

ELM LAKE LABS

AI Sales Funnel Design

A complete playbook for selling FJD Dynamics precision ag products through an AI-powered online sales funnel

Prepared for Elm Lake Labs

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A Complete Playbook for Elm Lake Labs

Prepared: February 2026 **Version:** 2.0 **Author:** Henry (AI Executive Assistant) **For:** John Moss, Elm Lake Labs

1. Executive Summary

The Opportunity

Aftermarket autosteer is a \$2B+ global market growing at 12-15% annually, driven by aging farm operators, labor shortages, and the ROI math of precision agriculture. The dominant OEM players (John Deere StarFire, Trimble, Raven) sell systems at \$15,000–\$40,000 and lock farmers into proprietary ecosystems with recurring subscription fees. FJD Dynamics offers comparable 2.5cm RTK accuracy at \$5,000–\$8,000 — a 60-75% cost reduction — but the brand is still relatively unknown in North America.

The Problem

Today, a farmer who hears about FJD has no clear path from “curious” to “confident buyer.” The existing online landscape is fragmented: FJD’s own website redirects between consumer (robotic mowers) and ag products; third-party dealers like Emerald Bay Ag Dynamics list the product on basic Squarespace stores with minimal guidance; and farmers’ #1 question — **“Will this fit MY tractor?”** — goes unanswered until they call someone.

The Solution

Build an AI-powered sales funnel — the **“Confidence Engine”** — that moves a farmer from awareness to purchase by systematically eliminating technical doubt. The funnel’s centerpiece is a **Tractor Compatibility Tool** backed by an **AI chatbot** trained on FJD’s full technical documentation. This isn’t a standard e-commerce site. It’s a guided buying experience that replaces the dealer visit.

Expected Outcomes (12-Month Projection)

METRIC	CONSERVATIVE	OPTIMISTIC
Monthly site visitors	5,000	15,000
Compatibility tool completions/month	500	2,000
Qualified leads/month	100	400
Monthly units sold	15	50
Monthly revenue	\$90,000	\$350,000
Customer acquisition cost	\$150-\$300	\$75-\$150
Blended gross margin	25-30%	30-35%

Key Differentiators vs. Competitors

1. **Instant compatibility confirmation** — no other aftermarket dealer provides this online
2. **AI-powered technical sales** — available 24/7, answers complex questions with citations
3. **“Guaranteed to Fit” offer** — eliminates purchase risk entirely
4. **White-glove pre-configuration** — tablet arrives ready to use, not boxed in parts
5. **RTK network bundling** — one purchase, everything you need to get sub-inch accuracy

2. Market Analysis

2.1 How Farmers Currently Buy Autosteer

Understanding the farmer’s buying journey is critical. It looks nothing like a typical e-commerce funnel:

Discovery Phase (3-12 months before purchase) – Word of mouth: The #1 driver. A farmer sees a neighbor’s tractor driving itself, asks about it at the co-op or the elevator. “What system you running?” is worth more than any ad. – **YouTube:** Farmers are voracious YouTube consumers. Channels like Welker Farms, Millennial Farmer, and How Farms Work drive awareness. “Autosteer install” and “GPS guidance review” videos routinely get 50K–500K views. – **Farm shows:** Com-

modity Classic, Farm Progress Show, local field days. Farmers trust what they can see and touch. - **Facebook groups:** “Precision Ag & GPS” groups (50K+ members), brand-specific groups, regional farmer groups. This is where farmers ask real questions and get unfiltered answers. - **Reddit:** r/farming (200K+), r/precisionag — increasingly important for younger operators.

Research Phase (1-3 months) - Google searches: “aftermarket autosteer,” “FJD vs Trimble,” “cheapest RTK autosteer,” “autosteer for [tractor model]” - **Dealer visits:** Farmers call or visit their local precision ag dealer. The dealer relationship is paramount. - **Forum deep dives:** Allis-chalmers.com, TractorByNet, The Combine Forum, r/farming. Farmers read every reply in a thread before forming an opinion.

Decision Phase (1-4 weeks) - Price comparison: Aftermarket buyers are price-conscious by definition — they’ve already rejected OEM pricing. - **Compatibility confirmation:** The farmer needs to know it will work on their specific tractor before spending \$5K+. - **Installation confidence:** Can they self-install? What tools do they need? How long does it take? - **Support availability:** If something goes wrong at 10 PM during planting season, who picks up the phone?

2.2 How Precision Ag Dealers Sell Online Today

We analyzed five representative online dealers to identify patterns and gaps:

Dealer 1: Emerald Bay Ag Dynamics (emeraldbayagdynamics.squarespace.com) - Platform: Squarespace - Products: FJD AT2 (\$9,995 CAD), accessories - Strengths: Clean layout, transparent pricing, product images - Weaknesses: No compatibility tool, no chat support, no installation guidance, minimal content, no lead capture, generic product descriptions copied from FJD - Verdict: A product listing, not a sales experience

Dealer 2: Global GPS Systems (globalgpssystems.com) - Platform: WordPress/WooCommerce - Products: FJD, survey equipment, machine control - Strengths: Claims “lowest price online,” next-day delivery, free shipping - Weaknesses: Pricing hidden behind login wall, no compatibility guidance, no technical content, broad product focus dilutes ag messaging - Verdict: Wholesale-oriented, not farmer-friendly

Dealer 3: AgriSpray Drones (agrispraydrones.com) - Platform: Custom site - Products: HD408 AutoSteer (budget segment), drone sprayers - Strengths: Clear “easy to install” messaging, budget positioning, video demos - Weaknesses: Limited to one autosteer product, no compatibility database, no AI/chat, thin content - Verdict: Good messaging for budget buyers, but no depth

Dealer 4: FJD Direct Store (store.fjdynamics.com / us.fjdynamics.com) - Platform: Shopify (re-directed from original store) - Products: Full FJD lineup (AT1, AT2, AT2 Max, AL01, accessories) - Strengths: Official brand authority, full product range, includes warranty/shipping - Weaknesses: Website now redirects to consumer products (robotic mowers) — ag products are buried. No compatibility tool, no chat, no installation support content, confusing navigation between ag and consumer divisions - Verdict: Brand authority undermined by terrible UX and consumer product pivot

Dealer 5: Precision Ag Reviews (precisionagreviews.com) - Platform: Review/comparison site (not a dealer) - Products: Reviews of FJD, Trimble, AgOpenGPS, Topcon, Outback - Strengths: Honest reviews, comparison content, community trust - Weaknesses: Not transactional — they review but don't sell - Verdict: Proves demand for comparison content; opportunity to own this space while also selling

2.3 The Gap: Nobody Answers “Will This Fit MY Tractor?” Instantly

This is the single biggest friction point in the entire aftermarket autosteer market. Here's what happens today:

1. Farmer Googles “autosteer for John Deere 7810”
2. Gets generic product pages that say “compatible with a wide range of agricultural machinery”
3. Can't find a definitive yes/no answer for their specific tractor
4. Calls a dealer (if they can find one). Leaves a voicemail. Waits 1-3 days.
5. Maybe gets an answer. Maybe gets bounced to another dealer or to FJD directly.
6. Frustration builds. Some farmers give up. Some go back to Deere/Trimble because at least the compatibility is guaranteed.

The farmer's internal monologue: “I'm not spending \$6,000 on something that MIGHT work. I need to KNOW it'll work on my 7810 before I give you my credit card number.”

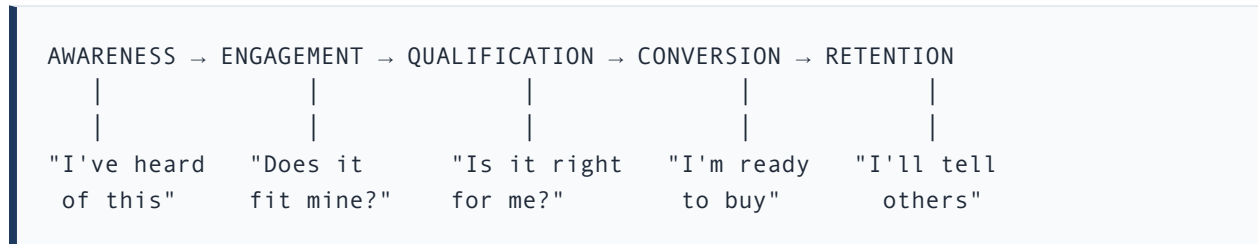
ELL's opportunity: Be the ONLY place online where a farmer can type in their tractor and get an instant, definitive answer: “Yes, the FJD AT2 works on your 2004 John Deere 7810. You need Bracket Kit B and Steering Harness C. Here's the install video for your exact model.”

