Branding Pioneers — Agency Management System (AMS)

Product Requirements Document (PRD) — v0.1
Codename: PioneerOS
Prepared for: Branding Pioneers (Digital Marketing Agency)
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1) Product Vision & Goals

Vision: One hub to run the entire agency—centralizing employee data, client data, operations, sales pipeline, accounts/compliance, and performance management—to enable transparent communication, faster decisions, and genuinely data-driven appraisals.

Primary Goals

1. **Single Source of Truth (SSOT):** All employee and client data lives in one place with searchable, role-based access.
2. **Operational Clarity:** Track who is doing what, for which client, with what results and satisfaction.
3. **Performance & Appraisals:** Score monthly performance using objective metrics and proofs, roll up to quarterly "Strategic" and annual appraisal decisions.
4. **Financial Hygiene:** Visibility on payments (recurring and one-time) and compliance status (GST filing, books closed), with proof links.
5. **Sales Rigor:** Pipeline stages, conversion analytics, lead source mix (inbound/outbound/cold calls), and velocity tracking.
6. **Culture & Learning:** Enforce mandatory learning (≥ 6 hrs/month) with proof; non-compliance delays appraisal by 1 month.

Success Metrics (post-launch)

- 90%+ monthly Tactical Report completion by client-facing and MASH roles.

- 100% of invoices tracked with status & proof by Month 2.
- 95% of client projects have monthly NPS recorded by Ops Head by Month 3.
- 100% of learning proofs attached for active employees by Month 2.
- Appraisal cycles automated with <2 days manual effort.

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2) Users & Roles (Personas)

- **Super Admin (Founder/Director):** Full visibility and control; can export, edit, audit, and configure.
- **Admin (Ops/HR/IT):** Manages onboarding, permissions, master data, and approvals.
- **Operations Head (Manager):** Views client health (NPS, scope progress, results), runs monthly check-ins, validates proofs.
- **MASH** (Manager, Accountant, Sales, HR):
  - **Manager (Ops Head):** see above.
  - **Accountant:** tracks payments, compliance (GST, books), proof URLs; visible status dashboard.
  - **Sales:** manages leads pipeline end-to-end; source/category analytics.
  - **HR:** hiring pipeline, onboarding, culture programs, attendance/discipline inputs.
- **Department Leads & Executives (Client-Facing):** Web, SEO, Social (Client Servicing, Designer, Video Editor, YouTube SEO), Ads (Meta/Google), Graphics, etc.—submit Tactical Reports and proofs monthly.
- **Client (External) [Limited Scope]:** Fills Client Onboarding form; (future) optional access to view project summary.

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3) Scope

In-Scope (MVP)

- Home (public to logged-in users): Tools Directory, Company Guidelines, Quick Links to policies & credential lockers.
- **Employee Onboarding:** Structured form + document capture + profile creation.
- **Client Onboarding:** Shareable form for clients; structured project & business details.
- **Authentication:** MVP login via First Name + Phone Number (as specified).

  Security Note: This is weak; flagged as MVP-only with a planned upgrade path.

- **Monthly Tactical Update** (per employee): KPI capture, proofs, client dropdown, discipline & learning inputs.
- **Quarterly Strategic Review** (auto-generated from monthly + human inputs).
- **Sales Pipeline:** Stages, source split (inbound/outbound/referral), cold-call counts, conversion metrics.
- **Accounts & Compliance:** Payment status (one-time/recurring, advance/remaining), GST, books closed; proof URLs mandatory.
- **Operations Head Dashboard:** Client NPS, scope completion %, results; proof links.
- **Super Admin Reports:** Employee performance ranking, monthly/quarterly trend, PDF export.
- **Notifications/Reminders:** Monthly submissions, payment due, missing proofs, learning non-compliance.
- **Audit Log:** Who viewed/changed what and when.

Future (Post-MVP)

- Strong Auth (OTP login, SSO), fine-grained credential vault (SCIM/1Password integration).

- Attendance integration (biometrics or HRMS), task & timesheet sync (Jira/Asana), Google Drive screenshots auto-ingest.
- Client portal, SLA tracking, automated result ingestion (e.g., GA4/Search Console/Ads APIs).

