Agentic AI Decision Support System for Financial Planners ("FinAssist A.I.")

PRODUCT REQUIREMENTS DOCUMENT (PRD)

(Note: Proprietary details have been modified for confidentiality)

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1. Introduction & Background

Certified Financial Planners (CFPs) operate in a complex environment that requires synthesizing client financial profiles, risk tolerances, regulatory constraints, long-term goals, asset allocation theory, and rapidly changing market conditions. The current generation of advisory software provides static dashboards, rule-based prompts, and portfolio templates, but does not intelligently reason or autonomously generate recommendations.

This PRD defines *FinAssist A.I.*, an **Agentic AI decision-support system** composed of **2–3 cooperative AI agents** designed to enhance CFP decision-making through dynamic analysis, personalized modeling, risk scoring, and market-informed scenario generation.

This system does **not** make final investment decisions nor replace the CFP; instead, it provides **decision guidance**, **quantitative analysis**, **scenario modeling**, and **transparent reasoning** to support the CFP's professional judgment.

2. Product Vision Statement

Create a small constellation of collaborative Agentic AI components that continuously analyze market signals, interpret client financial profiles, calculate risk-adjusted strategies, and generate clear, explainable investment recommendations—delivering a next-generation decision-support layer for financial planners.

Vision in one sentence:

A self-coordinating AI advisor for advisors—combining market intelligence, risk science, and personalized financial modeling into actionable insights.

3. Agent Architecture Overview

FinAssist A.I. consists of 3 specialized agents working in sequence:

Agent 1: Client Intelligence Agent (CIA)

- Extracts and interprets client financial profile information.
- Analyzes goals, age, income, liquidity, time horizon, tax considerations, and risk tolerance.
- Normalizes inputs and detects missing or contradictory data.
- Creates a "Client Financial Genome" profile used by other agents.

Agent 2: Market & Trend Analysis Agent (MTA)

- Continuously monitors current market conditions and macroeconomic indicators.
- Evaluates asset class trends, sector strength, interest-rate environment, volatility indexes, and geopolitical shifts.
- Produces scenario projections and relative asset attractiveness scoring.

Agent 3: Portfolio Strategy & Risk Modeling Agent (PSR)

- Combines output from CIA and MTA to generate tailored strategy suggestions.
- Calculates risk scores, diversification ratios, Monte Carlo simulations, and Sharpe-like metrics.
- Suggests allocations, rebalancing strategies, and hedging options.
- Ensures explainability and compliance-friendly transparency.

Agent Coordinator Layer

Manages communication between agents.

- Ensures sequential workflow from Client → Market → Strategy.
- Produces the final "Advisor Recommendation Report."

4. Problem Statement

CFPs currently face:

- 1. Manual consolidation of client data from multiple tools.
- 2. **Limited scenario modeling** due to time constraints.
- 3. **Rapid market changes** that create information overload.
- 4. **Risk scoring formulas that are static**, not adaptive.
- 5. **Inefficient rebalancing and option evaluation** workflows.
- 6. **Compliance burdens** requiring documentation and explanation of every recommendation.

The market demands an intelligent assistant that automates research, generates personalized options, and enhances the CFP's analytical accuracy—without violating fiduciary or regulatory constraints.

5. High-Level Goals & Success Metrics

Goals

- 1. Increase CFP analytical productivity by **30–50%**.
- 2. Reduce preparation time for client strategy sessions by 40–60%.
- 3. Improve quality and consistency of risk assessments.
- 4. Provide compliant, transparent, auditable reasoning for recommendations.

5. Deliver actionable, customizable investment scenarios for each client.

KPIs

- Time saved per client portfolio review.
- Recommendation adoption rate by planners.
- Accuracy of risk scoring vs market benchmark outcomes.
- User satisfaction (CFP NPS).
- Compliance auditor acceptance of explanation logs.

6. Key Features & Requirements

6.1 Client Intelligence Engine

Description

Agent 1 transforms client inputs into structured financial intelligence.

Requirements

- R1: Accept client data from CRM, planning tools, or manual CFP entry.
- R2: Normalize income, liability, asset, age, and tax details.
- R3: Infer missing attributes where possible (e.g., estimated retirement spending).
- R4: Identify inconsistencies or high-risk data points (e.g., overly optimistic return expectations).
- R5: Generate a "Client Financial Genome":
 - Risk tolerance index

- Liquidity needs
- Time horizon
- Regulatory constraints
- Suitability indicators
- Key life events forecast

6.2 Market & Trend Intelligence

Description

Agent 2 produces real-time, data-driven analysis.

Requirements

- R6: Ingest market signals (stocks, bonds, commodities, crypto if allowed, real estate indicators).
- R7: Evaluate interest rate trends (yield curve, Fed statements).
- R8: Monitor volatility (VIX), sector momentum, and macroeconomic indicators.
- R9: Rank asset classes by risk-adjusted attractiveness.
- R10: Generate multi-scenario projections (base case, bull, bear, recession).