This single capability — instant compatibility confirmation — is the moat.

3. Funnel Architecture: The “Confidence Engine”

Overview

The funnel has five stages, each designed to address a specific psychological barrier:



Stage 1 — Awareness: Content Strategy

Goal: Get in front of farmers who are (a) already searching for autosteer, or (b) don't know they need it yet.

YouTube Video Topics (20 Ideas)

YouTube is the #1 discovery channel for precision ag. These videos should be 8-15 minutes, authentic (filmed in cab/field, not studio), and answer ONE specific question each:

Installation & Compatibility (High Search Intent) 1. “Installing FJD AT2 Autosteer on a John Deere 4440 — Full Walkthrough” 2. “FJD Autosteer on Case IH Magnum: What You Need to Know” 3. “Does FJD Autosteer Work on Older Tractors? (Pre-2000 Models)” 4. “FJD AT2 Install: The 5 Most Common Mistakes (and How to Avoid Them)” 5. “Hydraulic vs. Electric Steering: Which Does Your Tractor Need?” 6. “FJD AT2 vs AT1 vs AT2 Max — Which Kit is Right for You?”

ROI & Business Case (Decision Stage) 7. “I Saved \$22/Acre with Aftermarket Autosteer — Here's the Math” 8. “Aftermarket Autosteer: \$6,000 vs. Deere StarFire at \$30,000 — Honest Comparison” 9. “Will Autosteer Pay for Itself? ROI Calculator Walkthrough” 10. “Why I Switched from Trimble to FJD (and Saved \$20,000)”

In-Field Demonstrations (Trust Building) 11. “FJD AT2 Night Planting Demo — Watch It Drive Itself in Total Darkness” 12. “Autosteer Accuracy Test: FJD AT2 RTK vs. Deere StarFire Side by Side” 13. “Spraying with FJD Autosteer: Zero Overlap, Zero Waste” 14. “Planting Corn at 8 MPH with FJD Autosteer — Cab Cam Uncut” 15. “FJD Autosteer on Hilly Ground: Does It Hold the Line?”

Educational & Awareness (Top of Funnel) 16. “What is RTK and Why Does It Matter for Your Farm?” 17. “Autosteer for Beginners: Everything You Need to Know in 2026” 18. “5 Reasons Your Next Tractor Doesn’t Need Factory Autosteer” 19. “NTRIP, Base Station, or RTK Network? Which Correction Source is Best?” 20. “The Real Cost of Overlap: How Much Are You Wasting Per Field?”

SEO Keyword Targets (35+ Keywords)

High Intent (Ready to Buy) | Keyword | Monthly Volume (Est.) | Intent |
 |-----|-----|-----| | buy aftermarket autosteer | 500 | Transactional | |
 FJD AT2 price | 800 | Transactional | | FJD autosteer for sale | 400 | Transactional | | cheapest
 RTK autosteer | 600 | Transactional | | aftermarket autosteer kit | 700 | Transactional | | FJD AT2
 vs AT1 | 300 | Commercial | | best aftermarket GPS autosteer | 900 | Commercial |

Medium Intent (Researching) | Keyword | Monthly Volume (Est.) | Intent |
 |-----|-----|-----| | aftermarket autosteer reviews | 500 | Informa-
 tional | | FJD Dynamics review | 600 | Informational | | autosteer for [tractor brand/model] |
 200-500 each | Informational | | RTK autosteer accuracy | 400 | Informational | | FJD vs Trimble |
 350 | Commercial | | FJD vs John Deere autosteer | 300 | Commercial | | aftermarket autosteer
 compatibility | 250 | Informational | | autosteer install difficulty | 300 | Informational | |
 precision ag cost savings | 400 | Informational |

Low Intent / Awareness (Educational) | Keyword | Monthly Volume (Est.) | Intent |
 |-----|-----|-----| | what is autosteer | 1,200 | Informational | | GPS
 guidance for tractors | 1,500 | Informational | | precision agriculture technology | 2,000 | Inform-
 ational | | RTK GPS farming | 800 | Informational | | tractor GPS guidance system | 1,000 | In-
 formational | | how does autosteer work | 900 | Informational | | NTRIP RTK correction | 400 |
 Informational | | reduce overlap farming | 300 | Informational | | autosteer for old tractors | 600 |
 Informational | | farm input cost reduction technology | 250 | Informational | | autosteering
 system installation | 350 | Informational |

Long-Tail / Model-Specific (Create pages for each) | Keyword Pattern | Examples |
 |-----|-----| | autosteer for [make] [model] | “autosteer for John Deere 4440” | |
 FJD AT2 on [make] [model] | “FJD AT2 on Case IH 7140” | | [make] [model] GPS guidance | “Kubota
 M7 GPS guidance” | | aftermarket autosteer [make] | “aftermarket autosteer New Holland” |

Create individual SEO landing pages for the top 50 tractor models. Each page answers the compatibility question and links to the tool.

Social Media Strategy

Facebook (Primary — where farmers are) - Page: Elm Lake Labs - **Group:** “Aftermarket Autosteer Owners” (community, not sales pitch) - **Posting frequency:** 4-5x/week - **Content mix:** - 40% — In-field demos and customer stories - 25% — Educational (RTK explained, overlap cost, etc.) - 20% — Product/compatibility updates - 15% — Behind-the-scenes, personality, humor - **Budget:** \$500-\$1,500/month for boosted posts and targeted ads - **Targeting:** Male, 25-65, interests in farming, John Deere, precision ag, rural areas, Farm Bureau members

YouTube (Secondary — discovery & SEO) - Channel: Elm Lake Labs - **Posting frequency:** 2 videos/week (1 install/demo, 1 educational) - **Format:** 8-15 min, authentic cab-cam style, real tractors, real fields - **Thumbnails:** Split-screen comparisons, before/after, tractor + price callout - **Budget:** \$200-\$500/month for YouTube Ads (pre-roll on competitor videos)

TikTok / Instagram Reels (Tertiary — younger operators) - Posting frequency: 3-5x/week (short clips from YouTube content) - **Content:** 15-60 second clips: wheel turning itself, accuracy demos, “the sound of straight rows” - **Budget:** Organic only initially; \$300/month if traction builds

Reddit (Engagement — not advertising) - Strategy: Answer questions in r/farming, r/precision-ag, r/tractors. Link to ELL compatibility tool when relevant. - **Rule:** Be genuinely helpful, not salesy. Reddit will destroy you if you’re obviously advertising. - **Budget:** Time only — no paid ads on Reddit

Paid Ads Strategy

Google Search Ads — \$2,000-\$4,000/month - Campaign 1: Brand Defense — Bid on “FJD AT2,” “FJD Dynamics autosteer,” “Elm Lake Labs” - **Budget:** \$500/month - **Expected CPC:** \$1.50-\$3.00 - **Goal:** Capture branded search, prevent competitors from stealing traffic - **Campaign 2: High Intent —** “buy aftermarket autosteer,” “cheapest RTK autosteer,” “aftermarket GPS tractor” - **Budget:** \$1,000-\$2,000/month - **Expected CPC:** \$3.00-\$8.00 - **Goal:** Capture bottom-of-funnel buyers, send to compatibility tool - **Campaign 3: Model-Specific —** “[make] [model] autosteer” for top 20 tractor models - **Budget:** \$500-\$1,000/month - **Expected CPC:** \$1.00-\$3.00 (low competition, high specificity) - **Goal:** Long-tail capture, send to model-specific landing pages

YouTube Ads — \$1,000-\$2,000/month - Pre-roll on competitor videos: Target viewers of Trimble, Deere, Raven, AgOpenGPS content - **Format:** 15-30 second skippable ads with strong hook (“What if autosteer was \$6K instead of \$30K?”) - **Retargeting:** Show ads to people who visited site but didn’t complete compatibility tool - **Expected CPV:** \$0.03-\$0.08

Facebook/Instagram Ads — \$1,000-\$2,500/month - Campaign 1: Awareness — Video ads (cab cam demos) targeting farming interests - Budget: \$500/month - Goal: Video views, page likes, initial awareness - **Campaign 2: Retargeting** — Dynamic ads to site visitors, compatibility tool users who didn't buy - Budget: \$500-\$1,000/month - Goal: Return visitors to site, push to conversion - **Campaign 3: Lookalike** — Target farmers similar to existing customers - Budget: \$500-\$1,000/month - Goal: Expand reach to similar demographics

Total Monthly Ad Spend: \$4,000-\$8,500/month - Start at \$4,000/month in Phase 1, scale to \$8,500 as conversion data improves - Expected blended CAC: \$150-\$300 per sale (target: under \$200 by month 6)

Stage 2 — Engagement: Tractor Compatibility Tool

Goal: Convert a curious visitor into an engaged lead by answering their #1 question: “Will this fit my tractor?”

