

PTO Connect Complete MVP Specification

Mission Statement

PTO Connect is a modern, all-in-one web platform that simplifies and supercharges Parent-Teacher Organization operations. With powerful AI features, built-in communication tools, robust planning modules, and integrated payment systems, PTO Connect supports every stakeholder from teachers to volunteers. The system scales with organizations and is designed to be mobile-friendly, secure, and intuitivebridging traditional PTO tasks with innovative technology.

Platform Scope Overview

The platform includes three primary environments:

1. **Public Marketing Site (www.ptoconnect.com)**:
 - Home, Pricing, Success, Cancel, Create PTO pages
 - Stripe-based onboarding with 15-day trial, monthly/annual plans
 - Dynamic plan pricing fetched via Stripe `lookup_keys`
 - QR/sign-up code system for unique PTO environment creation
2. **Main Application (app.ptoconnect.com)**:
 - Role-based dashboards and tools
 - Secure environment tied to `org_id`
 - All core features below
3. **Backend API (<https://api.ptoconnect.com>)**:
 - Node.js + Express REST API

- Supabase v3 for database and authentication
- OpenAI, Stripe, Twilio, Meta Graph API integrations

Core MVP Modules

1. **User Management & Role Permissions**

- Roles: admin, board_member, committee_lead, volunteer, parent_member, teacher
- Supabase auth with custom metadata & JWT verification
- Role-specific dashboard components
- Invite users via QR/signup code tied to `org_id`

2. **Communication Suite**

- In-app messaging + group channels
- Email & SMS via Twilio
- AI-generated newsletters, meeting summaries
- Scheduled messages and post history tracking

3. **Event & Project Planner**

- Calendar interface (monthly, list, and timeline views)
- Task delegation, deadline tracking, RSVPs, volunteer signups
- Sponsor tracking system (before, during, after events)
- AI event wizard with prompt-based generation + manual overrides

4. **Fundraising Toolkit**

- Multi-type campaign creation: donations, sales, pledges
- Stripe integration for secure transactions
- Donor progress dashboards, QR/pay links

- AI fundraising copy + auto-populated forms
- Public donation pages linked to campaigns

5. ****Budget & Finance Tracker****

- Categorized expenses and income records
- Upload & tag receipts
- AI-generated summaries and projections
- Multi-approver workflow and email report sharing
- Export to CSV/PDF

6. ****Social Media Automation****

- Meta Graph API for FB/Instagram integration
- Post scheduling with preview
- AI-generated captions and image promo ideas
- Engagement metrics dashboard

7. ****Teacher Engagement Portal****

- Submit classroom needs, surveys, and event ideas
- Wishlist uploads
- PTO admin review + approval queue

8. ****Templates & Automation Engine****

- Event/fundraiser template cloning with smart adjustments
- Pre-scheduled communications and tasks
- Prompt-powered AI for new event/fundraiser plans

9. ****Document Vault + AI Assistant****

- Upload bylaws, policies, meeting notes, etc.
- Search bar powered by RAG + OpenAI for contextual answers
- Permissions-based access

Technical Architecture

Layer	Tech
Frontend	React + TailwindCSS
Backend	Node.js + Express (ESM)
Auth/Database	Supabase v3 (PostgreSQL)
Hosting	Frontend: Vercel
	Backend: Render
AI Services	OpenAI via backend
Integrations	Stripe, Twilio, Meta API

Post-MVP Roadmap

- Native mobile apps (iOS & Android)
- District-level dashboards & org grouping
- Seasonal auto-pause/reactivation logic
- Admin notification system (e.g. renewal alerts)
- Custom PTO themes & logos
- Multilingual interface
- Teacher-AI copilot for event suggestions
- Role analytics and engagement scoring