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4) Information Architecture

- **Home (Hub)**
  - Tools Directory → Tool Detail (department, purpose, credential locker link)
  - Company Guidelines → Policy Library (HR policies, SOPs, brand assets)
  - Quick Links → (Onboarding forms, Credential lockers, Support)
- **People**
  - Employee Directory → Profile (Onboarding data, docs, role/skills, learning history)
- **Clients**
  - Client List → Client Profile (onboarding data, projects, payment plan, NPS history, results, proofs)
- **Workflows**
  - Monthly Tactical → My Submissions → Team Submissions
  - Quarterly Strategic → My Reviews → Team Reviews
- **Sales**
  - Pipeline → Leads → Lead Detail
- **Finance/Compliance**
  - Payments (Recurring/One-time) → Invoice Detail

    - Compliance Checklist (Monthly) → Proofs
- **Reports**
    - Employee Performance, Client Health, Sales Funnel, Payment Status
- **Admin**
    - Master Data (Clients, Departments, Roles), Permissions, Audit Logs

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5) Key Modules & Detailed Requirements

5.1 Home (Hub)

Purpose: Surface generalized, org-wide information accessible to all logged-in users.

Sections

1. **Tools We Use**
    - List of tools with: Name, Category (SEO, Ads, Social, Web, Finance, HR), Description, Department(s), Owner, Access method.
    - **Credential Lockers by Department** (MVP): store shared login credentials.
        - Fields: Username, Password, 2FA notes, Recovery email, URL, Visibility (Dept), Last Updated, Proof/Policy link.
        - **Audit**: View logs, last accessed by, changes.
        - **Security**: Masked by default; click-to-reveal; (Future: integrate secret vault).
2. **Company Guidelines**
    - Links to HR policies, SOPs, brand book, compliance standards.
    - Versioning with effective dates.
3. **Onboarding**

- Quick-access cards: **Employee Onboarding** / **Client Onboarding**.

Acceptance Criteria

- All users can view Tools list and policies.
- Department members can view their credential locker entries with masked reveal & audit trail.
- Admin can CRUD tools, policies, and lockers.

5.2 Authentication & Account Management

- **MVP Auth:** First Name + Phone Number.
- **Session:** 12-hour session expiry; device-level remember toggle (30 days).
- **Uniqueness Guard:** Prevent duplicate FirstName+Phone combos; store phone with country code.
- **Role Binding:** On first login post-onboarding, user is assigned one or more roles and a department.
- **Open Risk:** Weak auth; add banner in Admin > Settings with upgrade path toggle (OTP/SMS, email magic link, SSO in Future).

5.3 Employee Onboarding (Form)

Trigger: HR/Admin shares link internally or completes on behalf of new joiner.

Fields

- Personal: First Name, Last Name, Phone (primary login), Email, Date of Birth, Joining Date, Current Address, Emergency Contact.
- Employment: Department, Role Title, Reporting Manager, Employment Type, Work Location.

- Skills & Tools: Known Tools (multi-select), Proficiency (1–5), Learning Goals (free text), Certifications.
- Documentation: Aadhaar/PAN (or relevant), Bank Details (masked display), Offer Letter, NDAs (file uploads), Profile Image URL.
- Compliance consent checkboxes.

Behaviors

- Creates **Employee Profile** with a unique Employee ID.
- Auto-assigns monthly **Tactical Update** template based on role & department.
- HR can mark onboarding steps complete; upload proof URLs for documents.

Acceptance Criteria

- Validation for required fields; audit of who submitted/modified.
- Employee can login post-approval.

5.4 Client Onboarding (External Form)

Trigger: Shared to client as a secure link.

Fields

- Company & Contacts: Company Name, Brand Name(s), Primary Contact (Name/Phone/Email), Secondary Contacts.
- Business Summary: Industry, Geography, Products/Services, Target Audience, Objectives.
- Project Scope: Services (Web/SEO/Social/Ads/Creative), Start Date, Contract Type (Retainer/One-time), SLA expectations.
- Tech Stack & Accesses: Domains, Hosting, CMS, Analytics, Ad Accounts; access method or invite emails.

- Measurement: KPIs, current baselines (traffic/leads/revenue), Reporting cadence & preferred format.