The “Will It Fit?” Tool — Detailed Specification

What the farmer sees:

The tool is a prominent, above-the-fold interactive element on the homepage and every product page. It's NOT buried in a FAQ. It IS the primary call-to-action.

Headline: “Check Your Tractor in 30 Seconds” **Subhead:** “Find out exactly which FJD autosteer kit fits your machine — and what you'll need to install it.”


User Flow (Step by Step)



Step 1: Select Tractor Make - Dropdown or search with 40+ supported makes - Top makes pinned: John Deere, Case IH, New Holland, Kubota, AGCO/Massey Ferguson, Fendt, Claas - Includes: Challenger, Versatile, McCormick, Kioti, Mahindra, Deutz-Fahr, Same, Valtra, etc. - Also: “I don't see my brand” → opens chat with AI assistant

Step 2: Select Tractor Model - Dynamically filtered by make selection - Shows model families (e.g., “7000 Series,” “8R Series”) with specific models nested - Search functionality for fast lookup

Step 3: Select Year Range - Dropdown filtered by model - Grouped logically (e.g., “2000-2005,” “2006-2010”) where steering type is consistent across years - Exact year when it matters (steering changes mid-generation)

Step 4: Confirm Steering Type (if ambiguous) - Some tractors changed steering mid-model-year or had options - Show reference photos: “Does your steering column look like THIS (mechanical) or THIS (electrohydraulic)?” - Skip this step if steering type is unambiguous for the year/model selected

Step 5: Results Screen - Green check  — “Confirmed Compatible!” - Shows: Exact kit needed (AT1 or AT2), specific bracket type, steering harness/adaptor - Shows: All-in price (kit + bracket + accessories) - Shows: Estimated install time (“Most farmers complete this in 2-4 hours”) - Shows: Link to install video for this specific tractor (or closest match) - CTA: “Add to Cart” + “Talk to a Specialist” (opens AI chat) - Lead capture: “Email me this compatibility report” (captures email even if they don’t buy today)

- **Yellow warning  — “Compatible with Modifications”**
 - Shows: What additional parts or modifications are needed
 - Shows: Estimated additional cost
 - CTA: “Talk to a Specialist” (opens AI chat with context pre-loaded)
 - Lead capture: Email the full compatibility assessment
- **Red X  — “Not Compatible (Yet)”**
 - Shows: Honest explanation of why (e.g., “This tractor uses a full-time power steering system that requires a custom mounting solution. We’re working on a kit for this model.”)
 - CTA: “Notify me when support is added” (captures email)
 - Shows: Alternative options if any exist
- **Gray ? — “We Need More Info”**
 - Shows: “We need to see your steering setup to confirm. Upload a photo or start a chat.”
 - CTA: Opens AI chat with image upload capability
 - Lead capture: Captures contact info for follow-up

Database Schema

```

-- Core tables for the compatibility engine

CREATE TABLE tractor_makes (
  id SERIAL PRIMARY KEY,
  name VARCHAR(100) NOT NULL,          -- "John Deere"
  slug VARCHAR(100) UNIQUE NOT NULL,   -- "john-deere"
  logo_url VARCHAR(500),
  display_order INT DEFAULT 999,
  is_popular BOOLEAN DEFAULT FALSE    -- pins to top of dropdown
);

CREATE TABLE tractor_models (
  id SERIAL PRIMARY KEY,
  make_id INT REFERENCES tractor_makes(id),
  name VARCHAR(200) NOT NULL,          -- "7810"
  series VARCHAR(100),                 -- "7000 Series"
  year_start INT NOT NULL,             -- 1997
  year_end INT,                       -- 2003 (NULL = current)
  steering_type VARCHAR(50) NOT NULL,  -- "hydrostatic", "mechanical",
"electrohydraulic"
  steering_subtype VARCHAR(100),       -- "orbitrol", "priority_valve",
"load_sensing"
  wheel_type VARCHAR(50),              -- "standard", "MFWD", "track"
  cab_type VARCHAR(50),               -- "open_station", "cab"
  notes TEXT,                         -- special considerations
  popularity_rank INT                 -- for search ordering
);

CREATE TABLE fjd_products (
  id SERIAL PRIMARY KEY,
  sku VARCHAR(50) UNIQUE NOT NULL,
  name VARCHAR(200) NOT NULL,          -- "FJD AT2 Auto Steer System"
  product_type VARCHAR(50),           -- "autosteer_kit", "bracket", "accessory",
"rtk"
  base_price DECIMAL(10,2),
  description TEXT,
  image_url VARCHAR(500)
);

CREATE TABLE compatibility_rules (
  id SERIAL PRIMARY KEY,
  model_id INT REFERENCES tractor_models(id),
  product_id INT REFERENCES fjd_products(id),
  status VARCHAR(20) NOT NULL,         -- "compatible", "compatible_modified",
"incompatible", "unknown"
  bracket_type VARCHAR(100),          -- "universal_A", "deere_B", "case_C"

```

```

steering_kit VARCHAR(100),          -- "hydraulic_kit_1", "electric_kit_2"
additional_parts TEXT[],            -- array of additional SKUs needed
install_time_hours DECIMAL(3,1),    -- estimated install time
install_difficulty VARCHAR(20),     -- "easy", "moderate", "advanced"
install_video_url VARCHAR(500),     -- YouTube link for this model
notes TEXT,                         -- compatibility notes
verified_date DATE,                -- last time this was confirmed
verified_by VARCHAR(100)            -- who verified it
);

CREATE TABLE compatibility_lookups (
  id SERIAL PRIMARY KEY,
  created_at TIMESTAMP DEFAULT NOW(),
  make VARCHAR(100),
  model VARCHAR(200),
  year INT,
  steering_type VARCHAR(50),
  result_status VARCHAR(20),        -- what result they saw
  user_email VARCHAR(200),          -- if captured
  user_phone VARCHAR(20),           -- if captured
  ip_address INET,
  user_agent TEXT,
  session_id VARCHAR(100),          -- for funnel tracking
  converted_to_lead BOOLEAN DEFAULT FALSE,
  converted_to_sale BOOLEAN DEFAULT FALSE
);

-- Indexes for performance
CREATE INDEX idx_models_make ON tractor_models(make_id);
CREATE INDEX idx_compat_model ON compatibility_rules(model_id);
CREATE INDEX idx_compat_product ON compatibility_rules(product_id);
CREATE INDEX idx_lookups_email ON compatibility_lookups(user_email);
CREATE INDEX idx_lookups_date ON compatibility_lookups(created_at);

```

Lead Capture Integration

The compatibility tool is the primary lead magnet. Every interaction captures data:

- **Implicit capture (no form required):** Tractor make/model/year selection is logged with session ID. Used for retargeting even without email.
- **Soft capture (low friction):** “Email me this compatibility report” — one field, email only. Triggers automated nurture sequence.
- **Full capture (high intent):** “Talk to a specialist” — name, email, phone, tractor details pre-filled from tool. Routes to AI chatbot or human.

- **Exit intent capture:** If user starts but doesn't complete the tool, show exit-intent popup: "We'll save your results. Enter your email to pick up where you left off."

Data flows to: - CRM (HubSpot/Pipedrive) as a new lead with tractor details - Email automation (Klaviyo/ActiveCampaign) triggers model-specific nurture sequence - Retargeting pixel fires for Google/Facebook ad audiences - Analytics (Mixpanel/PostHog) tracks funnel completion rates

Stage 3 — Qualification: AI Chatbot

Goal: Replace the "call for info" step with an AI agent that can answer 90%+ of farmer questions instantly, 24/7, and intelligently hand off the rest to a human.

