# PROJECT CHARTER- Upgrading GenAI in a SecureInvest Financial Company

# PROJECT INFORMATION

| PROJECT NAME                              |              | PROJECT MANAGER   | PROJECT SPONSOR          |
|---|--------------|---|--------------------------|
| Implementing GenAI in a Financial Company |              | Project Team Manager  | Executive Team           |
| EMAIL PHONE                               |              | ORGANIZATIONAL UNIT(S)  |                          |
| first_name.Last_name@company.com          | 987-654-3210 | Project Management, Data Science and AI Development Team, Software Development and Engineering Team, Financial Analysis and Portfolio Management Team, IT & Infrastructure Team, Compliance and Risk Management Team, and Quality Assurance (QA) and Testing Team |                          |
| GREEN BELTS ASSIGNED                      |              | EXPECTED START DATE   | EXPECTED COMPLETION DATE |
| Project Management                        |              | 11/12/2024  | 10/12/2025               |
| BLACK BELTS ASSIGNED                      |              | ESTIMATED COSTS   |                          |
| Director of Operations                    |              | \$750,000   |                          |

# PROJECT OVERVIEW

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|-------------------------|---|--|--|--|---|
| PROBLEM OR ISSUE        | SecureInvest, a leading financial services firm, fa<br>having access to proprietary databases, live mark<br>of high market volatility. The initial developmen<br>retrieval, slow system performance under heavy<br>outputs. These challenges hinder the assistant's a   | tet feeds, and external reports, and<br>t of a Generative AI (GenAI) assi<br>loads, insufficient understanding | alysts struggle to quickly synthesiz<br>stant designed to streamline this p<br>of specialized financial terminolog   | ze this information into actionable<br>process has revealed several issues<br>gy, lack of interpretability in reco | s insights, particularly during periods<br>s, including mismatches in data<br>mmendations, and the risk of biased   |
| DUDDOSE OF DDOJECT      | SecureInvest aims to enhance its investment decision-making by developing a Generative AI (GenAI) assistant that uses Retrieval-Augmented Generation (RAG) technology. This assistant will process real-time data from proprietary databases, market feeds, and external reports to provide analysts with timely, contextually relevant insights. In an increasingly complex financial landscape, the GenAI assistant will empower analysts and portfolio managers to make faster, data-driven decisions, improving transparency and the overall decision-making process.   |  |  |  |   |
| BENEFITS AND IMPORTANCE | Real-time Insights: Immediate access to current, relevant information allows analysts to make faster and better-informed decisions.  Improved Efficiency: By automating data retrieval and analysis, the assistant reduces manual effort and increases productivity.  Competitive Advantage: Empowering SecureInvest's analysts with a cutting-edge AI tool enhances the firm's ability to provide high-quality recommendations to clients.  Informed Decision-Making: The assistant's ability to interpret intricate financial data, analyze trends, and generate insights will help reduce errors and omissions in decision-making. |  |  |  |   |
|                         | Develop a Generative AI assistant leveraging RAG technology to generate contextually relevant financial insights from live data and external reports  | of queries during periods of   | Fine-tune the assistant to accurately interpret financial terminology and specialized language specific to the financial services industry.                  | behind the assistant's   | Ensure the AI assistant's recommendations are free from bias, reflecting a diverse and inclusive view of financial opportunities, especially in emerging markets. |
|                         | AI assistant capable of answering complex<br>questions and providing actionable insights<br>based on current market data.   | The assistant can handle high data loads and provide rapid responses even during critical trading periods.     | Al assistant capable of<br>understanding specialized terms<br>like "yield curve inversion,"<br>"contango," and others used in<br>investment decision-making. |  | A balanced, unbiased AI assistant capable of offering well-rounded insights for diverse investment strategies.  |

## PROJECT SCOPE AND DELIVERABLES

IN-SCOPE OUT-OF-SCOPE

Development of the GenAI assistant based on Retrieval-Augmented Generation (RAG). Integration with proprietary databases, live market feeds, and external reports. Real-time query handling and performance optimization.

