

# Varys: GenAl-Powered Company Intelligence

Summarizing Online Sentiment from Reddit for Strategic Insights

## Why Varys? The Problem with Scattered Feedback

In today's fast-paced digital landscape, valuable customer and market feedback is everywhere. But it's often fragmented, overwhelming, and difficult to leverage.



#### Fragmented Data

Feedback lives in isolated channels – social media, forums, reviews – creating a disconnected view.



#### Information Overload

The sheer volume of raw, unstructured data makes manual analysis virtually impossible for teams.



#### **Buried Insights**

Critical trends and sentiments are hidden beneath noise, leading to missed opportunities and slow reactions.

## Why Varys? The Problem with Scattered Feedback

Unstructured & Scattered
Companies struggle to analyze
public feedback hidden across
disparate online platforms.

Missing Reddit Insights

Valuable, real-time insights from

platforms like Reddit remain

untapped due to lack of specialized tools.

Need for Automation

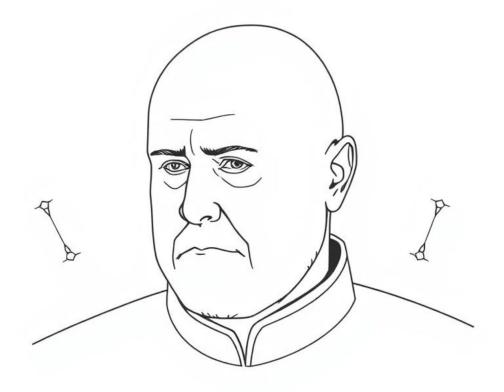
Demand for automated,

explainable, and centralized

summaries to inform strategic

decisions.

### What's in a Name? A Nod to Westeros



## "Little birds everywhere. Everywhere. They whisper in my ear."

Inspired by the enigmatic character from Game of Thrones, Varys
"the Master of Whisperers" quietly gathers intelligence from across
the realm.

Our Varys listens to the digital realm, specifically Reddit, and whispers critical insights to stakeholders.

## Varys' Core Functionality

1

#### Collect Reddit Mentions

Scrapes company-specific discussions and mentions from Reddit.

3

#### Extract Themes & Build a RAG model

Extracts key themes, keywords, and entities to build a comprehensive company profile and RAG model.

2

#### Analyze & Classify Sentiment

Identifies sentiment (positive, negative, neutral) and categorizes feedback (complaints, praise, questions).

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#### Display Insights

Presents actionable insights via a monitoring dashboard with a real-time log viewer and GenAl chat interface.

### The Tech Behind Varys: Detailed Architecture

Varys leverages a robust, modern tech stack designed for scalability and efficiency.



User Input UI

ReactJS + Shadon



Reddit Scraper

Reddit API + PRAW



Preprocessing/Data Cleaning

Langchain + gpt-nano-4.1



LangChain Enrichment / Text Analysis

LCEL Runnables + gpt-nano-4.1



Vector Store Embeddings

FAISS + text-embedding-ada-002 +

OpenAlEmbeddings



RAG model

Vector Store Retriever + Chat



**Backend API** 

FastAPI + Uvicorn



Database

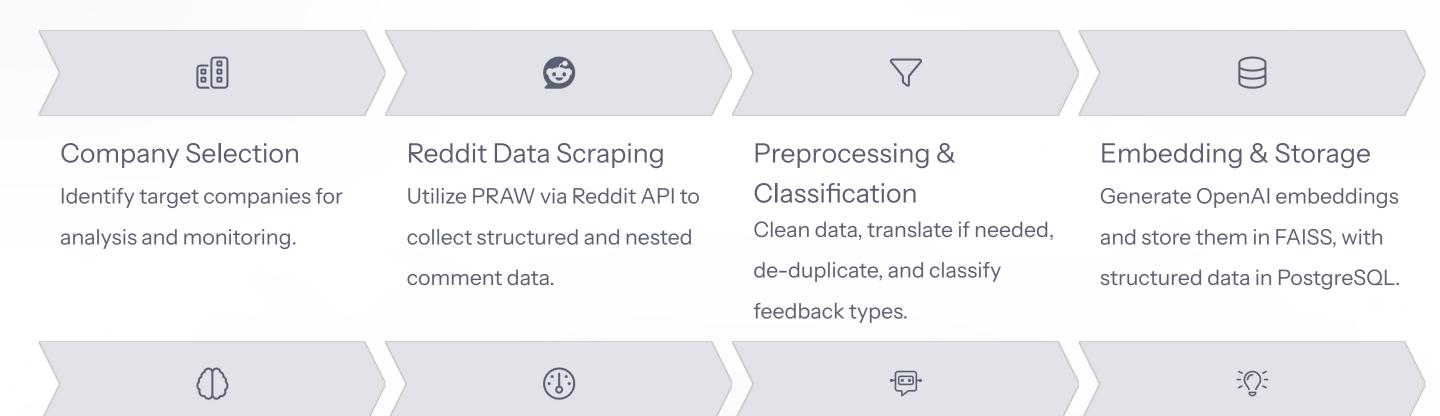
PostgreSQL + Supabase



Visualization

ReactJS + Recharts

### Varys Model Building: Step-by-Step



#### **RAG Setup**

Implement

Retrieval-Augmented

Generation for context-rich Al

responses.