Platform Comparison

PLATFORM	MONTHLY COST	PER-INTERACTION COST	PROS	CONS
Intercom Fin	\$29/seat + \$0.99/resolution	~\$0.99/conversation	Best-in-class AI, ingests PDFs, cites sources, seamless handoff	Cost adds up at scale (500 resolutions = \$495/mo)
Custom OpenAI Assistant	API costs only (~\$0.03-\$0.10/conversation)	Very low	Full control, custom UI, cheapest at scale	Requires development, no built-in chat widget, DIY handoff
Drift	\$2,500+/month	Included	Strong B2B sales features, meeting booking	Expensive, overkill for product sales, complex setup
Tidio AI	\$29-\$59/month + \$0.50/conversation	~\$0.50	Budget-friendly, good for e-commerce	Less sophisticated AI, limited technical training
Crisp	\$25-\$95/month	Included (limited)	All-in-one (chat + email + CRM), affordable	AI is less capable, smaller knowledge base limit

Recommendation: Start with Intercom Fin, plan migration to custom OpenAI

- **Phase 1 (Month 1-3):** Use Intercom Fin. Fastest to deploy, best out-of-box quality. At ~100 conversations/month, cost is ~\$129/month (base + resolutions). Acceptable.

- **Phase 2 (Month 4-6):** As volume grows, evaluate custom OpenAI Assistant API. At 500+ conversations/month, custom becomes dramatically cheaper (\$15-\$50/month vs. \$524+/month for Intercom).
- **Phase 3 (Month 6+):** If volume exceeds 1,000 conversations/month, definitely move to custom. Build with OpenAI Assistants API + Vercel AI SDK + custom chat widget.

Training Data Required

The AI chatbot is only as good as its knowledge base. Assemble the following:

Technical Documents (Priority 1 — load immediately) - FJD AT2 full user manual (PDF) - FJD AT1 full user manual (PDF) - FJD AT2 Max user manual (PDF) - All bracket installation guides (per tractor make/model) - Wiring diagrams for each steering type - RTK configuration guides (NTRIP setup, base station setup) - FJD Connect platform documentation - Troubleshooting guides / known issues database - Firmware update procedures

Compatibility Data (Priority 1) - Complete tractor compatibility matrix (same data as the compatibility tool database) - Bracket cross-reference chart (which bracket fits which tractor) - Steering type identification guide with photos - Antenna mounting specifications per tractor model


Sales & Positioning (Priority 2) - Feature comparison: FJD vs. Deere vs. Trimble vs. Raven vs. AgOpenGPS - Pricing breakdowns with bundles - ROI calculations and case studies - Warranty terms and return policy - Financing options and details - Shipping information and timelines - “Guaranteed to Fit” program terms

FAQ & Common Objections (Priority 2) - “Why is this so much cheaper than Deere?” (aftermarket vs. OEM cost structure) - “Is Chinese equipment reliable?” (address head-on with warranty, reviews, install base) - “Do I need a base station?” (explain NTRIP/RTK network options) - “Will this void my tractor warranty?” (Magnuson-Moss Warranty Act) - “Can I move it between tractors?” (yes, explain how) - “What accuracy can I really expect?” (2.5cm RTK, 15cm WAAS, real-world results) - “How hard is the install?” (2-4 hours average, video guides available)

Example Conversation Flows

Conversation 1: Compatibility Check (Most Common)

FARMER: Does this work on a 2012 Case IH Magnum 235?

AI: Great question! Yes, the FJD AT2 is fully compatible with the 2012 Case IH Magnum 235. 

Here's what you'd need:

- FJD AT2 Auto Steer System Kit — \$5,495
- Case IH Magnum Bracket Kit (2010-2014) — \$189
- Hydraulic Steering Adapter — included with AT2

The Magnum 235 uses a load-sensing hydraulic steering system, which works perfectly with the AT2's electric steering wheel. Most farmers get this installed in about 3 hours.

Would you like to:

1. See the install video for Case IH Magnum?
2. Get a complete quote with RTK options?
3. Talk to a specialist about your specific setup?

FARMER: What about RTK? I don't have a base station.

AI: No problem — you don't need your own base station. Here are your options:

****Option 1: NTRIP Network (\$200-\$400/year)****

Best for most farmers. Uses cell signal to get RTK corrections. Gives you sub-inch (2.5cm) accuracy anywhere you have cell service.

****Option 2: FJD Base Station (\$1,800 one-time)****

Best if you're in an area with no cell signal, or if you want zero recurring costs.

Set it up on your highest point, covers about a 10-mile radius.

****Option 3: WAAS/SBAS (Free, built-in)****

Already included with every AT2. Gives you 6-8 inch (15cm) accuracy. Fine for spraying and fertilizing, but most farmers prefer RTK for planting.

Most of our customers go with NTRIP — it's the simplest and most cost-effective. Want me to check NTRIP coverage in your area?

Conversation 2: Price Objection / Competitive Comparison

FARMER: I'm looking at the Deere StarFire 7000 + AutoTrac for my 8R. Why would I go aftermarket?

AI: Smart to compare options. Here's the honest breakdown:

****John Deere AutoTrac + StarFire 7000:****

- Hardware: ~\$12,000-\$18,000
- AutoTrac activation: \$3,000-\$5,000
- StarFire subscription: \$1,200-\$2,400/year
- Total Year 1: \$16,200-\$25,400
- Total 5-Year: \$22,000-\$35,000

****FJD AT2 with RTK:****

- AT2 Kit: \$5,495
- RTK (NTRIP): \$300/year
- Total Year 1: \$5,795
- Total 5-Year: \$6,695

****What you get with FJD that Deere doesn't offer:****

- Move it between ANY tractor (Deere locks to one machine)
- No dealer required for activation or updates
- No recurring "activation" fees
- 2.5cm RTK accuracy (same as StarFire RTK)
- ISOBUS compatible (AT2)

****What Deere does better:****

- Seamless integration with Deere displays (if you're already in that ecosystem)
- Deere dealer support network
- Section control integration (though FJD's ISOBUS is catching up)

The bottom line: If you're running all Deere equipment and want one-vendor simplicity,

AutoTrac is great – but expensive. If you want the same accuracy at 1/4 the price and the flexibility to use it on multiple machines, FJD is the move.

Want me to build a side-by-side ROI comparison for your specific operation?

Conversation 3: Installation Anxiety

FARMER: I'm not super techy. How hard is this to install? I've got a 1995 JD 7800.

AI: Totally understand the concern. The good news: the JD 7800 is one of our most popular installs. Here's what it actually involves:

****The install is basically 4 steps:****

1. Mount the GNSS antenna on the cab roof (2 bolts + magnetic base option)
2. Attach the electronic steering wheel to your existing steering column (slides on,
4 bolts)
3. Mount the tablet/terminal on the dash (suction cup or RAM mount)
4. Run the cables and plug everything in (color-coded connectors)

****Time:**** 2-3 hours for the 7800 specifically

****Tools needed:**** Basic socket set, drill (for antenna mount if not using magnetic)

****Difficulty:**** If you can change your own oil, you can do this.

We also have a full install video for the 7000 series: [\[link\]](#)

And if you hit a snag, we offer:

- ****Free FaceTime/video call support**** during your install
- ****\$500 White Glove service**** – we pre-configure your tablet with your farm, field boundaries, and A-B lines before we ship. You plug in and go.

Want me to add the White Glove option to your quote?

FARMER: What if I can't get it working?

AI: We've got you covered with our Guaranteed to Fit promise:

If you follow the install guide and can't get it working:

1. We'll troubleshoot live with you via video call (free)
2. If that doesn't solve it, we'll send a replacement unit (free)
3. If it's genuinely not compatible with your tractor, full refund + we pay return shipping

No one else in the aftermarket autosteer space offers this. We can do it because the 7800 is a verified-compatible model and we've done hundreds of these installs.

Conversation 4: Upsell / RTK Bundle

FARMER: I just want the basic kit. How much?

AI: For the basic FJD AT2 kit, you're looking at \$5,495 – that includes the electronic steering wheel, GNSS antenna, control terminal (10" tablet), IMU, all cables, and mounting hardware. Plus 2-year warranty and free shipping.

Out of the box, it runs on WAAS (free satellite correction) which gives you about 6" pass-to-pass accuracy. That's plenty for spraying and general fieldwork.

