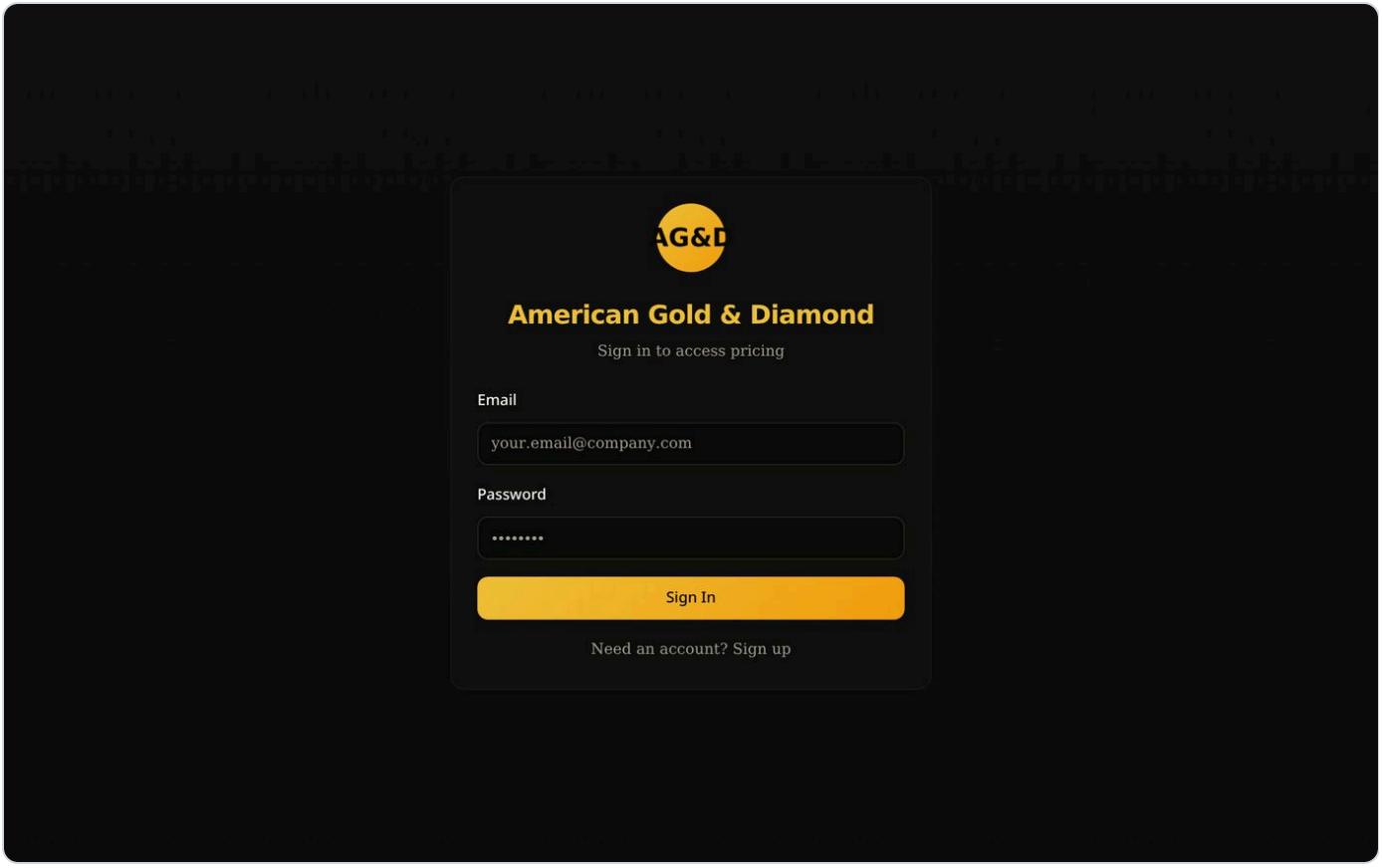
PROMOMEDIA
ADVERTISING AGENCY

TECHNOLOGY WHITEPAPER · PRECIOUS METALS RETAIL OPERATIONS

Live Spot Prices In, Exact Quotes Out — On Every Screen

How PromoMedia built Gold Vault Kiosk — a private, sign-in-only pricing app that turns live market prices into the store's exact We Pay and We Sell numbers for every metal, product, weight and unit.