- Billing: Plan type (recurring/one-time), Fee structure, Invoicing cycle/day, Payment method, Approver, GSTIN.

- Legal/Compliance: Agreements, approvals; upload area for docs and screenshots.

Behaviors

- On submit, creates **Client Profile** & default **Project** entries; adds to the master **Client Dropdown**.

Acceptance Criteria

- Client can save draft and resume; server-side validation; audit trail of edits.

5.5 Monthly Tactical Update (Employee Submission)

Purpose: Mandatory monthly data capture. Feeds performance scoring and quarterly/annual reports.

UI

- Grid-style form with one row per **Client** (from dropdown) + per **Project**, per month.

- Inline fields with quick add of new client (Admin-only) and smart dropdown (typeahead) to avoid retyping names.

Common Fields (all roles)

- Month (YYYY-MM), Department, Role, Client (dropdown), Project, Hours Spent (optional), Key Deliverables, Outcomes/Results (numeric where possible), Blockers, Next-month Plan, Proof URLs (screenshots/links), Collaboration Notes.

- **Discipline Inputs:** Attendance %, Late arrivals count, WFH days (optional), Adherence to deadlines (Yes/No).

- **Learning:** Hours this month (goal ≥ 6), Topic(s), Proof URL(s). **Rule:** If < 6 hours, **auto-flag** → “Appraisal Month +1 delay”.

Role-Specific KPI Fields

- **SEO Executive**: Organic sessions, Impressions, Clicks, Avg Position, CTR, Indexed pages, Backlinks acquired, Technical fixes done, Keywords in Top 3/10, Leads from organic.

- **Web Executive/Developer**: Stories/Tasks completed, Features shipped, Bugs resolved, PageSpeed score, Uptime %, Launches (one-time), Revisions cycle count, QA pass rate, Handover docs uploaded.

- **Graphic Designer**: Assets produced (#), On-time delivery %, Revision rounds, Asset performance (when measurable), Brand guideline adherence (Yes/No), Proofs.

- **Social Media — Client Servicing**: Content calendar adherence, Posts published (#), Engagement rate, Follower growth, Response SLA, Client feedback (qualitative/numeric), Campaign outcomes.

- **Video Editor**: Videos produced (#), Avg edit cycle, Watch time, Retention %, Revisions, On-time %.

- **YouTube SEO Specialist**: Video SEO tasks (#), Tag/metadata optimization, CTR, Avg view duration, Rank improvements, Subscriber growth, Leads attributed (if any).

- **Ads Executive (Meta/Google)**: Spend, Impressions, Clicks, CTR, CPC/CPM, CPA/CPL/ROAS, Conversions, CAC vs target, Experiments run (#), Learning added.

- **Manager (Ops Head)**: Client NPS collection status, % scope completion validated, Monthly result score, Issues escalated/resolved, Proof links.

- **Accountant**: Invoices raised, Payments received, Overdues, Compliance items done (GST/books), Proof links.

- **Sales**: New leads (#), Qualified (#), Proposals sent (#), Demos (#), Won/Lost (#), Cold calls (#), Inbound (#), Referral (#), Conversion rate, Pipeline value.

- **HR**: Hires (#), Offers made, Time-to-fill, Attrition %, Culture initiatives (#), Attendance policy adherence checks (#), Proofs.

Performance Scoring (per month)

- **Base Formula (default)**
  `Monthly Score = 40% Output KPIs + 30% Client Satisfaction (NPS/Feedback) + 15% Discipline + 10% Revenue/Payment Impact + 5% Peer/Manager Review`
  - Role-specific weights can override defaults (e.g., Sales: Output 50%, Revenue 30%, Discipline 10%, Peer 10%).
- **Discipline Score** = avg(Attendance %, On-time submissions, Deadline adherence).
- **Learning Compliance Gate:** If <6 hours with proof → mark month as **Non-Compliant** and set **Appraisal Delay +1 month**; optional -5 score penalty.

Acceptance Criteria

- Submitter cannot finalize without at least one Proof URL per client-row where numeric KPIs are claimed.
- Audit logs capture edits; late submissions highlighted.
- Exports to PDF and CSV by user and by manager.