Quick question though – what are you mainly using it for?

FARMER: Mostly planting corn and beans.

AI: For planting, I'd really recommend upgrading to RTK accuracy. Here's why:

At 6" accuracy (WAAS), you'll still see some overlap and gaps in your rows. That means:

- Wasted seed in overlap zones (~3-5% overapplication)
- Gaps that reduce yield
- Visible crooked rows (if that bugs you 😊)

At 1" accuracy (RTK), your rows are dead straight and perfectly spaced. The seed savings alone typically pay for RTK in one season on 500+ acres.

****RTK upgrade options:****

- NTRIP subscription: +\$300/year (easiest, most popular)
- FJD base station: +\$1,800 one-time (no recurring cost)

For a 1,000-acre corn/bean operation, RTK typically saves \$8-\$15/acre in reduced input overlap. That's \$8,000-\$15,000/year in savings from a \$300/year subscription.

Want me to run the exact numbers for your acreage?

Handoff Triggers (AI → Human)

The AI should handle 85–90% of conversations autonomously. It hands off to a human when:

Immediate handoff (route to human queue): – Customer explicitly says “I want to talk to a person” or “let me speak to someone” – Order issue or complaint about existing purchase – Warranty claim or return request – Technical issue during active installation (farmer is in the cab, stuck) – Customer mentions legal issue or threatens action

Warm handoff (AI summarizes, human continues): - Conversation exceeds 10 exchanges without resolution - AI confidence drops below threshold (can't find answer in knowledge base) - Customer asks about bulk/fleet pricing (5+ units) - Customer is a dealer or reseller (different pricing structure) - Custom integration question (e.g., connecting to existing ISO implement) - Compatibility result is “unknown” — needs manual verification

Scheduled callback (capture info, human follows up): - After-hours inquiry that needs human expertise - Customer wants a live demo or farm visit - Financing discussion for large orders - Customer in an area where NTRIP coverage is uncertain

Stage 4 — Conversion: Purchase Flow

Goal: Make buying as frictionless as possible once confidence is established.

E-Commerce Platform

Recommendation: Shopify Plus (or standard Shopify with apps)

CONSIDERATION	SHOPIFY	CUSTOM (NEXT.JS + STRIPE)
Time to launch	1-2 weeks	4-8 weeks
Monthly cost	\$39-\$399/month	Hosting only (~\$20/month)
Transaction fees	2.4-2.9% + \$0.30	2.9% + \$0.30 (Stripe)
Customization	Good (Liquid templates + apps)	Unlimited
Maintenance	Shopify handles updates	You handle everything
Financing integration	Native (Shop Pay Installments)	Manual (Affirm SDK)
Inventory management	Built-in	Build or integrate

Verdict: Start with Shopify. Migrate to custom only if Shopify's limitations become bottlenecks (unlikely for this product category).

Note: ELL already has a Shopify store at store.elmlakelabs.com — build on this foundation.

Product Configuration & Bundles

Core Products:

PRODUCT	SKU	PRICE	DESCRIPTION
FJD AT2 Auto Steer System	ELL-AT2-KIT	\$5,495	Complete kit: electronic steering wheel, GNSS antenna, terminal, IMU, cables, mounting
FJD AT1 Autosteering Kit	ELL-AT1-KIT	\$3,995	Budget option: GNSS receiver + electronic steering wheel, no terminal (use phone/tablet)
FJD AT2 Max	ELL-AT2MAX-KIT	\$7,495	Premium: all-in-one design, built-in 4G, enhanced IMU

Brackets & Adapters (add-ons, shown after compatibility tool):

PRODUCT	SKU	PRICE
Universal Bracket Kit A	ELL-BRKT-A	\$149
John Deere Bracket Kit B	ELL-BRKT-JD	\$189
Case IH Bracket Kit C	ELL-BRKT-CASE	\$189
New Holland Bracket Kit D	ELL-BRKT-NH	\$179
Kubota Bracket Kit E	ELL-BRKT-KUB	\$169
Hydraulic Steering Adapter	ELL-HYD-ADAPT	\$249

RTK Correction Options:

PRODUCT	SKU	PRICE	TYPE
NTRIP Annual Subscription	ELL-NTRIP-12	\$299/year	Recurring
NTRIP Monthly Subscription	ELL-NTRIP-1	\$39/month	Recurring
FJD RTK Base Station	ELL-BASE-RTK	\$1,799	One-time

Bundles (Recommended — higher AOV):

BUNDLE	CONTENTS	PRICE	SAVINGS
Starter Bundle	AT2 + Bracket + NTRIP 1-year	\$5,895	Save \$88
Pro Bundle	AT2 + Bracket + Base Station + White Glove	\$7,995	Save \$288
Fleet Kit (3-pack)	3x AT2 + 3x Bracket + NTRIP 1-year each	\$16,495	Save \$890
Max Bundle	AT2 Max + Bracket + NTRIP 1-year + White Glove	\$8,395	Save \$388

Pricing Strategy

- **Transparent pricing** — no “call for quote” anywhere on the site. This is a core differentiator.
- **Bundle incentives** — bundles are 5-10% cheaper than à la carte. Push toward bundles via the compatibility tool (“We recommend the Starter Bundle for your tractor — saves you \$88”).
- **Seasonal promotions:**
 - **January-March (pre-season):** 10% off bundles, free NTRIP for first year
 - **April-June (planting season):** Standard pricing, fast shipping emphasized
 - **July-September (slow season):** Demo units at 15% off, trade-in programs
 - **October-December (harvest/off-season):** Black Friday bundles, “get ready for spring” messaging

“Guaranteed to Fit” Offer

This is the conversion linchpin. Formalize it as a program:

“Guaranteed to Fit” Promise: 1. Use the compatibility tool to confirm your tractor → receive a **Compatibility Certificate** (emailed PDF with tractor details, recommended kit, and guarantee terms) 2. Purchase the recommended kit 3. Follow the installation guide / watch the video 4. If the kit doesn’t fit or work on your confirmed tractor: – Step 1: Free live video troubleshooting (same day, during business hours) – Step 2: If unresolved, we ship a replacement unit at no cost (next business day) – Step 3: If it’s genuinely incompatible (our database was wrong), **full refund + we pay all shipping + \$100 credit toward your next purchase** 5. Standard 30-day return window for any other reason (buyer pays return shipping)

Terms & Risk Mitigation: – Only applies to tractors confirmed “Compatible” (green check) by the tool – Doesn’t cover damage from incorrect installation (but we’ll help them fix it) – Logged in CRM — every guarantee claim is reviewed and the compatibility database is updated

White-Glove Pre-Configuration Upsell (\$500)

What's included in the \$500 service: - Terminal (tablet) is unboxed, powered on, and fully configured before shipping - Customer's farm boundaries pre-loaded (from satellite/USDA data or customer-provided shapefiles) - A-B lines set up for primary fields - RTK/NTRIP connection pre-configured and tested - Firmware updated to latest version - Personalized 15-minute video walk-through recorded for the customer - Unit ships in "plug and play" state — mount hardware, plug in, start driving

Positioning: "Skip the setup. Start farming." **Margin:** High — \$500 for ~1.5 hours of work. Should be 70%+ margin. **Target attach rate:** 30-40% of orders

Financing Options

Farmers are accustomed to financing equipment. Offer multiple paths:

Option 1: Shop Pay Installments / Affirm (integrated with Shopify) - 4 interest-free payments of \$1,374 (for AT2 at \$5,495) - Or 6/12 month financing at 0-15% APR based on credit - Farmer applies at checkout — instant approval in most cases - Cost to ELL: 2-6% of transaction (Affirm merchant fee)

Option 2: Lease-to-Own Partnership - Partner with an ag equipment financing company (e.g., AgDirect, Farm Plan, Stearns Bank) - 12-36 month terms - Particularly attractive for fleet purchases - Cost to ELL: Referral structure, typically 1-3% origination fee

Option 3: Farm Credit / FSA Loans - Provide documentation that the FJD system qualifies as precision ag equipment under USDA programs - Some states offer precision ag grants/cost-share programs — create a list of active programs by state - No direct cost to ELL, significant conversion driver for budget-conscious operations

Stage 5 — Post-Sale: Retention & Referral

Goal: Turn every buyer into a promoter. In agriculture, one satisfied customer at the co-op can sell 5 more units.

