2026

NOEMA

BUSINESS PLAN

COFFEE.EXE

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1. PROJECT SUMMARY

NOEMA is a B2B artificial intelligence diagnostics platform developed for mission-critical aerospace systems. The platform enables black-box anomaly detection across telemetry streams, visual inspection data, and acoustic inputs without requiring access to proprietary internal system architectures. This capability is strategically significant for aerospace manufacturers, private space companies, and defense contractors operating under restricted infrastructure conditions.

The mission of NOEMA is to reduce operational risk, minimize unplanned downtime, and decrease failure-related financial losses through scalable AI-driven diagnostics. The company targets enterprise aerospace organizations globally and seeks USD 1.8 million in growth capital to achieve USD 10+ million in annual recurring revenue within 36 months.

2. DESCRIPTION

2.1 Product / Service

NOEMA integrates telemetry anomaly detection, computer vision–based structural diagnostics, and acoustic pattern recognition into a unified enterprise interface. The telemetry module analyzes time-series operational data to detect deviations and degradation patterns. The visual diagnostics module is powered by YOLO-based object detection models trained to identify structural damage, material wear, and external anomalies. The acoustic diagnostics component evaluates sound signatures for early mechanical fault detection. The platform is deployed using a FastAPI backend, a Python-based machine learning stack, enterprise-grade MLOps pipelines, and supports both cloud and on-premise installations. Unlike conventional diagnostic systems that require deep integration into internal architectures, NOEMA operates through external data inputs, making it deployable across legacy and contractor-controlled environments.

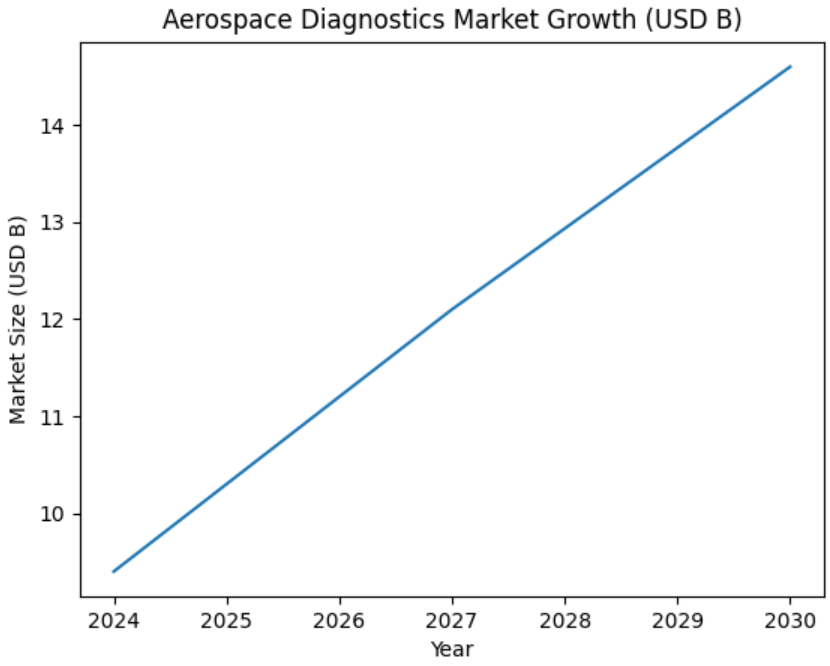
2.2 Problem Statement

The aerospace sector experiences substantial economic losses due to unplanned downtime and late-stage fault detection. Industry research indicates that downtime in aerospace operations can cost between USD 50,000 and USD 500,000 per day per asset, while major failure events frequently exceed USD 1–10 million per incident. Existing diagnostic solutions are typically siloed, hardware-locked, or dependent on proprietary system access, which limits cross-platform visibility and predictive capability. As aerospace systems grow more complex and distributed, the inability to detect early-stage degradation significantly increases operational risk and financial exposure.