#### **Dashboard Visualization**

Develop interactive dashboards to display key insights and trends.

#### GenAl Chatbot

Deployment

Integrate and deploy the

GenAl chatbot for interactive

Q&A.

Gain Insights and User Perspective
Know what the users are saying about the company/brand.



## Benefits & Impact: Unlocking Strategic Value



#### Rapid Insights

Centralized company feedback in minutes, not weeks, accelerating decision-making.



#### Cross-Functional Value

Empowers HR, MarComm, and leadership to understand external perception effortlessly.



#### Scalable

Adaptable to any company with a significant Reddit presence, fostering broad applicability.



#### Transparent & Traceable

Features transparent logs and a fully traceable pipeline for enhanced trust and debugging.

## Live Demo: Varys in Action

Experience the **real-time log viewer** as data streams in.

Monitor progress with our intuitive **tracking dashboard**.

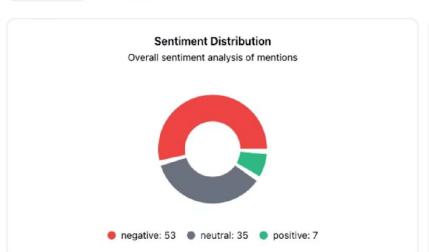
See a concise **generated company summary**.

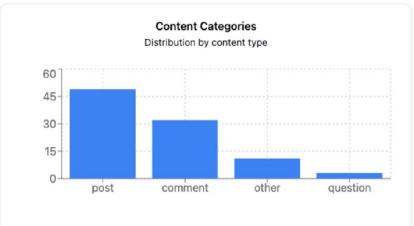
Engage with the **interactive GenAl Q&A** for specific company insights.

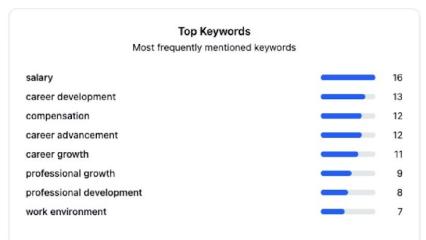


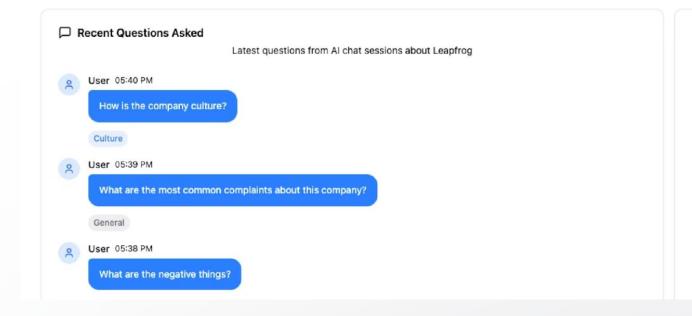
#### Intelligence Dashboard

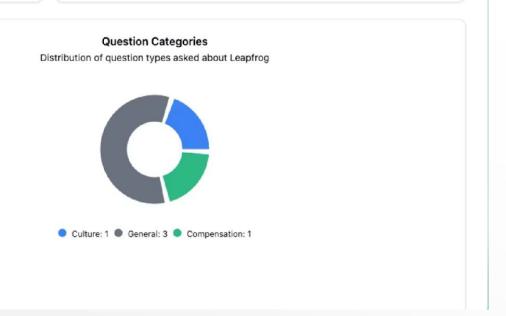












## Challenges Faced: Overcoming Hurdles



#### **API Limitations**

Navigating Reddit API rate limits and data access restrictions.



#### Noisy & Multilingual Data

Preprocessing and making sense of diverse, unstructured, and often informal online text.



#### LLM Alignment

Ensuring LLM outputs align accurately with structured insights and desired classifications.



#### Log Syncing

Maintaining reliable real-time log syncing and robust polling architecture.

## Future Enhancements for Varys

Broader Platform Support: Integrate Glassdoor, Blind, and LinkedIn comments for a holistic view.

Monthly Automations: Implement automations to get a diff on the reviews per month and add more insights.

**Model Refinement:** Fine-tune models specifically for company review classification and sentiment analysis.

Admin Dashboard: Develop a dedicated admin interface for seamless company management and configuration.

Thank you for your time and interest in Varys!