

# Problem Statement

- Credit scores are broken because they only look at numeric values
- 80% of enterprise data are unstructured texts
- Traditional Credit Scoring models (FICO/CTOS) ignore them completely.



# Motivation

## Blindness

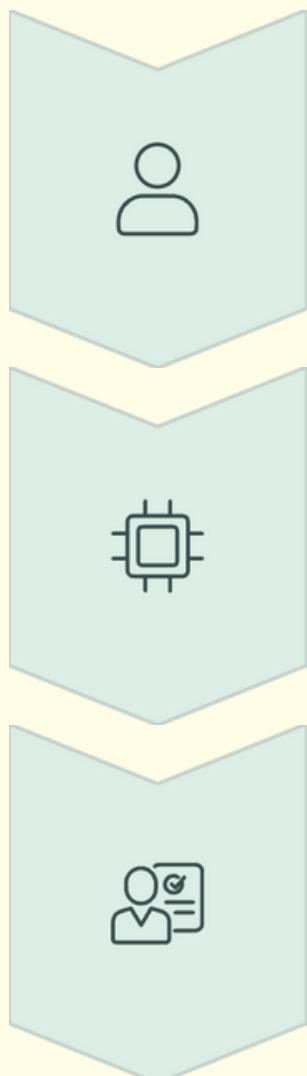
Numerical models missed textual red flags because the cash flow *looked* fine on paper.

## The Black Box

When AI is used, it gives a score without a reason. You can't tell a regulator "The robot said no."

We need a system that reads between the lines, verifies facts, and explains its work.