Client
American Gold & Diamond

Users
Counter staff & owners

Data source
GoldAPI live spot prices

Access
Private — sign-in required

EXECUTIVE SUMMARY

Taking the guesswork and mental math off the counter

Precious-metals counters live and die on margins. Every time a staff member glances at a spot price, converts grams to troy ounces and works out a buy percentage in their head, the store risks a quote that is too generous — or too low to win the deal. Multiply that by every transaction, every employee and every price move during the day, and small errors become real money.

PromoMedia built Gold Vault Kiosk to remove that risk. The app pulls live spot prices for gold, silver, platinum and palladium, then applies the owner's own buy and sell percentages, flat adjustments and product-specific overrides to produce an exact We Pay and We Sell number for every item — instantly, on any phone, tablet or counter screen.

The owner controls the entire pricing engine from one admin console. Change a margin once and every connected screen updates in real time. The app sits behind a sign-in wall, the market-data key never leaves the server, and only administrators can change pricing rules.

> One pricing brain for the whole store: the owner sets the rules once, and every employee quotes the same correct number every time.

THE BUSINESS PROBLEM

Margin math stuck in people's heads

Before Gold Vault Kiosk, pricing depended on whiteboards, calculators and memory. That made quotes slow, inconsistent and hard to control.

Pain point	What it was costing the business
Mental math at the counter	Staff converted units and applied margins by hand, slowing transactions and inviting mistakes.
Inconsistent quotes	Two employees could quote the same item differently, confusing customers and eroding trust.
Margins hard to enforce	Owner pricing rules lived on a whiteboard or in a spreadsheet, with no guarantee they were followed.
Prices went stale	Markets move all day; a number written down this morning could be wrong by lunch.
Changes took time to spread	Updating a percentage meant telling every employee — and hoping everyone heard.

THE SOLUTION

A live pricing engine with owner-controlled rules

Gold Vault Kiosk connects live market data to the store's own pricing rules and shows the result in large, easy-to-read numbers designed to be read across a counter.

How it works

01 **Sign in**

Staff sign in with their own account. Without a valid session, no pricing screen is visible.

02 **Live prices load**

The app loads current spot prices for gold, silver, platinum and palladium, with change indicators and a timestamp showing when prices were last loaded.

03 **Find the item**

Staff search across metals and named products (such as a 1 oz Eagle or a 10 oz bar) and choose the display unit — troy ounce, gram, kilogram or pennyweight.

04 **See We Pay / We Sell**

The pricing engine converts spot into the product's weight and unit, then applies the buy discount, sell premium and any flat adjustments — using product overrides where the owner set them.

05 **Stay current all day**

An optional 60-second auto-refresh keeps prices fresh, pauses when the screen is hidden to save data quota, and resumes when the screen is opened again. A manual refresh is always available.

06 **Every screen in sync**

When new prices are saved, real-time updates push them to every open device, so the whole floor sees the same numbers.

Who uses it

Counter staff	Look up live We Pay / We Sell prices for any metal or product in any unit.
Owners / administrators	Enable or disable metals and products, set buy and sell percentages, flat adjustments, product overrides, decimal precision, display order and global settings, and manage user privileges.

FUNCTIONALITY IN DEPTH

Built for speed at the counter and control in the office

Every feature serves one of two people: the employee who needs the right number in two seconds, and the owner who needs to know that number follows the rules.

MARKET DATA

Live Spot Pricing

Real-time market data behind every quote.

- GoldAPI integration for gold, silver, platinum and palladium
- Market-direction indicators
- Last-updated timestamp on screen
- Raw provider data logged for troubleshooting

PRICING ENGINE

Owner-Configured Margins

The math is yours — the app applies it perfectly.

- Per-metal buy and sell percentages
- Separate flat buy and sell adjustments
- Per-product pricing overrides
- Configurable decimal precision

CATALOG

Multi-Unit, Multi-Product

Quote anything without a calculator.

