



Astraeus Analytics: From Data to Decision Intelligence

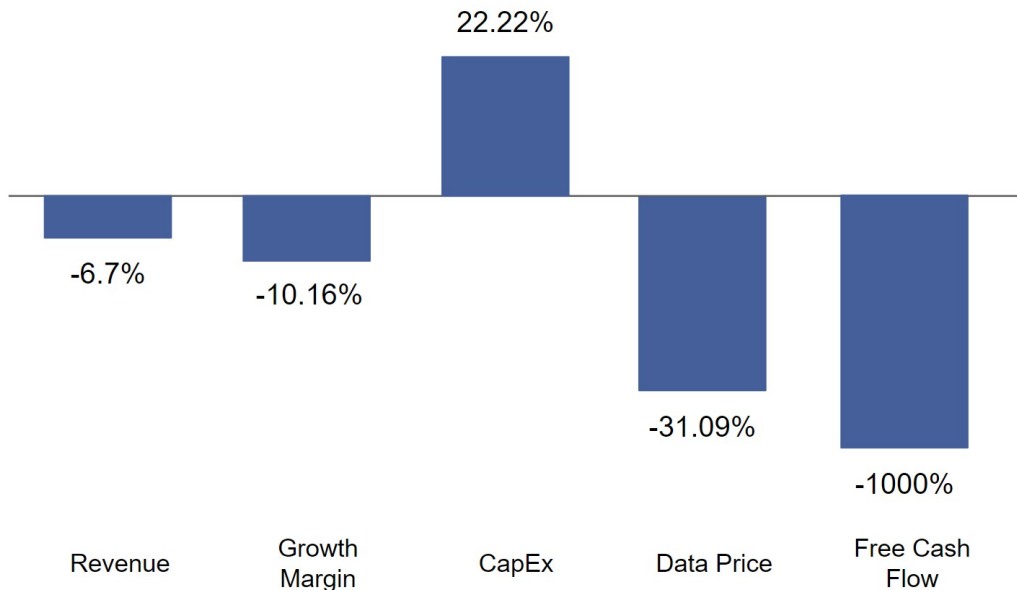
Pivot from a "hardware-first" imagery provider to an "AI-first" SaaS platform specializing in agricultural lending and insurance.

Team JJJAS

Problem Statement

Due to the increasing demand for insights and surging competition on satellites, Astraeus's hardware-centric business model is no longer economically viable.

Percentage Changes in Key Financial Metrics from 2024 to 2025



Key Takeaways:

Commoditization of Raw Data: cannot compete with mass-scale providers.

The Funding Gap Crisis: With -\$45M FCF, the company will face a liquidity crisis if it continues to build its own hardware.

Shifting Customer Demand: Buyers no longer want data; they want "Decision Intelligence" that integrates directly into their existing workflows.

Operational Stagnation: Zero internal AI capabilities to meet modern market standards

Market Opportunity

The \$625B agricultural lending market faces a critical data gap that Astraeus is uniquely positioned to fill with automated, verifiable risk intelligence.

Market Need

Farm debt is at record levels (\$624.7B) in 2026, increasing the cost of **default** for banks.

Lenders rely on **self-reported data** and **manual inspections** that take weeks.

Climate volatility makes traditional actuarial tables obsolete for risk.

Technology Gap

Competitors sell **raw imagery** (pixels) with optical type satellites, not integrated financial answers.

Existing AI tools focus on **agronomy** (irrigation) rather than credit risk.

No standard for 'legal proof' exists to verify claims for **risk-averse** insurers.

Astraeus Opportunity

Astraeus will provide the '**audit-ready**' layer, automating the entire loan lifecycle.

