
Customer Portal & Device Lifecycle Platform

Strategic Recommendation — March 2026

Prepared for: Tech to School

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EXECUTIVE SUMMARY

Build a free customer portal at **my.techschool.com** — order tracking, repair status, support tickets, and proactive shipping notifications. Pilot with 10 top California accounts. The portal keeps IT directors engaged between purchases so that when devices hit end-of-life, Tech to School gets the refresh order instead of a competitor.

Phase 4 adds MDM fleet intelligence (Google Admin Console, Mosyle, JAMF integration) — the long-term moat. But the short-term win is simply being the only reseller that gives customers a login.

At **\$20/month** in infrastructure costs and **~200 hours** of development time, even a conservative **10% lift in refresh capture generates \$870K/year** in incremental revenue — making this the highest-ROI project on the roadmap.

Metric	Value
Infrastructure cost	\$20/month
Development investment	~200 hours (Phase 1-3)
Conservative revenue uplift (10%)	\$870K/year
Moderate revenue uplift (15% + churn reduction)	\$1.75M/year
Active customer base (2025)	483 orgs, \$8.76M revenue
Average revenue per customer	~\$18,000/year
MVP timeline	4-6 weeks

SECTION 1

Recommended Positioning

Model: Freemium — Free tier with purchase, premium tier for MDM/lifecycle intelligence.

Tier	Price	Features	Purpose
Free	Included with purchase	Order tracking, repair status, support tickets, invoices, documents, reorder	Table stakes — makes buying from TTS better than buying from a competitor
Premium	\$0 initially; monetize later	MDM aggregation, fleet age visualization, refresh forecasting, budget planning	The moat — makes IT directors dependent on TTS between purchases

Why Not Charge Upfront?

483 active customers doing ~\$8.8M/year. A \$1/student SaaS fee would generate maybe \$200-400K but create massive adoption friction. The portal's real value is **capturing 10-20% more refresh revenue from existing accounts** — that's \$880K-\$1.76M/year in incremental device sales, dwarfing any SaaS revenue.

Why Not Fully Free Forever?

Once MDM integration delivers genuine fleet intelligence, a premium tier (\$500-2,000/year per district based on device count) becomes defensible. But only after proving the value with 50+ active users.

Competitive Positioning

Competitor	Model	Focus	TTS Differentiation
K-12 Tech Repairs (Rocket)	Free	Repair ticketing & asset mgmt	TTS adds procurement intelligence + fleet lifecycle — Rocket has zero purchasing integration
Incident IQ	~\$1.50/student	Enterprise asset & ticket mgmt	Don't replace — complement. TTS adds the procurement layer Incident IQ lacks
Mosyle / JAMF	MDM pricing	Device management & policy	TTS aggregates across MDMs + adds purchasing context. Not a replacement.
Other resellers	None	Price competition only	TTS is the only reseller giving customers a portal. Period.

"Tech to School gives you a single dashboard for every device your district bought from us — and when those devices are approaching end-of-life, we'll have the refresh quote ready before you ask."

SECTION 2

MVP Feature Set

The MVP must answer one question: **"What's happening with my order?"** — and do it better than email/phone. Ship in 4-6 weeks.

Feature	Why It's MVP	Status
Google SSO login	90%+ of K-12 uses Google Workspace	Auth architecture designed, schema ready
Dashboard — summary cards	Gives a reason to log in	Schema + routing designed
Order list + detail with tracking	#1 customer support question	16K+ orders in DB
Repair list + detail	#2 support question	Repair system active
Support ticket creation	Replaces email back-and-forth	Ticket system active
Email: order shipped notification	Proactive push — they don't need to log in	AWS SES available

What's NOT in MVP

Invoices (requires Zoho account_id backfill), documents, user management, MDM, quotes, Microsoft SSO, magic links. Add these in Phase 2-3.

Critical shortcut: Don't build the invitation flow for MVP. Manually create 10 portal_users rows for pilot customers. Self-service invitation is Phase 3.