5.6 Quarterly Strategic Review

- Auto-aggregates the last 3 **Monthly Tactical** submissions per person.
- Adds fields: Strategic learnings, Process improvements, Experiments that worked/failed, Client risk/opportunity assessment, Skills roadmap.
- Auto-suggested insights: red/yellow flags (clients with declining metrics, delayed payments, or low NPS).
- Outputs a shareable PDF: **Strategic Report**.

Acceptance Criteria

- One-click generate per employee and per team; editable narrative section; versioned.

5.7 Sales Pipeline

Stages (customizable): New → Contacted → Qualified → Proposal → Negotiation → Won/Lost/Junk.

Lead Fields

- Lead Source: Inbound (web, social, referrals), Outbound, **Cold Calls** (# per week/month), Events.
- Company/Contact details, Opportunity value, Close date (expected), Owner, Next action date, Notes, Attachments.

Analytics

- Funnel counts by stage; **This Month**: New, Qualified, Won, Lost, Junk.
- Conversion rates by stage; Win rate; Avg time in stage; Source mix (% inbound vs outbound vs cold calls vs referral).
- Monthly stats: Leads total, Converted this month, Junk, Cold calls, Inbound, Outbound, Referral.

Acceptance Criteria

- Drag-and-drop Kanban; quick edit; bulk stage update.
- Reports filter by owner, source, date range.

5.8 Accounts & Compliance

Payments

- **Recurring (Retainers: SEO, Social, Ads):** Monthly cycle with due date per client. Status: Paid/Unpaid/Partial. Fields: Amount, Invoice #, Due date, Paid On, Mode, Proof URL.
- **One-time (Web/Creative projects):** Track **Advance** received, **Milestone** payments, **Remaining** balance. Fields: Quoted amount, Advance amount/date, Milestones (name, %), Remaining due, Proof URLs.

- **Dashboard Widget:** List of all clients with current payment status; filter by Unpaid, Due in next 7/15/30 days.

Compliance (Monthly)

- **GST filed?** (Yes/No + Filed Date + Proof URL).
- **Books closed?** (Yes/No + Closed Date + Proof URL).

Acceptance Criteria

- Accountant can bulk-update statuses; everyone can **view** overall status in Dashboard.
- Payment & compliance rows **require proof URLs** for "Done".

5.9 Operations Head Dashboard

- **Client NPS:** Ops Head must record NPS (0–10) monthly per active client + verbatim feedback + call date + Proof (call log/recording link).
- **Scope Completion %:** % of planned deliverables completed; validated against Proofs (e.g., calendar, task board, shipped links).
- **Results Intake:** Numeric KPIs directly from teams or via client confirmations (attach client email/snippet/screenshots as Proof).
- **Auto-Insights:** Clients with low NPS (<7), dropping results (>10% decline), or payment overdue flagged.

Acceptance Criteria

- Per-client panel shows: NPS trend, Payment status, Results trend, Scope completion, Last contact date.
- Export to PDF for monthly leadership review.

5.10 Super Admin & Admin Controls

- **People Explorer:** Search/filter employees; open profile; view monthly and quarterly trends, score breakdown, proofs.
- **Leaderboards:** Top performers by department/role with tie-break logic.
- **Export:** Individual PDF report, team PDF, and CSV exports; select date ranges.
- **Master Data:** Add/edit clients, roles, departments; manage dropdowns.
- **Permissions Matrix:** Role-based feature access; credential locker visibility by department.
- **Audit Logs:** Immutable list of changes & views.

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6) Reports & Analytics

- **Employee Performance Trend:** Month-over-month score, component scores (Output, NPS, Discipline, Revenue impact, Peer review).
- **Client Health:** NPS trend, payment status, results movement; combine into a “Client Risk Score”.
- **Sales Funnel:** Stage counts, conversion rates, source effectiveness, cold-call productivity.
- **Finance:** Receivables aging, recurring revenue health, one-time collection status, compliance completion.
- **Learning:** Hours per employee; non-compliant list; topics heatmap.

PDF Templates

- **Tactical Report (Monthly)** — concise: KPIs, proof links, highlights, issues, next-month plan.
- **Strategic Report (Quarterly)** — narrative + trends + red/yellow/green flags + suggested actions.