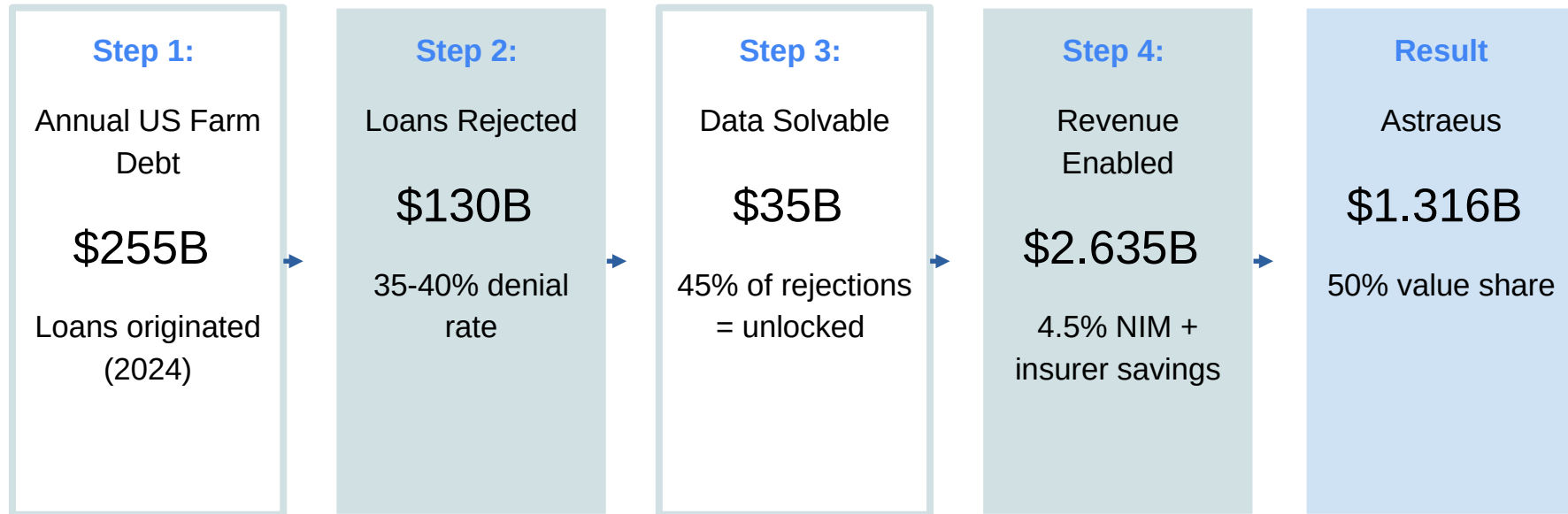
Proprietary SAR sensors provide day/night visibility that competitors lack.

First-mover in '**legal proof**' timestamps, creating **high switching costs** for banks.

Strategic Goal: Integrate Astraeus risk-scoring APIs into the U.S. Farm Credit System, establishing 'legal proof' timestamp as the industry standard for agricultural loan compliance

Market Sizing

By unlocking \$35B in creditworthy-but-rejected farm loans through satellite-verified data, Astraeus enables \$2.635B in new annual bank and insurer revenue and captures 50% as a value-share fee of \$1.316B.



$$\begin{aligned} & \$225B \times 35\% \text{ rejection} \times 45\% \text{ data-solvable} = \$35B \text{ unlocked} \\ & \$35B \times 4.5\% \text{ NIM} = \$1.575B \text{ bank revenue} + \$1.06B \text{ insurer savings} = \$2.635B \times 50\% = \$1.316B \end{aligned}$$

Product Offering

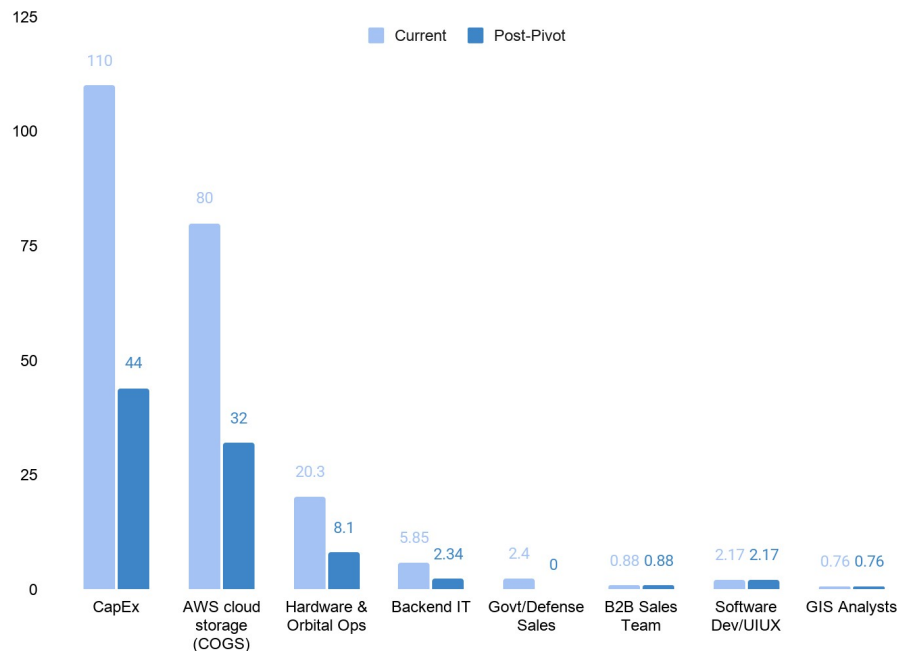
Our product suite evolves alongside with clients' needs, moving from baseline visibility to automated decision-making and comprehensive legal protection.