3. MARKET ANALYSIS

3.1 PAM–TAM–SAM–SOM Model

The potential available market (PAM) for NOEMA is derived from the aggregated aerospace diagnostics, telemetry, and predictive maintenance markets, which collectively exceed USD 25 billion globally. The total addressable market (TAM) specific to AI-enabled aerospace diagnostics is estimated at approximately USD 9 billion. To derive a bottom-up validation model, assume 1,000 addressable enterprise aerospace entities with an average three-year contract value of USD 600,000. This produces a TAM of USD 600 million within a focused enterprise segment. If 40 percent of this segment actively adopts AI-based diagnostics solutions, the serviceable available market (SAM) equals USD 240 million. Assuming a competitive landscape of five comparable providers, a 17 percent obtainable share yields a serviceable obtainable market (SOM) of approximately USD 40 million in achievable medium-term revenue.



3.2 Target Audience

The primary target audience consists of B2B enterprise aerospace organizations, including aerospace OEMs, private launch providers, satellite operators, defense contractors, and engineering research laboratories. These entities operate high-value mission-critical assets where risk mitigation and predictive maintenance generate measurable financial returns.

3.3 Competitive SWOT Analysis

NOEMA's strengths include its multi-modal diagnostics capability, flexible deployment architecture, and measurable economic return for clients. Weaknesses include extended enterprise sales cycles typical of aerospace procurement processes. Opportunities arise

from rapid expansion in predictive maintenance adoption and increasing automation within private space programs. Threats include in-house AI development within large aerospace corporations and regulatory compliance complexity.

4. BUSINESS MODEL

The company generates primary revenue through enterprise SaaS subscriptions and on-premise licensing agreements, with annual contract values ranging between USD 150,000 and USD 300,000. Additional revenue is derived from paid pilot programs, systems integration services, and enterprise support agreements. The pricing model aligns with high-value mission-critical enterprise software standards within aerospace and defense sectors.

4.2 Pricing Strategy and CAC–LTV Analysis

The customer acquisition cost (CAC) is estimated at USD 30,000 per enterprise client, reflecting enterprise sales, technical demonstrations, and pilot program expenses. The average lifetime value (LTV) of a client is calculated at approximately USD 540,000, assuming a three-year average contract at USD 180,000 per year. This produces an LTV-to-CAC ratio of 18:1, significantly exceeding the industry benchmark of 3:1 for healthy SaaS enterprises, indicating strong capital efficiency and scalability.

5. OPERATIONAL ACTIVITY

Operational execution includes enterprise deployment management, cloud and on-prem infrastructure provisioning, continuous model retraining via MLOps workflows, security compliance monitoring, and client performance reporting. Scalability is supported through modular architecture and standardized onboarding processes.

6. ORGANIZATIONAL STRUCTURE

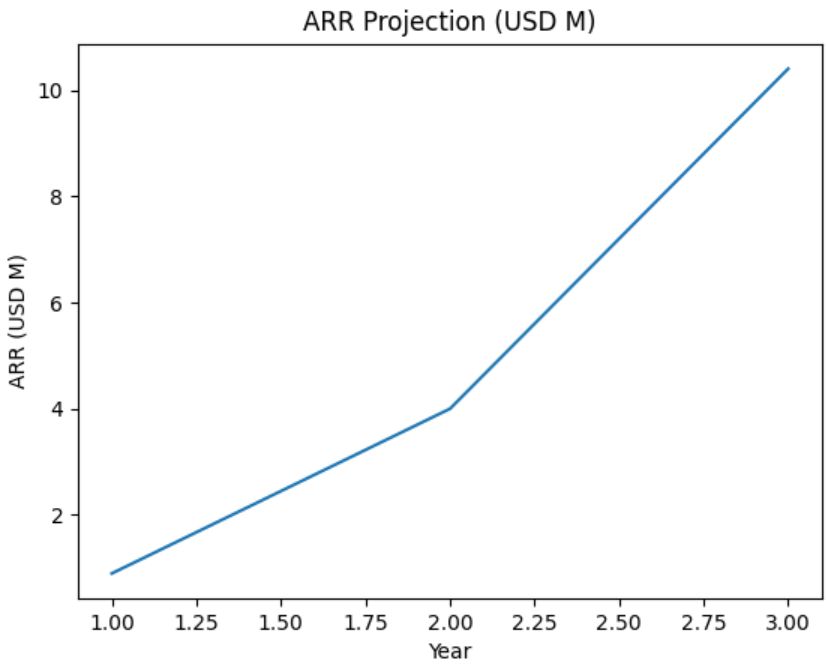
The current organizational structure consists of a compact founding team of four core contributors who developed NOEMA within a hackathon-driven innovation environment. The team combines expertise in backend engineering, machine learning, computer vision, and systems architecture. Responsibilities are distributed across technical development, product architecture, model training, and system integration. This lean structure enables rapid iteration, efficient decision-making, and low operational overhead during the early-stage growth phase. As the company progresses toward enterprise deployment and revenue expansion, additional roles in sales, compliance, and infrastructure engineering will be introduced in alignment with defined revenue milestones.