# System Architecture



## Input

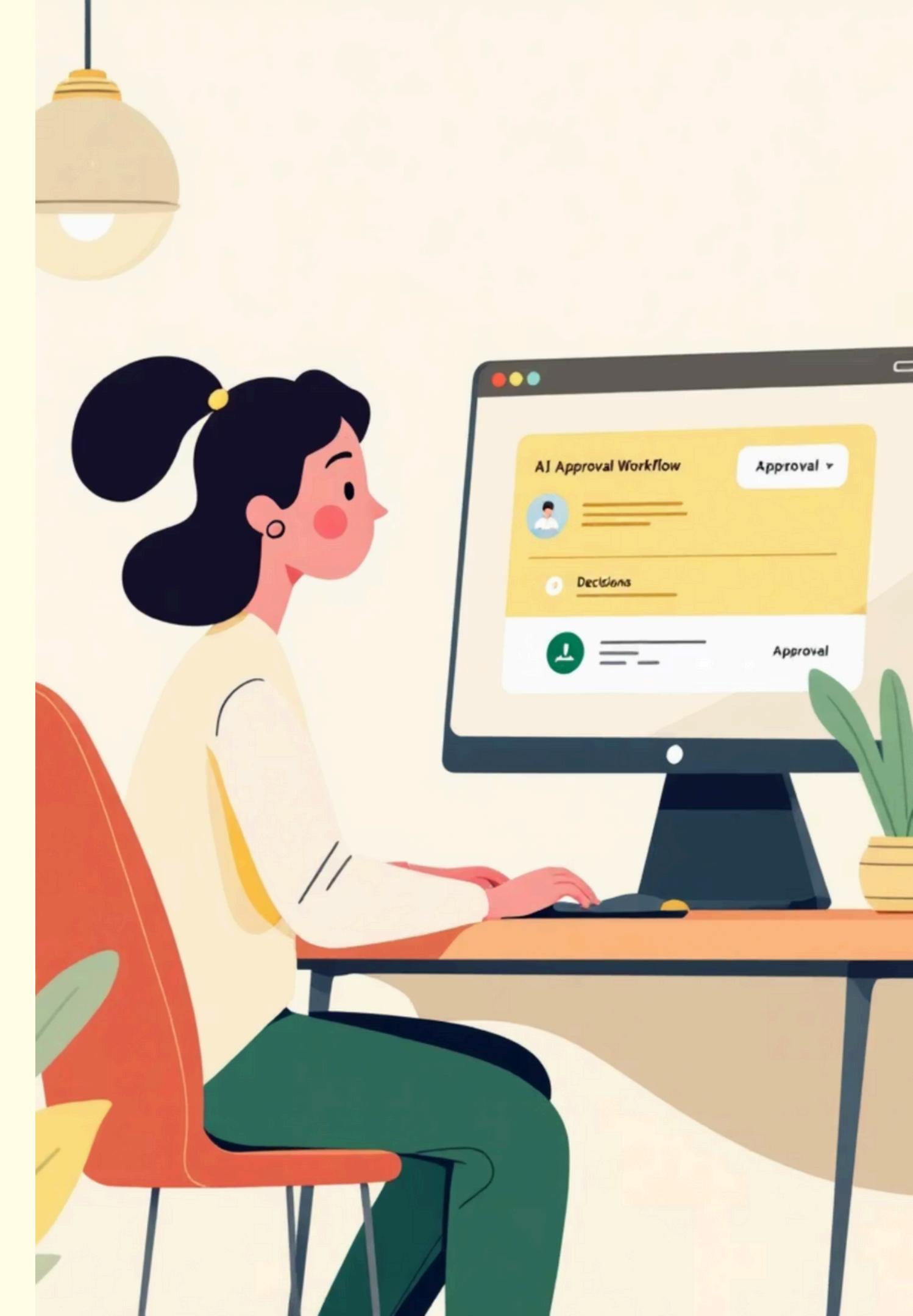
Applicant Profile, Loan Information

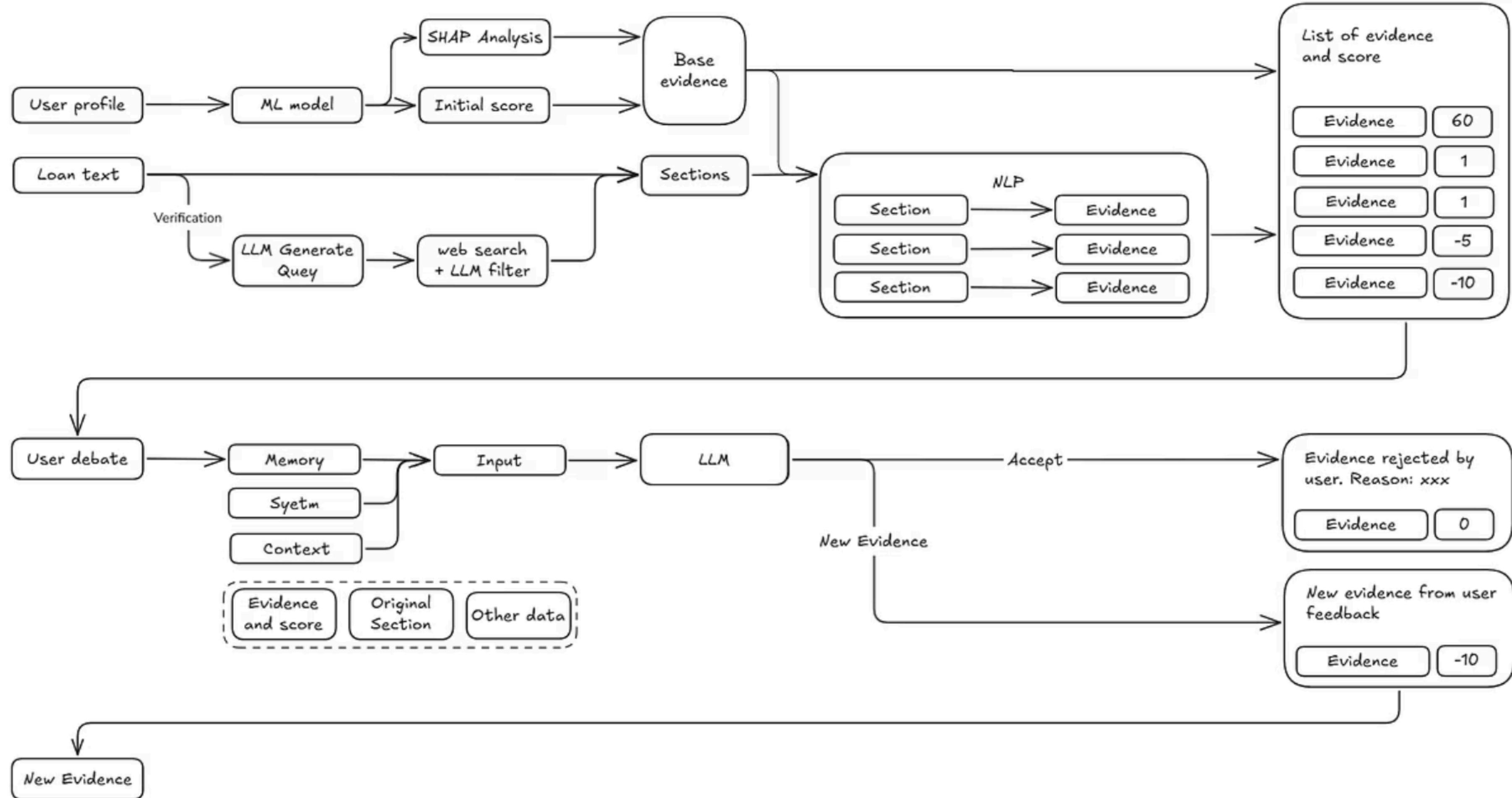
## Processing

ML, web search, LLM