Tiers	Offerings	Price
Standard	Portfolio Visibility: • Real-time satellite health alerts • Crop growth tracking • Weather impact overlays	\$ 220,000
Professional	Credit Underwriting: • Historical yield prediction AI • Soil health and moisture scoring • Automated credit risk ratings	\$ 650,000
Enterprise	Fraud and Compliance: • Legal proof timestamps • Court-ready fraud certificates • Compliance dashboards	\$ 7,000,000

Financial Projections

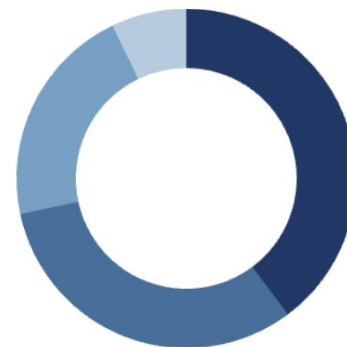
We aim to reduce our current \$111M operating cost by \$65M to reach a post-pivot total of \$46M, while allocating \$37.7M for new investment costs.

Projected Operating Costs (in million dollars)



New cost items breakdown

Total ~\$37.7M investment required

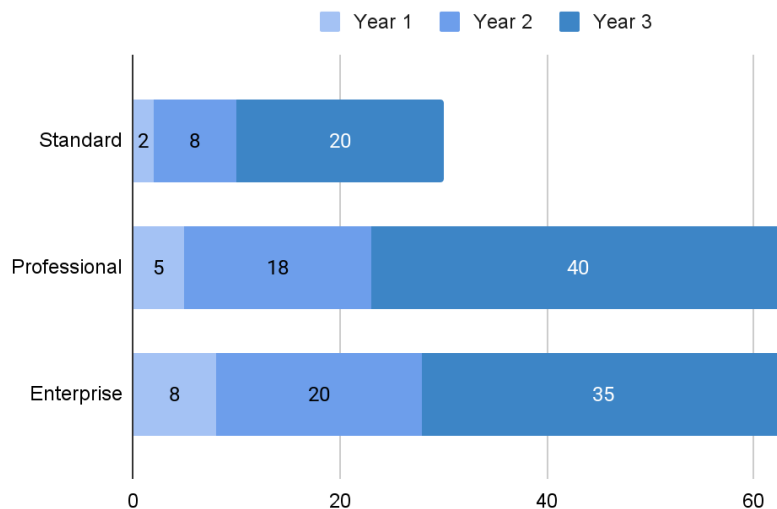


Raw satellite data (ForgeWing)	\$15M
SaaS platform build (yr 1)	\$12M
AI model training + compute	\$8M
AI developer hiring (15 eng.)	\$2.7M