Installation Support

Tiered support system:

SUPPORT LEVEL	AVAILABILITY	RESPONSE TIME	METHOD
AI Chatbot	24/7	Instant	Website/SMS
Video Library	24/7	Self-service	YouTube + site
Live Chat (human)	8 AM - 8 PM CT	< 15 min	Website
Video Call Support	8 AM - 6 PM CT	< 2 hours	FaceTime/Zoom
Emergency (planting season)	6 AM - 10 PM CT	< 30 min	Phone/SMS

Install day support flow: 1. Day before delivery: SMS/email — “Your FJD AT2 arrives tomorrow. Watch this 3-minute prep video so you’re ready.” 2. Day of delivery: SMS — “Your kit has been delivered! When you’re ready to install, reply START and we’ll be on standby.” 3. During install: AI chatbot available with troubleshooting mode activated. Any question routes to priority queue. 4. Post-install: SMS — “How’d it go? Reply with your accuracy screenshot and we’ll make sure everything looks right.”

Follow-Up Sequence (Automated Email/SMS)

DAY	CHANNEL	MESSAGE	GOAL
0	Email	Order confirmation + tracking + install prep checklist	Set expectations
1	Email	"Meet your autosteer" — feature overview, app download links	Pre-educate
3	SMS	"Your FJD AT2 arrives today/tomorrow! Prep video: [link]"	Reduce install anxiety
5	SMS	"How's the install going? Reply HELP if you need us."	Catch problems early
7	Email	"First week tips: calibration, A-B lines, RTK optimization"	Drive usage
14	Email	"How many acres have you run? Here's how to check your stats."	Engagement
21	SMS	"Quick question: would you recommend FJD to a friend? Reply 1-10"	NPS + referral trigger
30	Email	"Your first month with FJD! Here's your overlap savings report."	ROI reinforcement
45	Email	"Know someone who needs autosteer? Share your \$200 referral code."	Referral program
60	Email	"Leave a review, get a free FJD hat."	Review collection
90	Email	"Season update: firmware updates, new features, prep for next season."	Retention
180	Email	"Fleet upgrade: add autosteer to your second machine at 15% off."	Upsell
365	Email	"Happy anniversary! Renew your NTRIP subscription and save 10%."	Renewal

Referral Program

"Neighbor's Discount" Program: - Every customer gets a unique referral code - **Referrer gets:** \$200 credit (toward NTRIP subscription, accessories, or next purchase) - **Referred farmer gets:** \$200 off their first purchase - Codes are shareable via SMS, email, or printed card included in every shipment - Track referrals in CRM — some customers will become "super referrers" - Top referrers (5+ referrals) get "Ambassador" status: early access to new products, invitation to advisory board, deeper discounts

Physical referral cards: - Include 3 printed referral cards in every shipment - Card says: "[Customer Name] thinks you should check this out. \$200 off your FJD autosteer at [elmlakelabs.com/ref/\[CODE\]](https://elmlakelabs.com/ref/[CODE])" - Simple, physical, shareable at the co-op or in the cab

Review & Testimonial Collection

Multi-channel approach:

1. **Automated review request (Day 60):** Email with direct links to leave review on Google, Facebook, and the ELL website
 2. **Incentivized:** “Leave a review on Google and we’ll send you a free FJD hat” (cost: ~\$8 for hat + shipping)
 3. **Video testimonials:** Offer \$50 store credit for a 2-minute video testimonial filmed in their cab/field. These become YouTube content and ad creative.
 4. **Case studies:** For high-value or unique installs, conduct a 20-minute phone interview and write a full case study. Published on blog with farmer’s permission.
 5. **Social proof:** Aggregate reviews across Google, Facebook, Trustpilot, and display count on site (“287 farmers and counting”)
-

4. Recommended Tool Stack (with Pricing)

Complete Stack — Estimated Monthly Cost: \$400-\$1,200/month

CATEGORY	TOOL	MONTHLY COST	WHY THIS ONE
Website/CMS	Next.js + Vercel (headless) OR Shopify Storefront	\$0-\$20 (Vercel) or \$0 (Shopify)	Fast, SEO-optimized, customizable for compatibility tool
E-commerce	Shopify (\$39-\$399/mo)	\$79/month (Basic)	Already in use at store.elmlakelabs.com, native financing, inventory management
AI Chatbot	Intercom Fin (Phase 1) → Custom OpenAI (Phase 2)	\$130/month → \$50/month	Best AI quality to start, migrate to cheaper custom when volume grows
Email Automation	Klaviyo	\$20-\$60/month	Best Shopify integration, powerful segmentation, SMS included
SMS	Klaviyo (bundled) or Twilio	\$0-\$50/month	Farmers prefer SMS for time-sensitive comms, 90%+ open rate
CRM	HubSpot Free → Starter (\$20/mo)	\$0-\$20/month	Free tier is sufficient to start, integrates with everything
Analytics	PostHog (free tier) + Google Analytics 4	\$0/month	PostHog for product analytics (funnel tracking), GA4 for traffic
Video Hosting	YouTube (free) + Wistia (\$24/mo for gated videos)	\$0-\$24/month	YouTube for public content, Wistia for gated install videos with lead capture
Ad Management	Google Ads + Meta Ads Manager	Platform cost only	Direct management, no agency markup initially
Compatibility Tool	Custom-built (Supabase + Next.js)	\$0-\$25/month (Supabase)	Database + API for tractor lookups, free tier handles initial traffic
Reviews	Judge.me (\$15/mo) or Stamped (\$23/mo)	\$15-\$23/month	Shopify-native review collection with photo/video support
Live Video Support	Zoom (\$13/mo) or FaceTime (free)	\$0-\$13/month	For installation support calls
Design	Canva Pro (\$13/mo)	\$13/month	Thumbnails, social graphics, print materials
Referral Program	ReferralCandy (\$59/mo) or custom	\$0-\$59/month	Automated referral tracking and payouts

Total Monthly Stack Cost: - **Minimum (Phase 1):** ~\$400/month - **Growth (Phase 2):** ~\$700/month - **Scale (Phase 3):** ~\$1,200/month

Note: This excludes ad spend, which is separate and detailed in the Paid Ads section.

5. Content That Converts Farmers

5.1 ROI Calculator Specification

Location: Standalone page + embedded widget on product pages **URL:** elmlakelabs.com/roi-calculator

Input Fields:

FIELD	TYPE	OPTIONS/RANGE	DEFAULT
Total acres farmed	Number input	50-50,000	500
Primary crop	Dropdown	Corn, Soybeans, Wheat, Cotton, Rice, Hay/Forage, Vegetables, Mixed/Other	Corn
Current overlap %	Slider	3-15%	8%
Seed cost per acre	Currency input	Auto-filled based on crop	Corn: \$120
Fertilizer cost per acre	Currency input	Auto-filled based on crop	Corn: \$90
Chemical cost per acre	Currency input	Auto-filled based on crop	Corn: \$45
Fuel cost per gallon	Currency input	\$2.00-\$6.00	\$3.50
Hours farmed per season	Number input	100-5,000	600
Current autosteer system	Dropdown	None, Lightbar/manual guidance, Deere AutoTrac, Trimble, Raven, Other aftermarket	None
Number of tractors	Number input	1-20	1

Calculations (Backend):

```
// Core savings calculations
const overlapReduction = currentOverlap - 0.02; // RTK reduces to ~2% overlap
const acresSaved = totalAcres * (overlapReduction / 100);

const seedSavings = acresSaved * seedCostPerAcre;
const fertilizerSavings = acresSaved * fertilizerCostPerAcre;
const chemicalSavings = acresSaved * chemicalCostPerAcre;
const fuelSavings = acresSaved * (fuelCostPerGallon * 0.8); // ~0.8 gal/acre avg

const totalInputSavings = seedSavings + fertilizerSavings + chemicalSavings +
fuelSavings;

// Labor savings (autosteer reduces fatigue, extends daily hours)
const laborHoursSaved = hoursFarmedPerSeason * 0.15; // 15% efficiency gain
const laborSavings = laborHoursSaved * 25; // $25/hour imputed labor cost

// Total annual savings
const totalAnnualSavings = totalInputSavings + laborSavings;

// System cost
const systemCost = 5495 + 189 + 299; // AT2 + avg bracket + NTRIP year 1
const paybackSeasons = systemCost / totalAnnualSavings;

// 5-year ROI
const fiveYearSavings = (totalAnnualSavings * 5) - systemCost - (299 * 4); //
subtract NTRIP renewals
const fiveYearROI = (fiveYearSavings / systemCost) * 100;
```

Output Display:

OUTPUT	EXAMPLE VALUE	FORMAT
Annual input savings	\$4,080	Large, green number
Annual labor savings	\$2,250	
Total annual savings	\$6,330	Biggest number on page
System investment	\$5,983	
Payback period	0.95 seasons	Highlighted — “Pays for itself in less than 1 season!”
5-year net savings	\$24,454	
5-year ROI	409%	
Savings per acre	\$12.66/acre	

CTA after results: “See exactly which kit fits your tractor →” (links to compatibility tool) **Lead capture:** “Email me this ROI report” (generates PDF with their farm’s specific numbers)

5.2 Comparison Charts

Create a comprehensive, honest comparison page. Farmers respect transparency — don’t hide weaknesses.