Fine-tuning the assistant's understanding of financial terminology.

Interpretability and transparency features to explain AI recommendations.

Bias evaluation and adjustments to ensure inclusive, balanced insights.

Development of the underlying market data infrastructure (i.e., SecureInvest already provides the necessary data sources). Full-scale deployment to all SecureInvest teams—the project will focus initially on the investment analysis and portfolio management teams for testing and feedback.

#### DELIVERABLES

A functional GenAI assistant capable of processing complex financial queries.

Performance and scalability testing results, demonstrating the assistant's ability to manage high volumes of data during peak periods.

A specialized training module that ensures the assistant understands financial terminology and language.

Interpretability features that explain the assistant's decision-making process.

An evaluation report addressing potential biases and ensuring that recommendations are inclusive and balanced.

| HIGH-LEVEL REQUIREMENTS   |   |  |  |
|---|---|--|--|
| RESOURCES   | KEY TASKS   |  |  |
| Personnel: Data scientists, AI developers, infrastructure engineers, project managers.                              | Development of AI model and integration with financial data sources.                  |  |  |
| Technology: AI/ML platform for development, cloud infrastructure for deployment and scalability (e.g., Azure, AWS). | Performance optimization to handle peak demand.                                       |  |  |
| Vendor Support: Assistance from third-party vendors for the integration and deployment of tools.                    | Specialized training for the GenAI assistant.   |  |  |
| Budget: \$150,000 is the estimated budget for the instrument, training, and initial assistance.                     | Testing, feedback collection, and iteration for accuracy, bias, and interpretability. |  |  |

## PROJECT MANAGER AND KEY ROLES

| MEMBERS                | ROLES   |
|------------------------|---|
| Project Manager        | Oversee project execution, manage timelines, resources, and communicate with stakeholders.                  |
| Lead Data Scientist    | Oversee the development of the GenAl assistant's Al/ML models and fine-tuning for financial                 |
| Lead Developer         | Responsible for the integration of the GenAl assistant with SecureInvest's infrastructure.                  |
| Infrastructure Manager | Monitors adherence to regulatory requirements.  |
| Compliance Team        | Ensure scalability and optimize performance during high demand.   |
| Vendor Support Team    | Technical support is given by the vendor support team during the setup and installation procedure.erence to |

### TENTATIVE SCHEDULE

| KEY MILESTONE              | START                       | TASK   |
|----------------------------|-----------------------------|--|
| Initial Planning and Setup |                             | Complete requirement definition. Define project scope, deliverables, and high-level design.                          |
| Data Integration           | Sprint 2(Month 2-3 and 5-6) | Develop the GenAI assistant model.<br>Integrate with SecureInvest's<br>financial data sources and<br>infrastructure. |

| Performance Optimization     | Sprint 3(Month 3-6) | Performance testing and optimization for high-volume periods. Specialist training and testing with real financial queries.     |
|------------------------------|---------------------|--|
| Model Fine-Tuning            | Sprint 4(Month 4-7) | Enhancing model with domain-<br>specific financial data.   |
| Interpretability Development | Sprint 5(Month 4-7) | Ensuring transparent, understandable AI decision explanations.   |
| Bias Mitigation              | Sprint 6(Month 4-7) | Addressing biases for fair, balanced recommendations.  |
| Final Testing and Deployment | Sprint7(Month 4-9)  | Collect feedback from analysts and portfolio managers. Implement final adjustments to bias, interpretability, and terminology. |

## PROJECT STAKEHOLDERS

| STAKEHOLDERS                 | ROLE               | Expectations   | Influence |
|------------------------------|--------------------|--|-----------|
| SecureInvest Executive Team  | Senior Executives  | Primary users of the GenAI assistant; require timely and accurate insights for decision-making.                    | High      |
| Project Team                 |                    | Responsible for building, testing, and optimizing the assistant, including the data retrieval system and AI model. | High      |
| Senior Management/Executives |                    | Decision-makers overseeing project progress, ensuring alignment with company goals and client needs.               | Medium    |
| External Data Providers      |                    | Vendors supplying real-time market feeds, financial reports, and other external data sources.                      | Medium    |
| Compliance Team              | Compliance Officer | Ensure compliance with financial regulations and guidelines.   | Medium    |