6.3 Portfolio Strategy & Risk Modeling

Description

Agent 3 merges client + market signals into actionable strategies.

Requirements

R11: Suggest asset allocation ranges (e.g., 60/40 → 70/30 under certain conditions).

- R12: Evaluate portfolio concentration and diversification gaps.
- R13: Perform Monte Carlo simulations (500–10,000 iterations).
- R14: Produce risk metrics (Sharpe-like scores, drawdowns, VAR estimates).
- R15: Generate 2–4 strategy options:
 - Conservative
 - Moderate
 - Aggressive
 - Tax-efficient alternative
- R16: Provide reasoning for each recommendation.

6.4 Compliance & Explainability Layer

Requirements

- R17: Log every input, transformation, and output for auditability.
- R18: Provide human-readable explanations for:
 - Why the strategy fits the client
 - Why alternative strategies were rejected
 - How market dynamics influenced the suggestion
- R19: Provide disclaimers: Al does not make decisions; CFP retains control.
- R20: Ensure outputs are FINRA/SEC compliant (no guarantees of returns).

7. User Interface Requirements (Detailed)

The UI must be optimized for **financial planners**, not retail investors. It should feel like an advanced advisory cockpit.

7.1 Home Dashboard

Features

- List of all client profiles.
- Alerts for clients needing review (market changes, risk tolerance mismatch).
- Overview KPIs: top opportunities, macro risk signal index, market sentiment gauge.

UI Requirements

- Provide card-based summaries for quick scanning.
- Display "Action Required" badges for significant events (e.g., possible volatility adjustment).
- Integrate search and filtering by risk tolerance, portfolio size, life stage, or planning objective.

7.2 Client Profile View

Features

- Complete financial profile (income, assets, liabilities, dependents, tax bracket).
- "Client Financial Genome" visualization.
- Editable forms for CFP manual adjustments.
- Life-event timeline (retirement, college funding, home purchase, etc.).

UI Requirements

- Graphical risk tolerance slider + machine-generated risk persona (e.g., "Measured Growth Seeker").
- Expandable asset inventory table.
- Alerts for missing or inconsistent data.

7.3 Market Intelligence View

Features

- Real-time macro dashboard: interest rates, inflation, VIX, sector performance.
- Trend indicators (3-month, 6-month, 1-year).
- Scenario modeling toggle: Base / Bull / Bear / Stagflation / Recession.

UI Requirements

- Dynamic data visualizations with color-coded risk indicators.
- Clickable insights (e.g., "Tech sector showing volatility—impact on client portfolios +8% risk exposure").
- Allow CFP to drill down into asset class details.

7.4 Investment Strategy Workspace (Main View)

Features

- Side-by-side comparison of recommended strategies.
- Risk score cards, diversification charts, probability-of-success visuals.
- Monte Carlo graph overlay for projected outcomes.

UI Requirements

- Clean, professional layout suitable for client presentations.
- Tab structure:
 - 1. Strategy Summary
 - 2. Market Rationale
 - 3. Portfolio Metrics
 - 4. Tax Optimization
 - 5. Risks & Considerations
- "Advisor Notes" section for CFP personal reasoning.
- Export to PDF for client records.

7.5 Recommendation Explanation View

Features

- Full transparency for compliance and audits.
- Tree structure explaining reasoning chain:
 - Client profile inputs
 - Market evidence
 - Risk calculations
 - o Final recommendation logic

UI Requirements

- Expand/collapse nodes for readability.
- FINRA-compliant language and disclaimers.

Side panel summarizing alternative strategies considered and rejected.

7.6 Advisor Control Panel

Features

- Override Al suggestions.
- Adjust weightings (e.g., "Higher emphasis on dividend income").
- Lock or unlock certain asset classes.
- Save custom advisory templates.

8. Assumptions & Dependencies

- Market data feeds (paid APIs) must be available.
- Client data must come from secure, consented systems.
- FINRA/SEC compliance teams must review model behavior.
- Risk models require continuous tuning.

9. Risks & Mitigations

Risk: CFPs may distrust Al-driven suggestions.

Mitigation: Heavy emphasis on explainability + override controls.

Risk: Regulation prohibits certain types of predictive statements.

Mitigation: Compliance review of templates and language.

Risk: Data quality issues reduce accuracy. **Mitigation:** Data validation and error flags.

Risk: Market volatility could produce unstable recommendations. **Mitigation:** Multi-scenario modeling and confidence scoring.

10. Out-of-Scope (Phase 1)

- Direct trade execution
- Robo-advisor for retail end users
- Predictive investment guarantees
- Crypto strategy recommendations (optional add-on)

11. Release Plan (High Level)

Phase 1 (0-3 months):

Client Intelligence Agent, Market Trend Agent (basic), UI skeleton, risk scoring MVP.

Phase 2 (3-6 months):

Portfolio Strategy Agent, multi-scenario modeling, Monte Carlo engine, UI full build-out.

Phase 3 (6-12 months):

Compliance layer, advisor overrides, continuous learning engine, full explainability toolkit, production integrations.