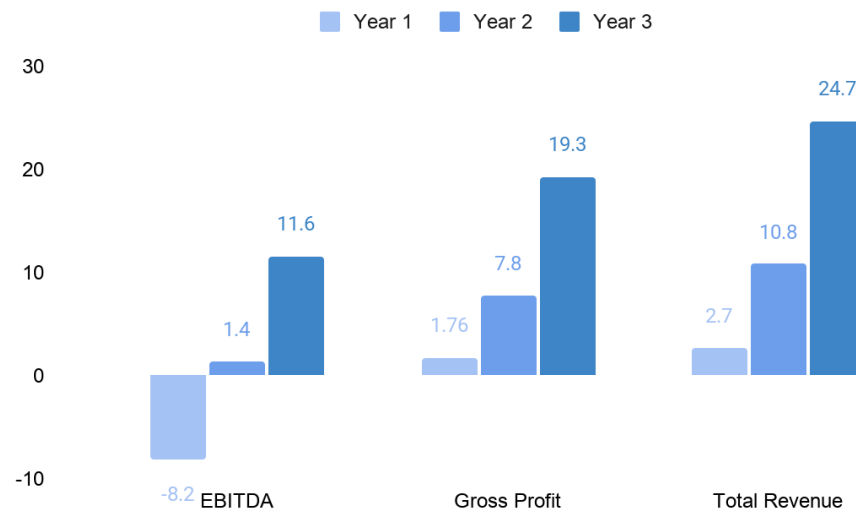
3 Year Revenue Projection

Leveraging a strategic \$37.7M investment, Astraeus will pivot to an asset-light SaaS model, scaling revenue to \$24.7M with 78% gross margins and achieving full payback within 3 years.

Client Development (Year 1 to Year 3)

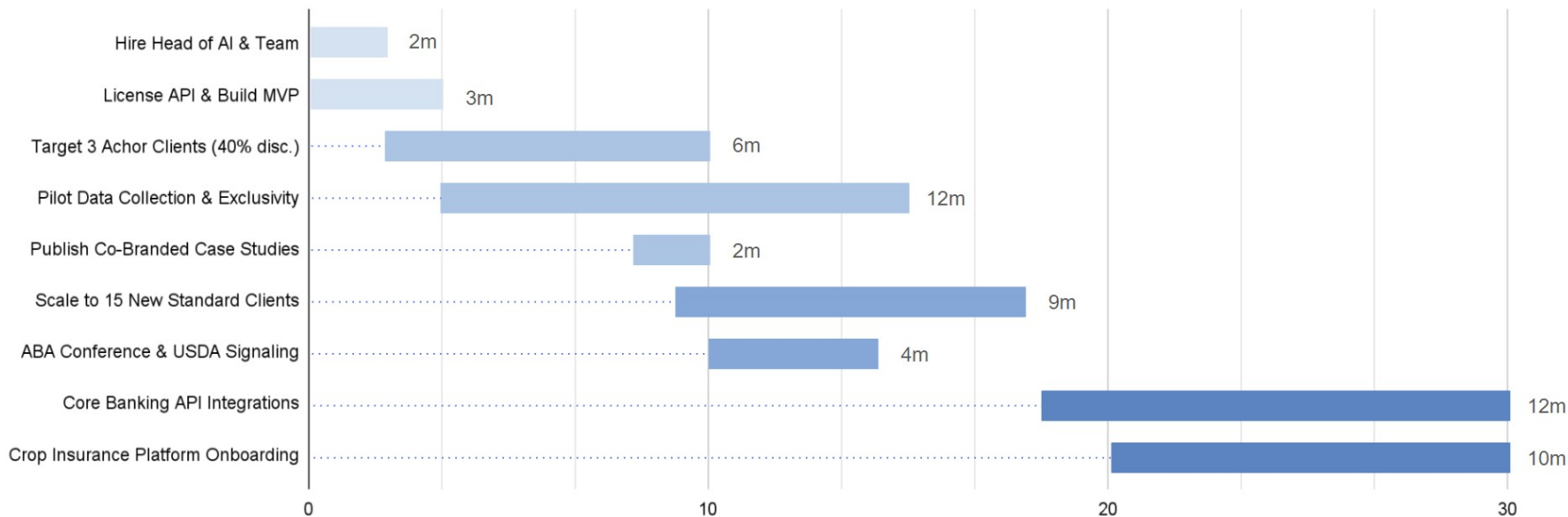


Revenue Projection (in million dollars)



Go-to-Market Strategy

Transitions Astraeus from an experimental AI startup to an indispensable infrastructure layer for the US agricultural finance market by Year 3



Phase 1: **Speed to Market**

Phase 2: **Data-Drive Growth Engine**

Phase 3: **Credibility Signaling**

Phase 4: **Deep Moats**

Risks and Mitigants

Operational and cultural risks will be managed through strategic technical partnerships and a top-down cultural shift that values software intelligence.

Operational Risks

AI gap: 0 AI experience. 14 software developers currently maintain a legacy web portal.