7. SALES STRATEGY (SMART)

The sales objective is to acquire 40 enterprise aerospace clients within 36 months. This target is specific to high-value aerospace entities, measurable through ARR milestones, achievable through enterprise pilot-to-contract conversion strategy, relevant to mission-critical diagnostics demand, and time-bound within a three-year scaling period.

8. FINANCIAL PLAN

The projected financial trajectory anticipates USD 0.9 million in ARR in Year 1 through five enterprise clients, USD 4.0 million in Year 2 through eighteen clients, and USD 10.4 million in Year 3 through forty enterprise contracts. Break-even is projected between Year 2 and Year 3 as fixed development costs stabilize and revenue scales.



9. RISKS

Key risks include prolonged enterprise procurement cycles, regulatory compliance requirements, competitive in-house AI initiatives within large aerospace firms, and dependency on access to sufficient quality operational datasets for model optimization.

10. ROADMAP

The development roadmap includes completion of MVP stabilization within six months, enterprise-grade Version 1 deployment within twelve months, and advanced feature expansion including defense integrations within twenty-four months.

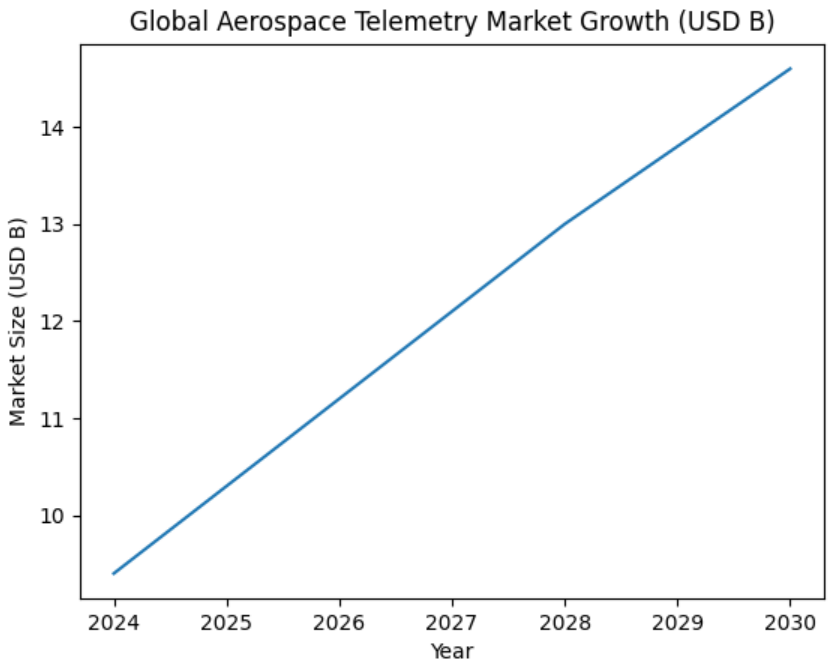
11. CALCULATION SUMMARY

The financial projections incorporate detailed CAC and LTV calculations, bottom-up TAM validation, competitive share modeling, and ARR growth trajectories as presented within the respective sections above. All calculations are embedded directly into the analytical narrative of this document.