Success Metric

7 of 10 pilot customers log in within 2 weeks. At least 3 return for a second visit.

SECTION 3

Phased Roadmap

Phase 1: MVP Portal (Weeks 1-6)

- Google OAuth login (any Google account)
- Dashboard with summary cards (open orders, active repairs, open tickets)
- Orders: list + detail with tracking links
- Repairs: list + detail with label download
- Support tickets: create + view + reply
- Email notification: order shipped (AWS SES)
- Apache vhost, PM2 process, SSL cert
- Manual onboarding of 10 pilot customers

Success metric: 7/10 pilots log in within 2 weeks; 3+ return visits

Phase 2: Full Service Portal (Weeks 7-14)

- Invoices (requires zoho_account_id backfill first)
- Documents center
- Quotes: buyback + quote requests
- Microsoft SSO + magic link auth
- Reorder button (pre-fill quote request from past order)
- Full notification suite (repair shipped, ticket reply, quote ready)
- Notification preferences + Slack #mkl-portal channel
- Onboard top 50 active customers

Success metric: 30+ active users; 5+ reorder requests via portal

Phase 3: Self-Service + Scale (Weeks 15-22)

- Settings: team management, org profile, user invitations
- Internal admin routes for portal user management
- Bulk onboarding script (staged rollout to all active customers)
- Integrated quote request form (pre-filled for logged-in users)
- Buyback quote approval (e-signature)
- Mobile optimization + security hardening (rate limiting, CSRF, CSP)

Success metric: 150+ active users; support tickets via portal > email

Phase 4: Device Lifecycle Intelligence (Weeks 23-36)

- Google Workspace integration (Chrome OS device fleet sync)
- Fleet age visualization + AUE date tracking
- Refresh forecasting ("142 Chromebooks hit AUE in 8 months")
- Proactive refresh notifications to customers AND sales reps
- Budget planning tools
- Mosyle/JAMF integration (CSV upload first, then API)
- Cross-platform fleet view (Chromebooks + iPads + Macs)

Success metric: 20+ districts connected Google Workspace; 3+ refresh deals from fleet alerts

SECTION 4

Technical Architecture

Recommendation: Build custom on the existing Node.js/Express/MariaDB stack. The architecture is already fully designed (see customer-portal.md). The alternatives are worse:

- **Low-code (Retool, Bubble):** Can't handle multi-tenant data scoping, custom auth, or MDM API integration. Outgrown in 3 months.
- **Fork open-source:** No K-12 asset management tools worth forking. Snipe-IT is PHP/Laravel, designed for internal IT.
- **Zoho Creator:** Deeper Zoho lock-in. Doesn't handle K-12 SSO flows.

Key Technical Decisions

Decision	Recommendation	Rationale
Server	Express on :3003, separate PM2	Matches existing pattern, independent deploy/restart
Auth	Google OAuth first; MS + magic link Phase 2	90%+ K-12 is Google Workspace
Database	Same MariaDB, new portal_* tables	Already designed. No new infrastructure.
Frontend	Vanilla HTML/CSS/JS (no React)	Matches codebase. Server-rendered is fine for IT directors.
Email	AWS SES (already available)	Don't add a new email provider.
MDM auth	OAuth2 per-org, tokens in DB	Already designed in schema stubs.
Multi-tenancy	Row-level isolation via org_id	Simple, proven, correct for this scale.

MDM Integration APIs

Platform	API	Auth Model	Data Available	Notes
Google Admin	Admin SDK Directory API	Per-org OAuth consent	Serial, model, OS, AUE, enrollment, org unit	ZTE partnership is the wedge
Mosyle	REST API	Per-org API token	Device list, compliance, apps, commands	Apply to Technology Partner program
JAMF Pro	REST API (Classic + Pro)	Per-org OAuth client credentials	Computer/mobile inventory	Join Technology Alliance Program

Platform	API	Auth Model	Data Available	Notes
Incident IQ	No public API	N/A	N/A	Complement, don't integrate

FERPA/COPPA Compliance

Phase 1-3 (no student data): No FERPA concern. Device serial numbers, models, OS versions are not student records.