→ License Data Analytics **API** immediately for Year 1 & Hire Head of AI within 60 days.

Bank & Insurer Credibility: Risk-averse buyers will not trust easily

→ Lead with pilots at **40%** discount \$ build partnering credibility through USDA networks.

Cultural Risks

Hardware Culture Resistance: 140 of 230 employees are in hardware. VP of Orbital Hardware publicly opposes the pivot. UI/UX developers are already quitting.

→ CEO leads "hardware as moat" narrative, create a separate unit

AI Talent attraction: "At Astraesus, if you don't build metal, you don't matter."

→ Competitive salary plus equity. Hire Head first

Competitive Risks

Big Tech (AWS, Google Cloud, Microsoft Azure): "Cloud-to-Space" offerings that process data and analytics

→ Focusing on insightful **vertical expertise** in agricultural crediting

Nova Flight: Large satellite network that allows them to have a large, global data coverage

→ Delivering **specialized insights**, not focused on data volume.

Competitive Analysis

While current competitors offer high-volume data or general analytics, Astraeus will dominate the high-value agricultural finance niche through verifiable, audit-ready intelligence.

Competitor Category	Competitors	Strategic Weakness	Astraeus Advantage	Astraeus Connection
Mass-Scale Data Providers	Nova Flight AeroCore Group	Lack specialized financial interpretation	Vertical Expertise: Tailored for credit risk	Stop trying to compete with them and start buying data from them
Analytics Platforms	SatSure EOSDA Planet	Oversimplified systems Lack "legal proof"	Audit-Ready: Court-ready reports for insurance	Dangerous Competitors They focus on general agronomy. Astraeus focus strictly on finance.
Data Aggregators	ForgeWing Systems Space Labs	Vulnerable to price wars No proprietary sensors	Hybrid Model: Proprietary SAR + licensed data	Strategic Partner Get the raw data needed for AI and stop expensive satellite operation



Conclusion

By evolving into a decision intelligence partner, Astraeus secures its future as an indispensable layer of the global agricultural financial infrastructure.

Key Suggestions

Asset-Light Operational Model: grow through partnerships, pilots, and APIs

Vertical Specialization: automated, audit-ready risk scoring

Establishing the Industry Standard: verifiable data required by risk-averse insurers and lenders

Appendix A

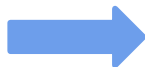
Pathway to Market Credibility through USDA Loan Networks

USDA Satellite Program Takeaways

Previously funded satellite-based
broadbands in rural areas

Serving and supporting underserved
rural communities that lack
infrastructure

Programs are administered through
Rural Utilities Service (RUS), structured
with strict eligibility requirements



What It Means for Astraeus

Identify current lenders of USDA loans, specifically FSA*

→ Focusing on rural banks and position Astraeus as a tool to
expand on safer rural lending

Run Pilot Programs with 2-3 FSA lenders

→ Offer **3-6 month pilots** with **40% discount**, delivering
predictive crop analytics and risk scoring to structure optimal
financial decisions

Validate & Publish Results

→ **Quantify improvements** in risk prediction accuracy, loan
process timeline and default rates, convert them to **co-branded**
case studies

Leverage Results for Credibility

→ Build relationships through **industry conferences** (e.g. ABA)
and networks, encouraging adoption and forming trust

Appendix B

Closer Look at EOSDA v. Astraeus: What Sets Us Apart?

Category	EOSDA	Astraeus
Data Source	Multi-source, historical satellite imagery	Multi-source & internal SAR
Analysis	Providing data for risk assessment with all-in-one built-in analytics	Providing structured risk scoring with AI-Driven Insights
Decision-Making	Requires banks to organize, analyze and decide	Structures data outputs into decision-ready metrics
Execution	Supports monitoring and analysis, not designed specifically for financial processes.	Designed for integration into financial processes, supporting more effective decisions.
Legal Proof	Not a core feature	Timestamped & audit-supporting report

Appendix C

U.S. Bank Categories

Bank Category	Market Size	Tier
Non-agricultural Bank	2510	Standard
Agricultural Bank	949	Standard
Lending Association	55	Professional
Crop Insurance (AIPs)	12	Enterprise
Wholesale Farm Credit Banks	4	Enterprise
Total	3530	