FJD AT2 vs. John Deere AutoTrac vs. Trimble Autopilot vs. Raven Viper 4+

FEATURE	FJD AT2	DEERE AUTOTRAC	TRIMBLE AUTOPILOT	RAVEN VIPER 4+
RTK Accuracy	2.5cm (1")	2.5cm (1")	2.5cm (1")	2.5cm (1")
WAAS Accuracy	15cm (6")	15cm (6")	15cm (6")	15cm (6")
System Price	\$5,495	\$15,000-\$25,000	\$12,000-\$20,000	\$8,000-\$14,000
Annual Subscription	\$299 (NTRIP)	\$1,200-\$2,400	\$800-\$1,500	\$600-\$1,200
5-Year Total Cost	\$6,691	\$21,000-\$35,000	\$15,200-\$26,000	\$10,400-\$18,800
Tractor Lock-In	No (move between any tractor)	Yes (one machine)	Partial	Partial
Brand Compatibility	Universal (50+ brands)	Deere only	Most brands	Most brands
ISOBUS Support	Yes (AT2)	Yes	Yes	Yes
Install	DIY (2-4 hours)	Dealer required	Dealer recommended	Dealer recommended
Display	10" included tablet	Separate purchase (\$3-5K)	Separate purchase (\$2-4K)	Included 7"
Warranty	2 years	2 years	2 years	2 years
Dealer Support	Growing network + remote	Extensive	Extensive	Moderate

Key takeaway for farmers (displayed prominently):

“For the same RTK accuracy, FJD AT2 costs 60-75% less than the OEM alternatives. The trade-off is a smaller dealer network — which Elm Lake Labs bridges with remote support, video install guides, and the Guaranteed to Fit program.”

5.3 Video Content Strategy

Content pillars (4 types, rotated weekly):

PILLAR	FREQUENCY	EXAMPLE	PURPOSE
Install videos	2/month	"FJD AT2 on JD 7810: Complete Install"	SEO + purchase confidence
Field demos	2/month	"Night Planting with FJD: Zero Mistakes"	Trust building
ROI / education	2/month	"Is Aftermarket Autosteer Worth It? The Math."	Awareness
Customer stories	2/month	"How Jake Saves \$15K/Year on His 2,000 Acres"	Social proof

Production notes: - Film on real farms with real tractors (not stock footage) - Show imperfections — a tractor with mud on it is more trustworthy than a shiny showroom - Include GPS accuracy screenshots in every field demo - Always show the tractor make/model prominently — it's SEO gold

5.4 Blog/SEO Content Calendar (12 Months)

MONTH	BLOG POST 1	BLOG POST 2	BLOG POST 3
1	"The Complete Guide to Aftermarket Autosteer in 2026" (pillar page, 3000+ words)	"FJD AT2 Review: 500 Hours Later"	"RTK vs WAAS: Which Accuracy Do You Actually Need?"
2	"Autosteer for John Deere: Every Compatible Model" (model-specific pillar)	"How to Set Up NTRIP on Your FJD System"	"5 Things I Wish I Knew Before Installing Autosteer"
3	"Autosteer for Case IH: Complete Compatibility Guide"	"Pre-Season Autosteer Checklist"	"FJD vs Trimble: Honest Comparison from a Farmer's Perspective"
4	"Spring Planting with Autosteer: Maximize Every Seed"	"Autosteer for New Holland: Compatibility Guide"	"Understanding FJD Connect: Cloud Platform Walkthrough"
5	"Reducing Input Costs with Precision Steering"	"Autosteer for Kubota: What You Need to Know"	"Base Station vs NTRIP: Which RTK Setup is Right?"
6	"Mid-Season Autosteer Maintenance Tips"	"How to Move FJD Autosteer Between Tractors"	"Customer Spotlight: 3 Farms, 3 Different Setups"
7	"Summer Spraying with Autosteer: Zero Overlap Results"	"ISOBUS and FJD AT2: Section Control Guide"	"The True Cost of Precision Ag: 5-Year Analysis"
8	"Autosteer for Vintage Tractors (Pre-2000)"	"FJD Firmware Update Guide"	"Harvest Prep: Optimizing Autosteer for Combines"
9	"Harvest Season: Using Autosteer for Grain Carts"	"State-by-State Precision Ag Grant Programs"	"Customer Spotlight: Fleet Installation (5 Tractors)"
10	"Post-Harvest: Off-Season Autosteer Maintenance"	"Autosteer for AGCO/Massey Ferguson: Full Guide"	"2026 Autosteer Technology Roundup"
11	"Black Friday Precision Ag Deals"	"Planning Your 2027 Precision Ag Investment"	"FJD AT2 Max Review: Worth the Upgrade?"
12	"Year in Review: Top Autosteer Installs of 2026"	"Tax Season: Section 179 and Precision Ag Equipment"	"Getting Ready for Spring: Pre-Order Guide"

Target: 3 posts/month, 1,000-3,000 words each. Prioritize model-specific compatibility guides (these are the highest-converting SEO pages).

6. Budget & Timeline

Phase 1: MVP Funnel (Months 1-2)

Goal: Launch the core funnel — website, compatibility tool, basic ad spend, initial content.

ITEM	ONE-TIME COST	MONTHLY COST	NOTES
Website redesign (Shopify theme + custom pages)	\$2,000-\$5,000	\$79/month	Use a premium Shopify theme, customize for ag
Compatibility tool development	\$3,000-\$8,000	\$25/month (Supabase)	Custom Next.js widget, initial database of top 200 tractor models
Initial content creation (10 blog posts + 5 videos)	\$2,000-\$4,000	—	Mix of written and video, focus on top tractor models
Shopify apps & integrations	\$500	\$150/month	Klaviyo, Judge.me, referral plugin
Google Ads setup + first month	\$500 (setup)	\$2,000/month	Start conservative, brand defense + high-intent keywords
Facebook Ads setup + first month	\$300 (setup)	\$1,000/month	Awareness campaigns, retargeting pixel installed
Analytics & tracking setup	\$500	—	PostHog, GA4, conversion tracking, UTM framework
Legal (terms, guarantee policy, privacy)	\$500-\$1,000	—	Attorney review of Guaranteed to Fit terms

Phase 1 Total: - One-time: \$9,300-\$19,300 - Monthly recurring: \$3,254/month - **Budget:** ~\$15,000 launch + \$3,300/month

Phase 2: AI Chatbot & Scale (Months 3-4)

Goal: Add AI chatbot, ramp up content and ads, optimize based on Phase 1 data.

ITEM	ONE-TIME COST	MONTHLY COST	NOTES
Intercom Fin setup + training	\$500-\$1,000	\$130/month	Ingest all manuals, configure handoff rules
Knowledge base creation	\$1,000-\$2,000	—	Organize all PDFs, create FAQ database
White Glove service setup	\$500	—	Process documentation, fulfillment workflow
Content creation (ongoing)	—	\$1,500/month	3 blog posts + 2 videos/month, freelancer or in-house
Increased ad spend	—	\$5,000/month	Scale winning campaigns from Phase 1
YouTube channel optimization	\$500	—	Thumbnails, descriptions, playlists, end screens
Referral program launch	\$300	\$59/month	ReferralCandy or custom, print referral cards
Compatibility database expansion	\$1,000	—	Add 200 more tractor models (total: 400)

Phase 2 Total: - One-time: \$3,800-\$5,300 - Monthly recurring: \$6,689/month (includes Phase 1 recurring) - **Budget: ~\$5,000 launch + \$6,700/month**

Phase 3: Optimization & Scale (Months 5-6)

Goal: Optimize conversion rates, expand content, consider custom chatbot migration.