Phase 4 (device-to-student mapping): Requires Data Processing Agreement (DPA) with each district. Use the Student Data Privacy Consortium standard DPA template. Store opaque student IDs only — never names or emails.

SOC 2: Not required for Phase 1-3. Plan for Year 2 when storing MDM credentials.

SECTION 5

Go-to-Market Playbook

Pilot Customer Selection (10 Accounts)

Select customers who meet ALL of these criteria:

- Ordered 3+ times in the last 12 months (warm relationship)
- Based in California (Amber's territory — 43% of revenue)
- Use Google Workspace (guaranteed SSO works)
- IT director or tech coordinator as primary contact
- Fleet size of 200+ devices (benefit from lifecycle tracking later)

Suggested Pilot Accounts (from Top Customers)

Customer	Lifetime Revenue	State	Active Through
San Ramon Valley USD	\$3.50M	CA	2026
CORE Butte Charter	\$1.00M	CA	2026
Sage Oak Charter	\$898K	CA	2026
Maatri International	\$1.15M	CA	2026
+ 6 more from Amber's active CA accounts			

Sales Playbook

Amber's outreach script (email or call):

"Hey [Name], we're launching a customer portal where you can track all your orders, repairs, and invoices in one place — no more emailing us to ask 'where's my order?' I'd love for [District] to be one of our first 10 pilot customers. All I need is the email you use for Google sign-in. Takes 30 seconds to set up."

Follow-up play (2-4 weeks later):

"How's the portal working? By the way, we're building a feature where you can connect your Google Admin Console and see your entire Chromebook fleet — AUE dates, enrollment status, the works. When those devices you bought in 2022 are approaching end-of-life, we'll proactively send you a refresh quote. Would that be useful?"

The Revenue Flywheel

1. Customer logs in to check order status → sees dashboard
2. Dashboard shows fleet age data (Phase 4) → "200 Chromebooks hitting AUE in September"
3. Portal proactively emails refresh quote → sales rep notified
4. Customer clicks "Reorder" in portal → quote request auto-generated
5. Sales rep closes the deal → devices ship → customer tracks in portal → cycle repeats

Marketing Approach

Bethany should **not** promote the portal as a standalone product. Instead:

- Add "Track your order at my.techtoschool.com" to every order confirmation email
- Add portal login link to techtoschool.com header navigation
- Include portal mention in sales proposals as an included benefit
- Blog post / one-pager for sales team: "Why districts love our Customer Portal"

SECTION 6

Financial Model

Cost Structure

Item	One-Time	Monthly	Notes
Development (Justin's time)	150-200 hours	10-20 hrs/mo	Opportunity cost vs. other projects
Infrastructure	\$0	\$0	Existing LiquidWeb VPS (8 vCPU, 8.4GB RAM)
AWS SES	\$0	~\$5-20	\$0.10 per 1,000 emails
Google OAuth	\$0	\$0	Free for unlimited users
SSL cert	\$0	\$0	Let's Encrypt or existing wildcard
MDM API access (Phase 4)	\$0	\$0	Google Admin SDK + partner programs are free

Revenue Impact Scenarios

Baseline (2025): \$8.76M revenue, 483 active customers, ~\$18K avg revenue/customer.

Scenario	Mechanism	Incremental Revenue	Incremental Gross Profit
Conservative (10% refresh uplift)	483 customers x 10% x \$18K avg	\$870K/year	\$147K/year
Moderate (15% + churn reduction)	15% uplift + 25 fewer lost customers	\$1.75M/year	\$296K/year
Aggressive (100+ districts on platform)	Lifecycle standard + \$50K SaaS	\$2.55M/year	\$430K+/year

Break-Even Analysis

At 200 hours of development x \$100/hr opportunity cost = **\$20K investment**. Even the conservative scenario (\$870K incremental revenue) pays this back in the first month of incremental sales. The ROI is not close.