Extended Market Validation & Growth Analysis

The global aerospace telemetry market was valued at approximately USD 9.4 billion in 2024 and is projected to reach USD 14.6 billion by 2030. This implies a compound annual growth rate (CAGR) calculated as: CAGR = (14.6 / 9.4)^(1/6) - 1, resulting in approximately 7.6%. This sustained expansion reflects increasing adoption of predictive maintenance, real-time monitoring, and AI-enabled diagnostics across aerospace and defense sectors.

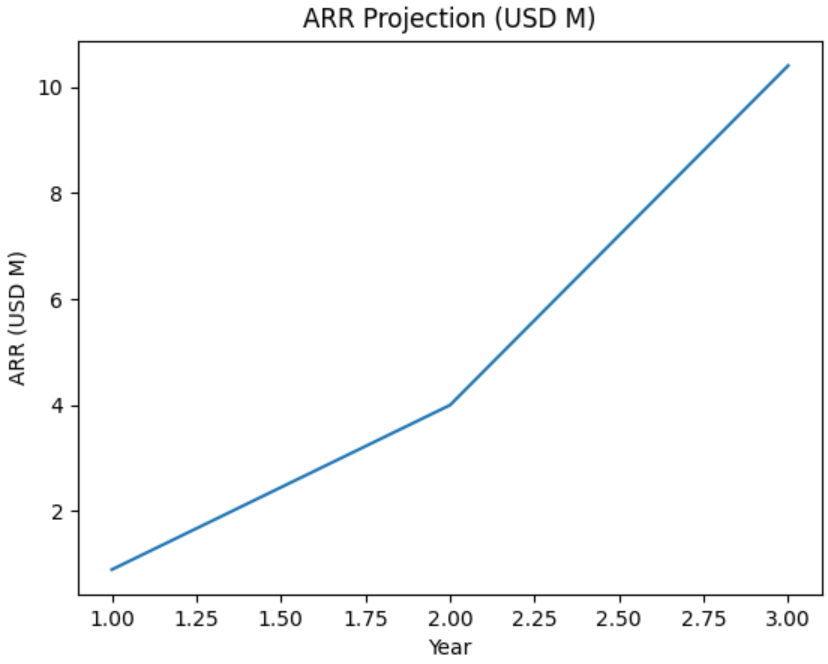
In parallel, the aviation predictive maintenance segment is projected to grow from approximately USD 2.0 billion to over USD 8.0 billion within the next decade, implying double-digit annual growth. This macro-trend confirms structural demand for AI-driven diagnostic systems such as NOEMA.