7) Data Model (Entities & Key Fields)

Employee (User): employee_id*, first_name*, last_name, phone* (login), email, dob, join_date, department_id*, role_id*, manager_id, skills[], tools[], certifications[], learning_targets, status.

Role: role_id*, name (e.g., SEO Executive, Ads Executive), kpi_template_id.

Department: department_id*, name (Web/SEO/Social/Ads/Graphics/MASH sub-roles).

Client: client_id*, company_name*, brand_name, primary_contact{name, phone, email}, contract_type (retainer/one-time), start_date, active_flag, gstin, payment_plan{recurring/one-time}, invoicing_day, amount_range.

Project: project_id*, client_id*, department_id, name, scope_summary, start_date, status.

Credential (Locker Entry): credential_id*, tool_id*, department_id, username, password(masked), url, last_updated, visibility_scope, audit.

Tool: tool_id*, name*, category, description, owner_user_id.

Monthly_Report (Tactical): report_id*, employee_id*, month*, entries[], learning_hours, learning_proofs[], discipline_metrics{attendance%, on-time_submit, deadlines}, peer_review (optional), overall_score, appraisal_delay_flag.

Monthly_Report_Entry: entry_id*, report_id*, client_id*, project_id, kpis{key:value}, deliverables, outcomes, blockers, next_plan, proof_urls[].

Quarterly_Report (Strategic): qreport_id*, employee_id*, quarter*, narrative, insights, risks, actions, attachments[].

Lead: lead_id*, source (inbound/outbound/referral/cold_call), stage, owner_user_id, value, expected_close_date, created_at, updated_at, cold_calls_count, inbound_flag.

Invoice/Payment: payment_id*, client_id*, project_id, invoice_no, amount, due_date, paid_on, status, proof_url, is_recurring, advance_amount, remaining_amount, milestones[{name, %}].

Compliance_Record: compliance_id*, month*, gst_filed{bool, date, proof_url}, books_closed{bool, date, proof_url}.

NPS: nps_id*, client_id*, month*, score(0–10), comment, captured_by_user_id, call_date, proof_url.

Audit_Log: audit_id*, entity_type, entity_id, action, actor_user_id, timestamp, metadata.

Relationships:

- Employee 1..* Monthly_Report; Monthly_Report 1..* Monthly_Report_Entry.
- Client 1..* Project; Client 1..* Payment; Client 1..* NPS.
- Department 1..* Role; Role ↔ KPI Template.

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8) Permissions Matrix (Summary)

- **Super Admin:** All modules (CRUD + export) + settings + audit logs.
- **Admin:** Onboarding, master data, credentials, policies, reports view, approvals.
- **Operations Head:** Client health, NPS, scope validation, proofs; view team submissions; approve/return.
- **Accountant:** Payments & compliance CRUD; view client/employee basics; export finance reports.
- **Sales:** Leads CRUD; view client basic profile (no finance details).
- **HR:** Employee onboarding/profile, attendance/discipline inputs; view limited finance.
- **Client-Facing Execs/Leads:** Submit Tactical; view their clients/projects; view own performance.
- **Client (external):** Onboarding form only (MVP).

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9) Notifications & Automations

- **Due Reminders:** Tactical submission due (last business day), payment due soon (7/15/30 days), NPS pending per client, compliance deadlines.
- **Failure Alerts:** Missing proofs, <6 learning hours, overdue Tactical, low NPS (<7), KPI declines (>10% drop).

- **Digest Emails:** Weekly pipeline snapshot (Sales), Monthly finance status (Accountant), Monthly team health (Ops Head).

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10) Non-Functional Requirements

- **Security & Privacy:** PII stored with encryption at rest; audit of credential views; masked display by default. **Known risk:** MVP auth is weak; plan OTP/MFA in Phase 2.
- **Availability:** 99.5% monthly uptime target.
- **Performance:** <2s median page load for dashboards up to 10k records.
- **Data Integrity:** Proof URL requirement for “done/claimed” items; soft deletes + audit logs.
- **Backups:** Daily snapshots; 30-day retention.

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11) Integrations (MVP & Future)

- **MVP:** Email notifications; file uploads/links for proofs (Drive/Dropbox links accepted).
- **Future:** GA4, GSC, Meta/Google Ads APIs for auto-results; HRMS for attendance; accounting tool sync (Tally/Zoho); OTP via SMS.