Future SaaS Revenue Path (Year 2+)

Tier	Price	Features
Basic (Free)	Included	Order/repair/ticket tracking, invoices, documents
Pro	\$500-1,000/year	MDM integration, fleet dashboard, AUE alerts
Enterprise	\$1,500-3,000/year	Refresh forecasting, budget planning, multi-campus, priority support

At 100 paying districts x \$1,000 avg = \$100K/year SaaS revenue. Meaningful but not transformative. The real money is always in the device sales the portal enables.

SECTION 7

Top 3 Risks & Mitigations

Risk 1: "Build It and They Won't Come"

The danger: You build the portal, manually onboard 50 customers, and login rates plateau at 10%. IT directors already have too many dashboards.

Mitigations:

- **Push, don't pull.** Email notifications are the #1 adoption driver. "Your order has shipped — track it here" with a one-click login link.
- **Embed in existing touchpoints.** Every order confirmation, every repair update, every invoice includes a portal link. Sales team email signatures include the URL.
- **Measure ruthlessly.** Track login rate, return visits, feature usage, reorder clicks. If below 30% after 60 days, fix existing features — don't add more.
- **Kill features that don't drive logins.** Simplify relentlessly.

Risk 2: MDM API Dependency

The danger: Google restricts Admin SDK access, Mosyle/JAMF change partner terms, and your Phase 4 value proposition evaporates.

Mitigations:

- **Phase 4 is gravy, not the meal.** Core value (order tracking, repair status, procurement) doesn't depend on any MDM API.
- **Start with CSV upload.** If customers will upload a device spreadsheet manually, the feature has value. If they won't, API integration won't save it.
- **Google Admin SDK is deeply entrenched.** Google has no incentive to restrict read-only device access for partners. ZTE program wants partners to manage fleets.
- **Mosyle/JAMF have partner programs.** Both vendors benefit from ecosystem integrations. Apply to both in Phase 3.

Risk 3: Development Bandwidth

The danger: The portal competes with AI SDR pipeline, Zoho/MYOB integrations, vendor sync rework, deal desk improvements, and a dozen other in-flight projects for Justin's time. This is the real risk.

Mitigations:

- **Timebox Phase 1 to 4 weeks.** If it takes longer, scope crept. MVP = login + orders + repairs + tickets + one email notification.
- **Delegate frontend.** Portal HTML/CSS is vanilla. A contractor can build page templates from wireframes while Justin focuses on backend routes and auth.
- **Build before summer.** Peak is June-September (57% of revenue). Build Phase 1 in March-April, pilot in May, iterate through summer.
- **Set a weekly budget.** 15 hours/week on portal, rest on other priorities. If portal work loses to firefighting, simplify scope.

THE ONE-PARAGRAPH VERSION

Build a free customer portal at **my.techtoschool.com**. MVP in 4-6 weeks: Google login, order tracking, repair status, support tickets, and "order shipped" email notifications. Pilot with 10 of Amber's best CA accounts. The portal's job isn't to be a SaaS product — it's to keep IT directors engaged between purchases so that when 200 Chromebooks hit AUE, Tech to School gets the refresh order instead of a competitor. Phase 4 (MDM fleet intelligence) is the long-term moat, but the short-term win is simply being the only reseller that gives customers a login. At \$20/month in infrastructure costs and 200 hours of development time, even a 10% lift in refresh capture (\$870K/year) makes this the highest-ROI project on your roadmap.

Next Steps

1. Approve this plan and allocate development time for Phase 1
2. Register a separate Google OAuth app for my.techtoschool.com
3. Select 10 pilot customers from Amber's active CA accounts
4. Begin building: DB schema, server.js, auth, dashboard, order routes
5. Target pilot launch: 4-6 weeks from start date