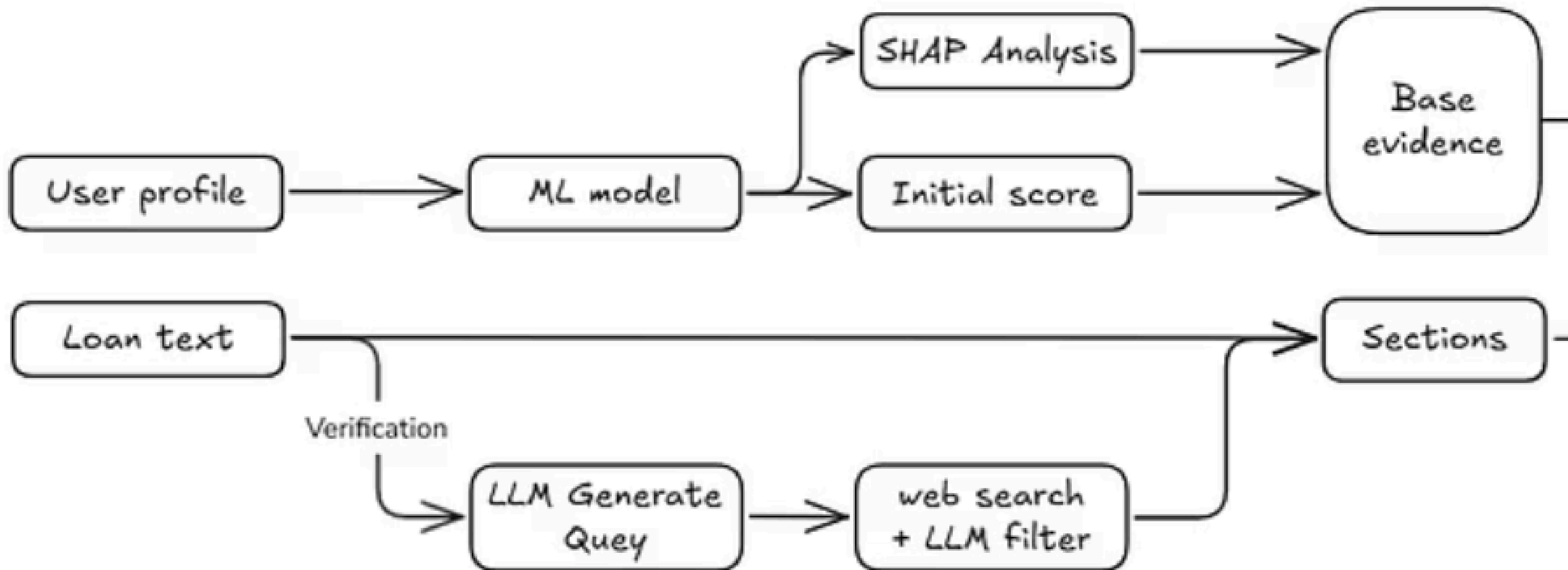
## Output

A series of evidence & final score

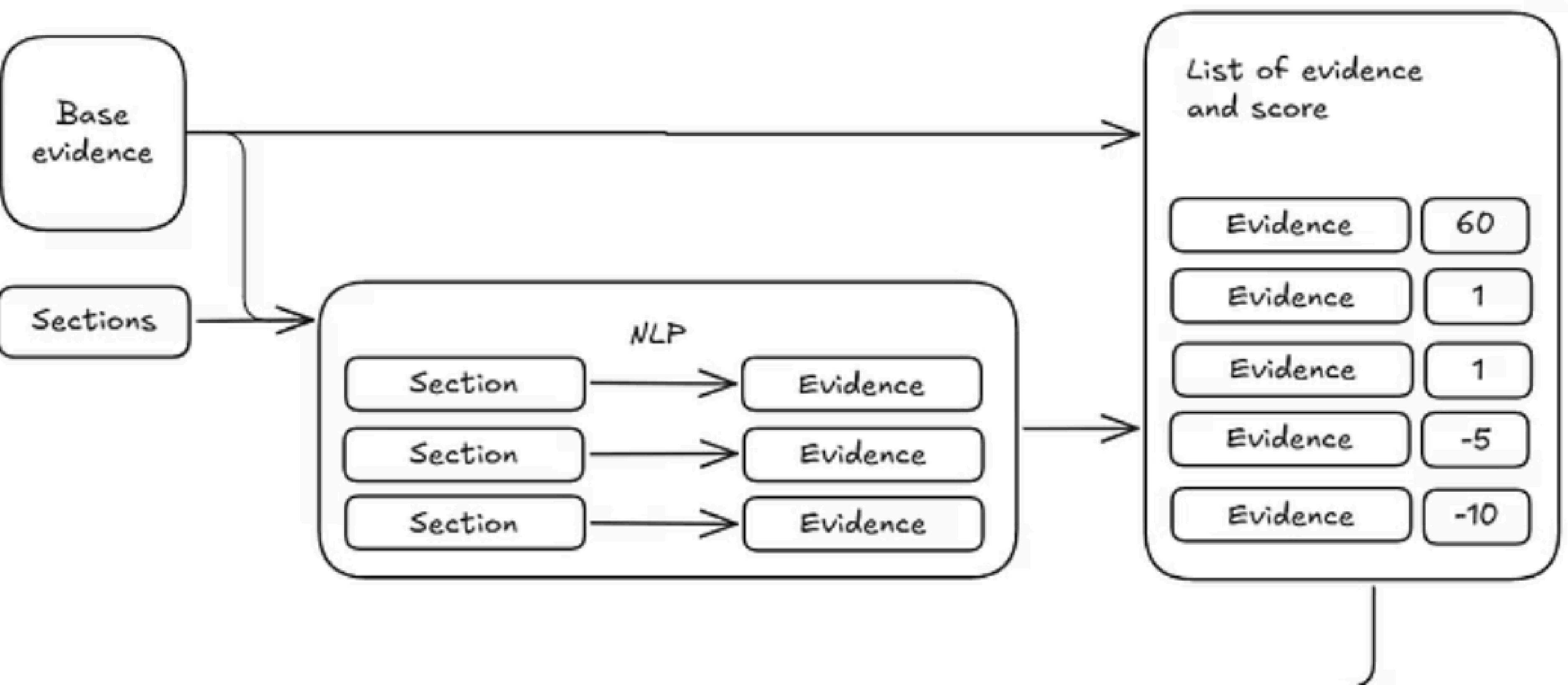




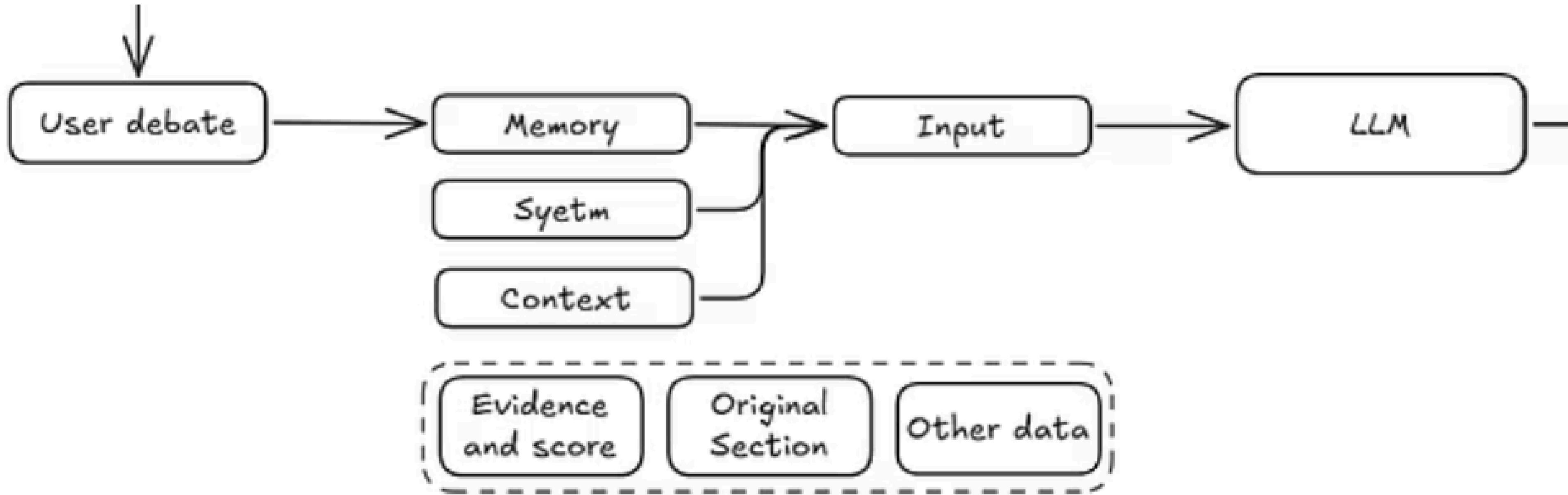
# Ingestion Pipeline



# Inference using LLM



# Evidence Override Flow





# Key Features

## Feature 1: Multi-Modal Risk Scoring

We don't just calculate Debt-to-Income. We analyze the *tone* of the application letter.