ITEM	ONE-TIME COST	MONTHLY COST	NOTES
A/B testing program	\$500	\$50/month	Test compatibility tool flow, CTAs, pricing display
Custom chatbot development (if needed)	\$5,000-\$10,000	\$50/month	OpenAI Assistant API + custom widget
Video content scaling	—	\$2,000/month	4+ videos/month, customer testimonials
Increased ad spend	—	\$8,500/month	Scale to profitable campaigns, kill underperformers
Compatibility database — full	\$1,500	—	Expand to 800+ models, add photo verification
Partnerships (NTRIP providers, financing)	\$500	—	Negotiate better NTRIP rates, set up AgDirect
Trade show presence	\$2,000-\$5,000	—	1-2 regional farm shows with demo unit

Phase 3 Total: - One-time: \$9,500-\$17,500 - Monthly recurring: \$10,600/month+ (includes all phases) - **Budget:** ~\$12,000 launch + \$10,600/month

6-Month Budget Summary

	ONE-TIME	MONTHLY	6-MONTH TOTAL
Phase 1 (Mo 1-2)	\$15,000	\$3,300 × 2	\$21,600
Phase 2 (Mo 3-4)	\$5,000	\$6,700 × 2	\$18,400
Phase 3 (Mo 5-6)	\$12,000	\$10,600 × 2	\$33,200
TOTAL	\$32,000	—	\$73,200

Break-even analysis: At an average order value of \$6,000 and 25% gross margin (\$1,500 GP per sale), ELL needs to sell **49 units** in 6 months (or ~8/month) to break even on the \$73,200 investment. At the conservative estimate of 15 units/month by month 6, this investment pays back within the first 6 months.

7. KPIs & Metrics

Funnel Metrics by Stage

Stage 1 — Awareness

METRIC	TARGET (MONTH 3)	TARGET (MONTH 6)	HOW TO TRACK
Monthly website visitors	3,000	8,000	GA4
YouTube channel subscribers	500	2,000	YouTube Analytics
YouTube monthly views	10,000	40,000	YouTube Analytics
Social media followers (all platforms)	1,000	3,000	Native analytics
Organic search impressions	50,000	200,000	Google Search Console
Cost per click (blended ads)	\$2.50	\$1.80	Google/Meta Ads

Stage 2 — Engagement

METRIC	TARGET (MONTH 3)	TARGET (MONTH 6)	HOW TO TRACK
Compatibility tool starts	300/month	1,000/month	PostHog
Compatibility tool completions	200/month	700/month	PostHog
Tool completion rate	65%	70%	PostHog
Email captures from tool	80/month	350/month	Klaviyo
Tool → product page rate	40%	50%	PostHog

Stage 3 — Qualification

METRIC	TARGET (MONTH 3)	TARGET (MONTH 6)	HOW TO TRACK
AI chatbot conversations	100/month	500/month	Intercom
AI resolution rate (no human needed)	75%	85%	Intercom
Chatbot → product page rate	30%	40%	Intercom + PostHog
Human handoff rate	25%	15%	Intercom
Average chat-to-purchase time	7 days	4 days	CRM

Stage 4 — Conversion

METRIC	TARGET (MONTH 3)	TARGET (MONTH 6)	HOW TO TRACK
Monthly orders	8	25	Shopify
Conversion rate (visitor → purchase)	0.3%	0.4%	Shopify + GA4
Average order value	\$5,800	\$6,200	Shopify
Bundle attach rate	40%	55%	Shopify
White Glove attach rate	20%	35%	Shopify
Cart abandonment rate	75%	65%	Shopify
Financing utilization	15%	25%	Affirm/Shop Pay
Customer acquisition cost (blended)	\$250	\$175	Ad spend ÷ new customers

Stage 5 — Retention & Referral

METRIC	TARGET (MONTH 3)	TARGET (MONTH 6)	HOW TO TRACK
NPS score	50	65	Post-purchase survey
Google review rating	4.5+ stars	4.7+ stars	Google Business
Review collection rate	20%	35%	Judge.me
Referral program participation	10% of customers	20% of customers	ReferralCandy
Referral conversion rate	15%	25%	ReferralCandy
NTRIP renewal rate	—	80%	Shopify subscriptions
Repeat purchase rate (accessories, second unit)	5%	10%	Shopify
Guarantee claims	<5%	<3%	CRM
Return rate	<5%	<3%	Shopify

Benchmarks for Ag E-Commerce

Industry context for these targets:

METRIC	AG E-COMMERCE AVERAGE	ELL TARGET	NOTES
Website conversion rate	0.5-1.5%	0.3-0.5%	Lower for high-ticket; compensated by higher AOV
Cart abandonment rate	70-80%	65-75%	Normal for \$5K+ purchases; retargeting critical
Email open rate	25-35%	30-40%	Farmers are responsive to relevant email
SMS open rate	90%+	90%+	Highest-performing channel for ag
Customer acquisition cost	\$100-\$500	\$150-\$250	Varies by product price point
Repeat purchase rate	5-15%	10-15%	Fleet opportunities drive this higher
Referral rate	5-10%	15-20%	Agriculture has highest referral potential of any industry
NPS	30-50	50-65	Autosteer has high satisfaction when it works as promised

Reporting Cadence

REPORT	FREQUENCY	AUDIENCE	CONTENT
Daily dashboard	Daily	John	Orders, revenue, ad spend, tool completions
Weekly funnel review	Weekly	Team	Full funnel metrics, week-over-week trends, top-performing content
Monthly deep dive	Monthly	John + advisors	CAC analysis, channel ROI, content performance, competitive landscape updates
Quarterly strategy	Quarterly	Leadership	Goal progress, budget adjustments, roadmap updates, new opportunities

Appendix A: Quick-Start Checklist

Week 1

- [] Audit and update existing Shopify store (store.elmlakelabs.com)

- [] Install analytics (PostHog, GA4, conversion pixels)
- [] Set up Klaviyo account and import existing customer list
- [] Begin compatibility database — enter top 50 tractor models
- [] Create Google Ads account and install tracking
- [] Create Meta Ads account and install pixel

Week 2

- [] Design and build compatibility tool prototype
- [] Write first 3 blog posts (pillar page + 2 model-specific)
- [] Film first 2 YouTube videos (install + cab cam demo)
- [] Set up Intercom account and begin knowledge base import
- [] Design “Guaranteed to Fit” program terms and landing page

Week 3

- [] Launch compatibility tool (beta — top 50 models)
- [] Publish first blog posts and YouTube videos
- [] Launch Google Ads Campaign 1 (brand defense) and Campaign 3 (model-specific)
- [] Set up automated email flows in Klaviyo (post-purchase sequence)
- [] Begin Facebook organic posting cadence

Week 4

- [] Launch AI chatbot (Intercom Fin) with initial knowledge base
- [] Launch Facebook/Instagram awareness ads
- [] Expand compatibility database to 100 models
- [] Publish 2 more blog posts
- [] Set up referral program infrastructure

Month 2

- [] Launch Google Ads Campaign 2 (high intent)

- [] Launch YouTube ads (pre-roll on competitor content)
- [] Expand compatibility database to 200 models
- [] Publish 6 blog posts + 4 YouTube videos
- [] Launch White Glove pre-configuration service
- [] First review collection campaign

Appendix B: Competitive Intelligence — Ongoing Monitoring

Track these competitors monthly:

COMPETITOR	WHAT TO MONITOR	WHY
FJD Dynamics (direct)	Pricing changes, new products, firmware updates	Must stay aligned with manufacturer
Emerald Bay Ag Dynamics	Pricing, promotions, new services	Largest FJD dealer competitor in North America
Global GPS Systems	Pricing strategy, new products added	Wholesale competitor
AgriSpray Drones	HD408 pricing, market positioning	Budget segment competitor
John Deere (StarFire)	Pricing changes, subscription model updates	The “default” that farmers compare against
Trimble Agriculture	New products, dealer network expansion	Second-largest OEM competitor
AgOpenGPS (open source)	Community growth, new features	Free alternative that tech-savvy farmers consider

This document is a living playbook. Update it monthly as market conditions, product availability, and funnel performance data evolve.

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