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12) Milestones & Phased Rollout

Phase 1 (Weeks 0–4): Home, Onboarding (Employee/Client), Auth MVP, Client dropdown master, Tactical form (generic), Proof URL enforcement, Payments (basic), Pipeline (basic), NPS capture.
Phase 2 (Weeks 5–8): Role-specific KPI templates, Accounts (recurring vs one-time, advance/remaining), Compliance checklist, Super Admin reports & exports, Ops Head dashboard, Notifications.
Phase 3 (Weeks 9–12): Quarterly Strategic reports, Leaderboards, Audit logs UI, Credential

lockers enhancements, Performance scoring tuning, Attendance inputs.
Phase 4 (Post-MVP): Strong auth (OTP/MFA), API integrations, Client portal.

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13) Acceptance Criteria (System-Level)

- 100% of modules enforce Proof URL for claimed “done” statuses or KPIs where relevant.
- Employee Tactical: cannot finalize with missing mandatory fields; client dropdown works with typeahead and prevents duplicates.
- Appraisal rule applied automatically if learning <6 hours.
- Sales dashboard surfaces counts for: total leads, in pipeline, converted this month, junk, inbound, outbound, cold calls.
- Accounts dashboard shows all clients with Paid/Unpaid/Partial and handles Retainer vs One-time flows.
- Exports: Individual and team PDFs generated under 10s with correct data.

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14) Open Questions

1. Do we need OTP on day 1 for clients filling onboarding? (Recommended.)
2. Attendance source—manual input vs HRMS integration (future)?
3. KPI baselines per client—how to initialize and update?
4. Peer/Manager review portion—keep at 5% or vary by role?
5. Credential lockers—are shared passwords acceptable long-term, or move to a vault in Phase 2?

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15) Glossary & Naming

- **PioneerOS** — the overall platform.
- **Control Tower** — main dashboard.
- **Tactical Report** — monthly submission (per user).
- **Strategic Report** — quarterly roll-up.
- **Credential Locker** — department-specific shared credentials.
- **Client Health** — composite view: NPS + results + payments.

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16) Sample Screens & Field Lists (Text Wireframes)

Home (Control Tower)

- **Tiles:** Tools • Policies • Employee Onboarding • Client Onboarding • Sales Pipeline • Accounts & Compliance • Tactical • Strategic • Reports

Tactical Report (Grid per Month)

| Client | Project | KPIs (role-based) | Deliverables | Outcomes | Proof URLs | Blockers | Next Plan | Discipline | Learning |

Sales Pipeline (Kanban)

- Columns: New • Contacted • Qualified • Proposal • Negotiation • Won • Lost • Junk
- Card: Company • Contact • Value • Source • Next action date • Owner • Cold calls count • Notes

Accounts (Table)

- Client • Type (Retainer/One-time) • Invoice # • Amount • Due Date • Paid On • Status • Advance • Remaining • Proof URL

Ops Head — Client Health

- Client card: NPS trend • Payment status • Scope % • Results delta • Last contact date • Risk flag

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17) Appraisal Computation (Annual)

- Aggregate monthly **Scores** (12 months) → drop worst month (optional policy) → arithmetic mean.
- Apply **Compliance Gate**: if any month marked **Non-Compliant (Learning <6 hrs)**, appraisal date shifts by +1 month per non-compliant month.
- Produce **Annual Appraisal Packet**: Performance trend, Highlights, Risks, Learning record, Manager notes, Recommendations.

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18) Risks & Mitigations

- **Weak Auth (MVP):** Risk of account misuse → short sessions, audit logs, masked credentials, Phase 2 MFA.
- **Data Quality:** Incomplete/incorrect KPIs → enforce proof, manager validation, automated checks where possible.
- **Adoption:** Complexity → start with templates, inline help, training videos.

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19) Current Implementation (Existing Architecture) — Snapshot

Source of truth: Current repo `bptm` and project docs (e.g., `README.md`, `ROLE_DASHBOARDS_DOCUMENTATION.md`, `NEW_AUTH_ARCHITECTURE.md`), plus TestSprite outputs (`standard_prd.json`, test artifacts).

