySQL backend

Phase 2 (Enhancements)

- Like/upvote articles
- View count
- Comments/discussions
- Analytics dashboard
- Integration with Jira/Slack

Phase 3 (Advanced)

- AI-based suggestions
- Auto-tagging
- Similar solutions recommendations

14. Acceptance Criteria (MVP)

- Users can register only with Kambaa email domain
- Users can submit KB article
- Admin can approve/reject
- Only approved articles are visible to all employees
- Search works for keywords in title and body
- Data stored in MySQL with audit trail