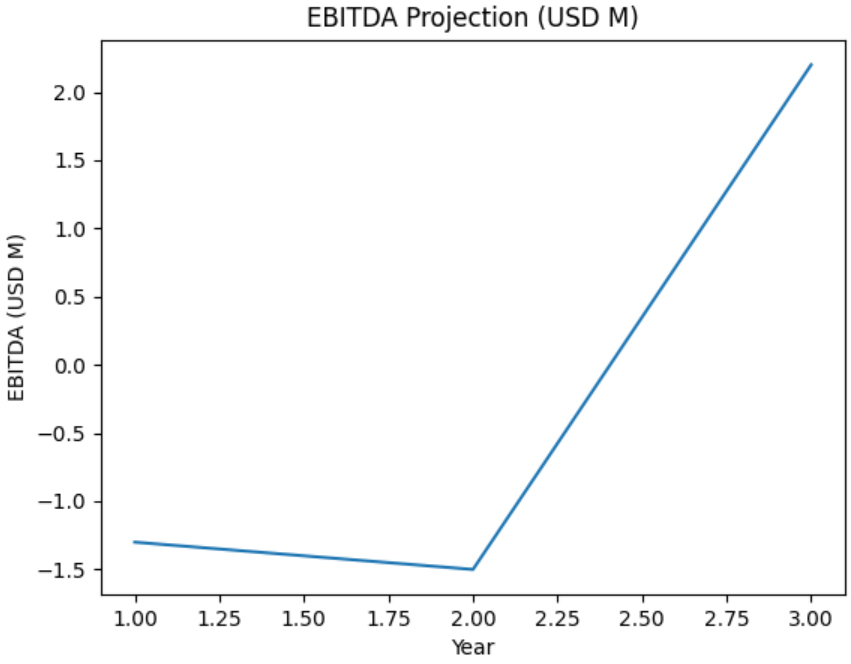


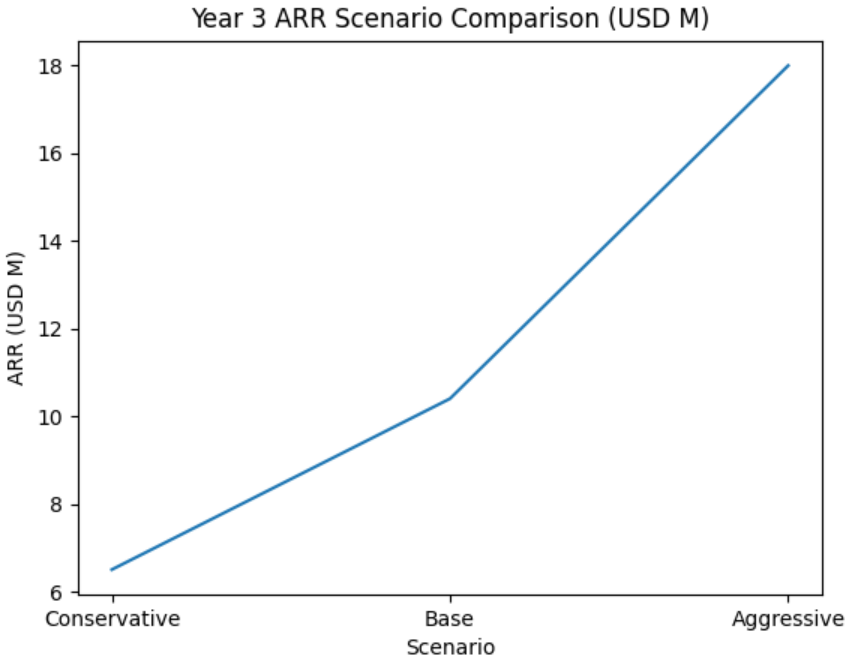
Detailed Financial Dynamics

The projected ARR growth from USD 0.9 million in Year 1 to USD 10.4 million in Year 3 implies a revenue growth multiple of 11.6x over 24 months. Assuming operating expenses of approximately USD 2.2 million in Year 1, USD 5.5 million in Year 2, and USD 8.2 million in Year 3, the company reaches operational break-even between Year 2 and Year 3. This trajectory reflects SaaS scalability, where fixed R&D costs stabilize while recurring revenue expands.

Burn rate during the first year is estimated at approximately USD 1.3 million. With a USD 1.8 million capital raise, projected runway extends to approximately 16–18 months, providing sufficient time to convert pilot deployments into enterprise contracts.


ARR Projection (USD M)
ARR (USD M)
10
8
6
4
2
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
Year


EBITDA Projection (USD M)
EBITDA (USD M)
2.0
1.5
1.0
0.5
0.0
−0.5
−1.0
−1.5
1.00
1.25
1.50
1.75
2.00
2.25
2.50
2.75
3.00
Year


Year 3 ARR Scenario Comparison (USD M)
ARR (USD M)
18
16
14
12
10
8
6
Conservative
Base
Aggressive
Scenario