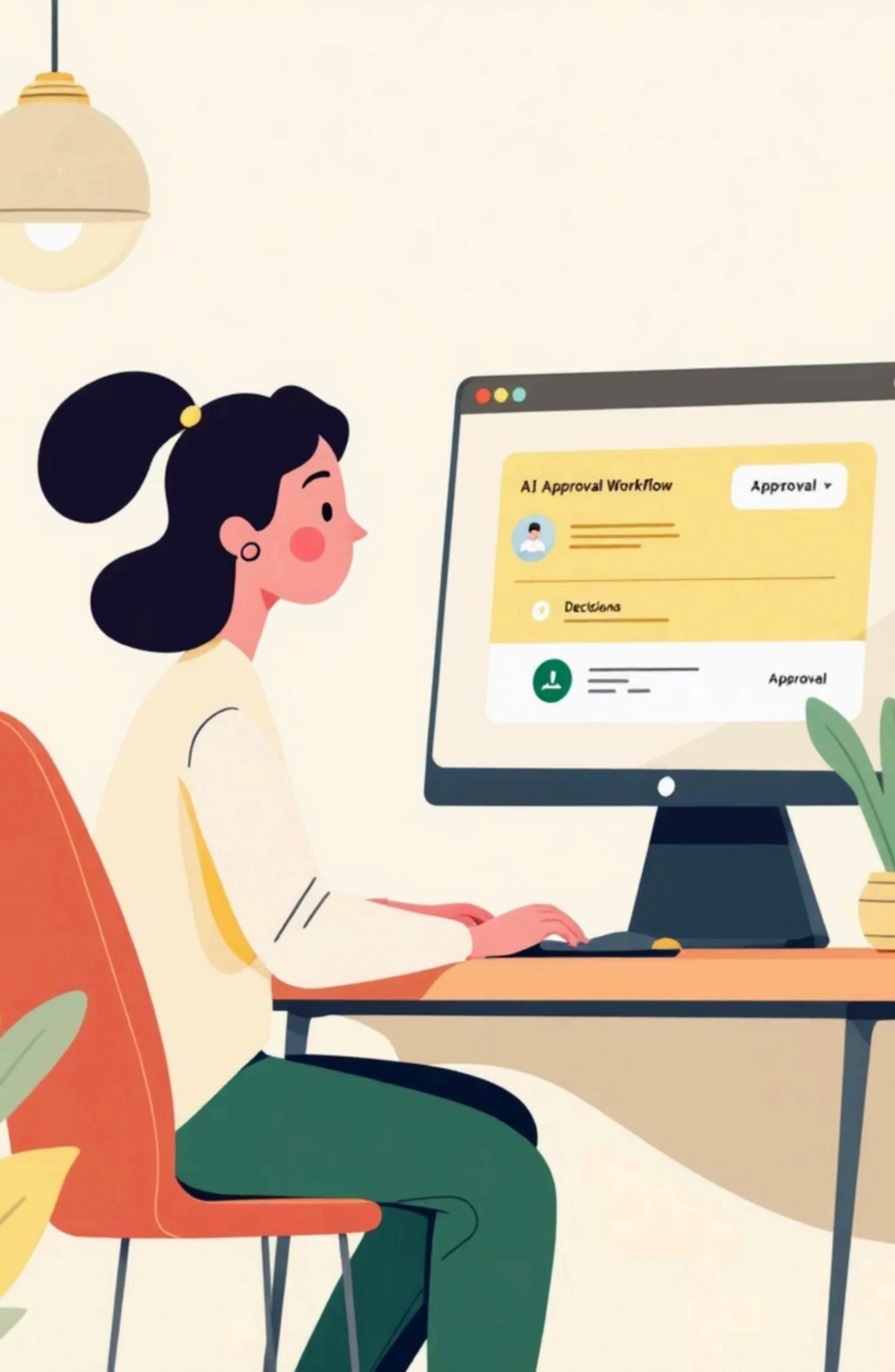
**Impact:** Detects "desperation" or "evasiveness" in text.



## Feature 2: The "Trust But Verify" Agent (Web Scraper)

Auto-validation of claims against real-world news and databases.

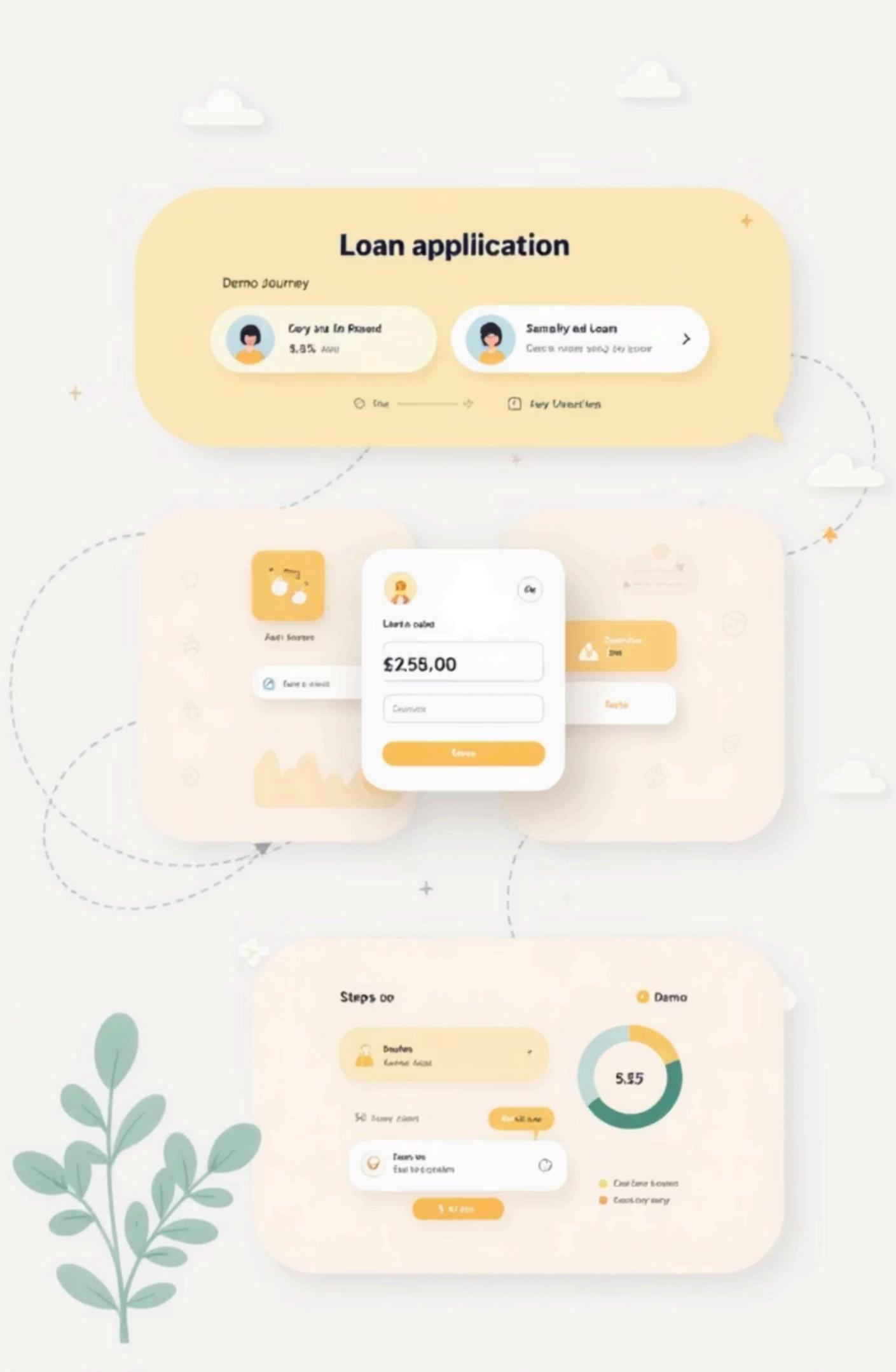
*Impact:* Caught scandals by linking the applicant news articles automatically.