- Troy ounce, gram, kilogram and pennyweight
- Named products with saved weights and units
- Instant search across metals and products
- Owner-controlled display order

FRESHNESS

Auto-Refresh & Sync

Prices stay current without a single click.

- Optional 60-second auto-refresh
- Pauses when the tab is hidden to save quota
- Manual hard refresh on demand
- Real-time sync across every open screen

ACCESS

Private, Sign-In Only

Pricing stays off the public internet.

- Every pricing screen requires sign-in
- Admin tools separated from staff screens
- Branded to American Gold & Diamond
- Works on phones, tablets and counter displays

CONTROL

Admin Console

Run the pricing engine from one screen.

- Turn metals and products on or off
- Change margins and adjustments in real time
- Manage products, weights and overrides
- Grant or remove administrator privileges

SECURITY & DATA PROTECTION

Keeping pricing private and rules protected

A store's margins are competitive information. Gold Vault Kiosk keeps them behind a sign-in wall and enforces who can change them in the database itself.

Identity WHO ARE YOU?	• Secure email and password authentication with managed sessions • No pricing data is shown without a valid signed-in session
Roles WHAT CAN YOU DO?	• Administrator and staff roles stored in a dedicated roles table • Server-side security-definer role checks with a fixed search path • Administrator-only screens for pricing rules and users
Database access rules WHAT CAN YOU CHANGE?	• Row Level Security on every table • Only administrators can create or change metals, products and settings • Live quotes can be written only by the server — never by a browser • The raw quote history is readable only by administrators
Market-data service WHERE IS THE KEY?	• The GoldAPI key is stored on the server and never sent to the browser • The price-refresh service verifies the caller's sign-in before running • Price updates are written with a protected server credential

> Staff can see the numbers they need — but only the owner can change the rules that produce them, and the database enforces that.

BUSINESS VALUE

Where Gold Vault Kiosk pays for itself

The value comes from protecting margin on every transaction and from giving staff a faster, more confident way to quote.

Value lever	How the platform delivers it
Protected margins	Every quote applies the owner's exact percentages and adjustments — no rounding in someone's head.
Faster transactions	Staff find the item and read the number instead of doing conversions and arithmetic.
Consistent customer experience	Every employee quotes the same price for the same item at the same moment.
Instant rule changes	Change a margin once and every screen in the store updates immediately.
Easier training	New employees can quote accurately on day one without memorizing pricing rules.
Troubleshooting history	Logged market data helps explain what price was received and when.

Technology foundation

React 18 + TypeScript · Vite · Tailwind CSS / Radix UI · Supabase Postgres + Row Level Security · Supabase Auth · Supabase Realtime · Serverless Edge Function · GoldAPI market data · TanStack Query

How PromoMedia delivered it

01 Discovery
We watched buyers and sellers at the counter to see exactly where margin math slowed down every transaction.

02 Design
We designed a mobile-first, big-number layout a staff member can read across the counter.

03 Build
We integrated GoldAPI, built the margin engine, and connected real-time sync and admin controls.

04 Launch
We placed the app behind sign-in, trained the team, and replaced the pricing whiteboard with a live app.

COULD THIS WORK FOR YOU?

Have a pricing or margin problem stuck in someone's head?

Any business that prices from a moving market or a complex rule sheet can benefit from the same approach.

Jewelry & bullion dealers
Live metal-based buy and sell pricing across stores and counters.

Scrap & recycling yards
Commodity-based pricing by material and weight, updated through the day.

Fuel, feed & agriculture
Price sheets tied to market inputs with owner-controlled spreads.

Any rule-heavy quote
Quotes built from spreadsheets or formulas that staff struggle to apply consistently.

Why businesses build with PromoMedia

- **Problem first, software second.** We start by studying how your team actually works — the counter, the phone calls, the spreadsheets — and only then design the tool.
- **Security built in, not bolted on.** Sign-in, roles, database-level access rules and server-side handling of keys and payments are part of every build from day one.
- **One local partner.** Strategy, design, development, launch, marketing and ongoing support from a single Tyler, Texas team that answers the phone.
- **Built to grow.** Platforms are designed to add features, users and locations without starting over.

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