19.1 Tech Stack (As Implemented)

- **Frontend:** React (Vite), React Router, TailwindCSS, Recharts.
- **State/Context:** React Context (e.g., `UnifiedAuthContext.jsx`).
- **Auth:** Supabase (phone/email + password) with session persistence; protected routing via `ProtectedRoute.jsx`.
- **Backend/DB:** Supabase (PostgreSQL, Row-Level Security policies TBD).
- **Testing:** TestSprite MCP workflow + Vitest (where applicable).

19.2 Key Files (Illustrative)

- `bptm/src/features/auth/UnifiedAuthContext.jsx` — centralized auth context.
- `bptm/src/features/auth/ProtectedRoute.jsx` — role-guarded routes/redirects.
- `bptm/src/shared/lib/supabase.js` — Supabase client configuration.
- Role dashboards per department under `bptm/src/…` (as per ROLE_DASHBOARDS docs).

19.3 Module Coverage (Current)

- **Dashboards:** Role-specific (Super Admin, Admins: HR/Accounting/Sales, Ops Head, Employee roles: SEO/Ads/Social/YT SEO/Web/Graphics, Freelancers/Interns).
- **Performance:** KPIs + monthly reports + leaderboards (per docs) for SEO; model applies across roles.
- **Client Mgmt:** Onboarding forms & client directory.
- **Arcade:** Gamification points and admin controls.

19.4 Deltas vs Product Spec (This PRD)

- **Authentication**: *Current* uses **Supabase phone/email + password**; *PRD-MVP* specified FirstName+Phone (weak).
  Decision: Keep Supabase auth as the **baseline now**. The FirstName+Phone flow is

dropped. Phase 2 → OTP/MFA.

- **Proof Enforcement:** Ensure all KPI/payment/compliance items require proof URL (add UI validations where missing).
- **RLS & Permissions:** Formalize Supabase RLS policies to mirror this PRD's permissions matrix.

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20) Testing & Quality — TestSprite/MCP Workflow

Objective: Standardize automated QA and evidence capture.

20.1 TestSprite Bootstrap (as run)

- `TestSprite/testsprite_bootstrap_tests` → initial attempt failed; created scaffolding and retried.
- Generated **code summary** → `bptm/testsprite_tests/tmp/code_summary.json`.
- Created **basic PRD** → `bptm/testsprite_tests/tmp/prd_files/project_requirements.md`.
- Generated **standardized PRD** → `TestSprite/testsprite_generate_standardized_prd` → outputs at `bptm/testsprite_tests/standard_prd.json`.
- Produced **frontend test plan** → `bptm/testsprite_tests/testsprite_frontend_test_plan.json`.
- Executed tests → `generateCodeAndExecute`; report at `bptm/testsprite_tests/tmp/report_prompt.json`.
- Authored human-readable summary → `bptm/testsprite_tests/testsprite-mcp-test-report.md`.

20.2 Key Findings (from TestSprite report)

- **Auth:** Intermittent "Invalid API key"; weak session persistence; error copy to improve.
- **Rendering:** Inconsistent responsive behavior on heavy dashboards; loading skeletons needed.
- **Access Control:** Some protected routes bypass or inconsistent redirects.

20.3 Action Plan & Quality Gates

- **QG-1 Authentication:**
  - Validate Supabase env vars at build/runtime; add health check page.
  - Centralize session restoration in `UnifiedAuthContext`; exponential backoff on token refresh.
  - Explicit, user-friendly error states.
- **QG-2 Protected Routes:**
  - Single source of role truth; deny-by-default; canonical redirect map.
  - Add route-level tests for each role.
- **QG-3 Performance/UX:**
  - Code-split heavy dashboards, introduce lazy loading & suspense fallbacks.
  - Virtualize long tables, cache queries, add loading/skeleton states.
- **QG-4 Proof Enforcement:**
  - Form schema validations for **proof URLs** wherever KPI/Payment/Compliance is marked done.
- **QG-5 Reports:**
  - Snapshot tests for PDF/CSV payloads; checksum compare on template.

CI Hook: Add a GitHub Action to run TestSprite on PR; fail build if critical QGs fail.