## Feature 3: Compliance Override Protocol (The Debate)

A HITL (Human-in-the-Loop) workflow where auditors can challenge the AI's findings.

*Impact:* Solves the "Black Box" problem. Every decision is logged with human rationale.



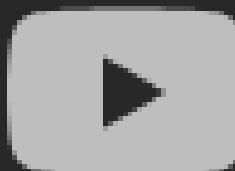
# User Journey & Demo Screens



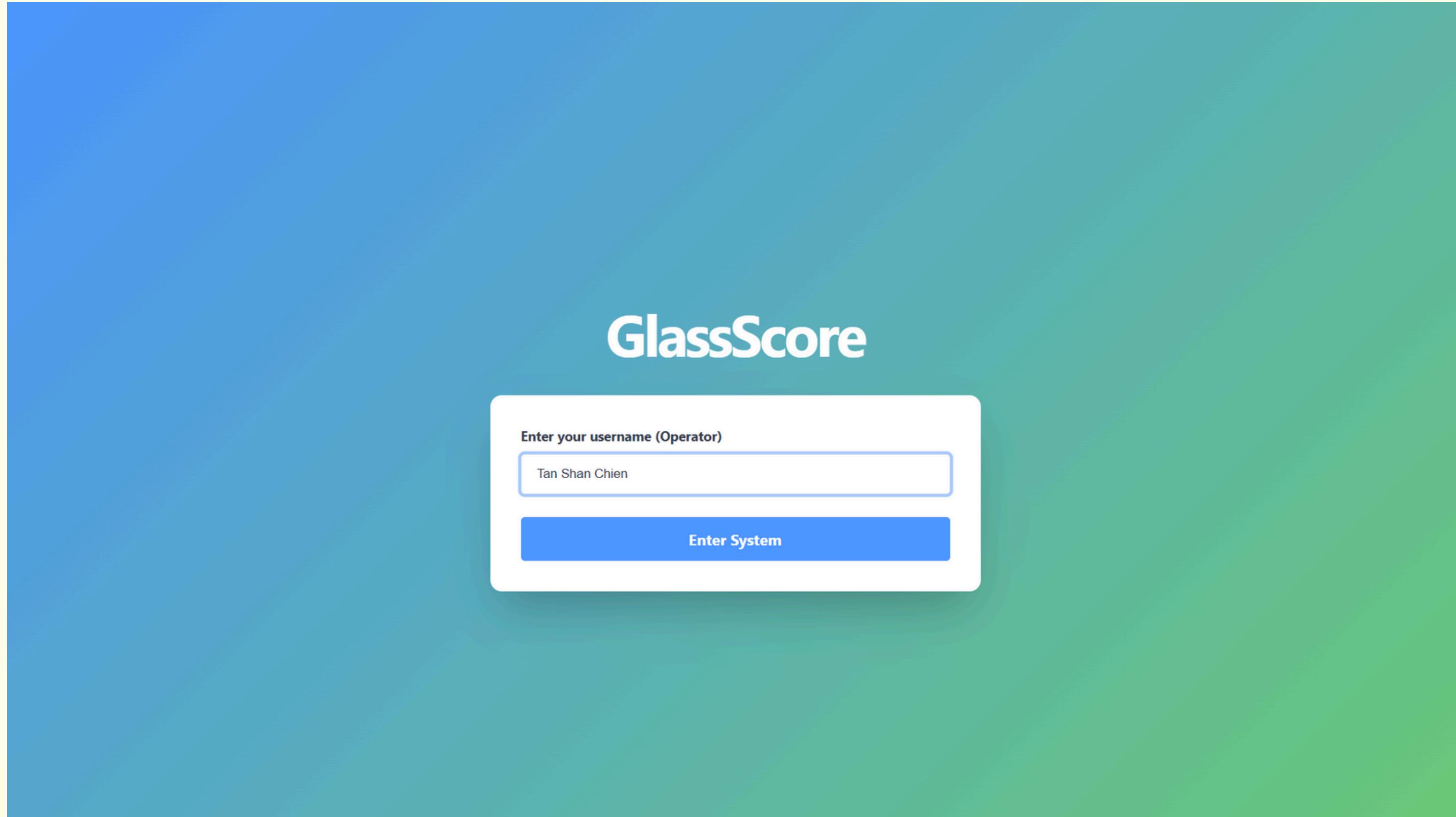
Watch video on YouTube

Error 153

Video player configuration error



# 1. Enter your identity



## 2. Fill in an Applicant's Profile

### Applicant Data

Enter details and upload documents for evaluation

#### Applicant Profile

Load Preset Profile  
Datuk Karim Abdullah

Name \*  
Datuk Karim Abdullah

Age \*  
52

Gender \*  
Male

Annual Income \*  
150000

Employment Length (years) \*  
25

Home Ownership \*  
Own

Loan Amount \*  
75000

Loan Interest Rate (%) \*  
4.5

Loan Intent \*  
Venture

Loan Grade \*  
A

Credit History Length (years) \*  
25

# 3. Upload all related documents

Home Ownership \*