## **BUDGET OVERVIEW**

| CATEGORY   | AMOUNT    | DESCRIPTION   |
|--|-----------|---|
| <b>Enhanced Retrieval System Precision</b>               | \$150,000 | Incorporating semantic search and real-time synchronization to improve data retrieval accuracy and relevance.   |
| Scalability and High-Performance Infrastructure          | \$125,000 | Upgraded infrastructure to handle peak traffic volumes without slowdowns, leveraging scalable cloud resources.  |
| Specialized Financial Terminology Fine-Tuning            | \$125,000 | Training models on specialized financial terminology to improve relevance and understanding of recommendations. |
| Interpretability and User Interface Improvements         | \$100,000 | Adding features to explain recommendations, improving user trust and usability through enhanced UI/UX.          |
| Bias Mitigation and Balanced Insights                    | \$65,000  | Enhancing data sources and model tuning to reduce biases in recommendations, providing inclusive insights.      |
| Quality Assurance and Testing for High-Traffic Scenarios | \$65,000  | Focused testing on high-traffic and high-stress scenarios to ensure system reliability.                         |
| Project Management, Training, and Documentation          | \$70,000  | Managing resources and timelines effectively with updated documentation and comprehensive training.             |
| <b>Contingency Funds</b>                                 | \$50,000  | Maintaining funds for unforeseen costs or additional adjustments.   |
| Total  | \$750,000 |   |

## CONSTRAINTS, AND ASSUMPTIONS

| CONSTRAINTS | Budget: Budget limitations may restrict some aspects of model optimization or data access.  Timeline: Tight timeline for deployment, which may lead to compromises in fine-tuning or interpretability features.  Technical Limitation: Technical limitations in processing high volumes of data and real-time querying under extreme market conditions.  Project dependencies: Project Dependencies on third-party data sources, which may face delays or limitations. |
|-------------|--|
| ASSUMPTIONS | Sufficient access to real-time financial data and proprietary databases.  Support from the IT team to ensure the GenAI assistant integrates smoothly into existing infrastructure.  Availability of financial domain experts to help with fine-tuning the assistant for specialized terminology.  Timely feedback from the analyst and portfolio management teams during testing.  |

## RISK AND MITIGATION STRATERGIES

| RISK  | MITIGATION STRATERGIES  |
|---|---|
| Slow system performance during high trading volumes                                 | Explore cloud scalability solutions and optimize retrieval systems for peak demand.                       |
| Misinterpretation of financial terms due to the general dataset used in training    | Implement specialized fine-tuning using SecureInvest's proprietary data to enhance accuracy.              |
| User resistance due to lack of explainability in AI-generated recommendations       | Prioritize the development of interpretability features to explain the rationale behind AI decisions.     |
| Potential bias in recommendations, especially regarding asset classes or geographic | Regularly audit the assistant's output and adjust its data sources to ensure diversified recommendations. |

#### APPROVAL AND COMMUNICATION PLAN

| APPROVAL AND COMMUNICATION PLAN  |  |  |
|--|--|--|
| APPROVAL   |  |  |
| The project charter will be approved by SecureInvest's Senior Management and stakeholders.                   |  |  |
| COMMUNICATION PLAN   |  |  |
| Weekly status meetings with the project team and monthly updates to senior management.                       |  |  |
| Key decisions and updates will be communicated via email and project management tools (e.g., Jira or Asana). |  |  |

| PREPARED BY    | TITLE              | DATE       |
|----------------|--------------------|------------|
| Altaf and Team | Cybersecurity Team | 11/11/2024 |