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21) Role Modules — Unified Blueprint (SEO model generalized to all roles)

> Everything specified for **SEO** applies analogously to **Ads, Social, YouTube SEO, Web Dev, Graphic Design, Client Servicing, Ops Head, Accountant, Sales, HR, Freelancer, Intern** with role-tuned KPIs.

21.1 Common Submission Schema (Monthly Tactical Entry)

- Identity: Employee, Department, Role, Month.
- Client/Project: Client (dropdown), Project, Scope items.
- Output KPIs: Role-specific numeric metrics (see 21.3 templates).
- Delivery: Deliverables shipped, Deadlines met/missed, Revisions.
- Outcomes: Results against target/baseline, Impact notes.
- Collaboration: Cross-team interactions, handoffs.
- Proofs: URLs/screenshots for outputs/results/payments/compliance.
- Discipline: Attendance %, on-time %, deadline adherence.
- Learning: Hours ≥ 6 + proof URLs; non-compliance triggers appraisal delay (+1 month).

21.2 Scoring Template (override per role)

```
Score = Output(40–50%) + Client Satisfaction/NPS(20–30%) +
Discipline(10–15%) + Revenue/Payment Impact(10–30%) +
Peer/Manager(5–10%)
```

21.3 KPI Packs by Role (examples)

- **SEO:** Sessions, Impressions, Clicks, CTR, Avg Pos, Top3/10 keywords, Leads.
- **Ads (Meta/Google):** Spend, Impr, Clicks, CTR, CPC/CPM, CPL/CPA/ROAS, Conv, CAC vs target, Experiments.

- **Social (Client Servicing):** Calendar adherence, Posts #, Engagement rate, Follower delta, SLA, Campaign outcomes.
- **YouTube SEO:** CTR, Avg view duration, Retention %, Subs growth, Rank improvements, Upload cadence.
- **Web Dev:** Stories/Features shipped, Bugs closed, PageSpeed, Uptime, Launches, QA pass %, Revisions.
- **Graphics/Video:** Assets/Videos #, On-time %, Revision rounds, Performance (where applicable), Brand compliance.
- **Ops Head:** NPS capture %, Avg NPS, Scope completion %, Result score, Escalations resolved.
- **Accountant:** Invoices raised/paid, Aging buckets, Compliance (GST/Books) status.
- **Sales:** Leads by source (Inbound/Outbound/Referral/Cold Call), Stage movement, Win rate, Velocity, Pipeline value.
- **HR:** Hires, Time-to-fill, Attrition %, Policy checks, Culture initiatives.

21.4 Dashboards (Role-First)

- My KPIs • My Clients/Projects • Proofs Due • Learning • Tactical/Strategic Reports • Alerts.

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22) CI/CD & Environments

- **Branches:** `main` (release), feature branches (PR required).
- **Checks:** Lint, Type check, Unit + TestSprite suite, Build.
- **Envs:** Dev (preview), Staging, Prod — Supabase projects per env.
- **Secrets:** Supabase keys via environment; no secrets in repo.

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23) Security & Auth — Current vs Target

- **Current:** Supabase auth (phone/email + password), route guards.
- **Target:** OTP/MFA, device-bound sessions, RLS policies mirroring Permissions Matrix; credential locker move to secrets vault.

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24) Migration & Alignment Plan

1. Freeze FirstName+Phone MVP idea; standardize on Supabase auth.
2. Implement RLS + server-side checks for role claims.
3. Harden `ProtectedRoute` + add route tests.
4. Enforce Proof URL validations across modules.
5. Ship loading skeletons + code-splitting for heavy dashboards.
6. Add TestSprite CI with quality gates.

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25) TestSprite Artifact Index (for reference)

- `/testsprite_tests/tmp/code_summary.json` — code structure summary.
- `/testsprite_tests/tmp/prd_files/project_requirements.md` — seed PRD.
- `/testsprite_tests/standard_prd.json` — standardized PRD output.
- `/testsprite_tests/testsprite_frontend_test_plan.json` — plan.
- `/testsprite_tests/tmp/report_prompt.json` — raw test report.
- `/testsprite_tests/testsprite-mcp-test-report.md` — summarized report.

End of PRD v0.1