Own

Loan Amount \*

75000

Loan Interest Rate (%) \*

4.5

Loan Grade \*

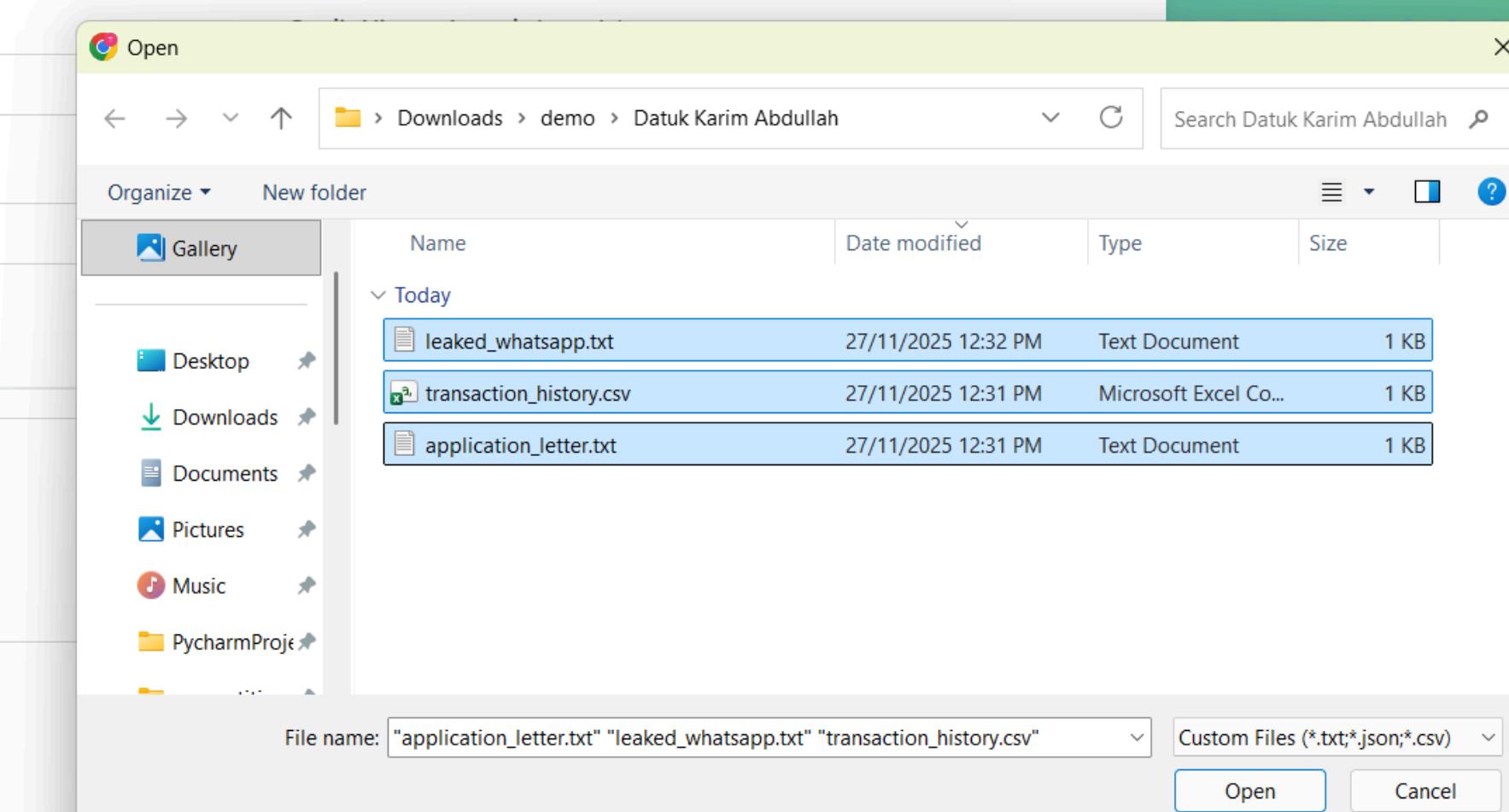
A

Default on File \*

No

**Supporting Documents**

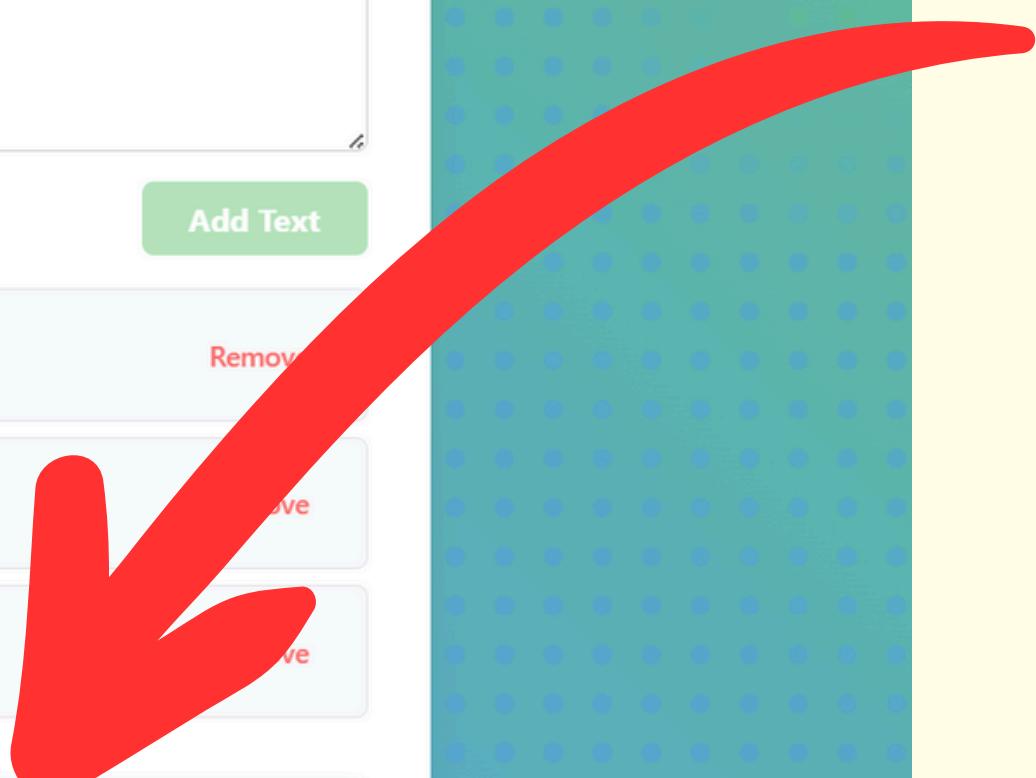
Paste text content here...

A file selection dialog titled "Open" is displayed over the form. The path shown is "Downloads > demo > Datuk Karim Abdullah". The "Today" section lists three files:

- leaked\_whatsapp.txt (Text Document, 1 KB)
- transaction\_history.csv (Microsoft Excel Co..., 1 KB)
- application\_letter.txt (Text Document, 1 KB)

The "File name:" field at the bottom contains the names of the selected files: "application\_letter.txt" "leaked\_whatsapp.txt" "transaction\_history.csv".

# 4. Start evaluation in one click



A screenshot of a web-based credit evaluation application interface. The form includes fields for numerical input (e.g., 4.5), dropdown menus (e.g., Venture, A, No), and text input. A section for 'Supporting Documents' contains a text area, a file upload button ('Upload File(s) (.txt, .json, .csv)'), and three uploaded files: 'leaked\_whatsapp.txt', 'transaction\_history.csv', and 'application\_letter.txt'. A prominent blue button at the bottom is labeled 'Start Evaluation'.

4.5

Venture

Loan Grade \*

A

Credit History Length (years) \*

25

Default on File \*

No

**Supporting Documents**

Paste text content here...

Upload File(s) (.txt, .json, .csv)

Add Text

leaked\_whatsapp.txt  
File Upload • 440 chars

Remove

transaction\_history.csv  
File Upload • 358 chars

Remove

application\_letter.txt  
File Upload • 1010 chars

Remove

Start Evaluation

# Evaluation Started

Machine Learning model gives an initial score

**Evaluating: Datuk Karim Abdullah**

[Back](#) [Evaluate Another User](#)

+89

Low Risk

*Source: Machine Learning Model*

[Summarise](#)

89 Final verdict: Approve Loan [Accept](#)

# Evaluation

LLM Found negative evidence

**Evaluating: Datuk Karim Abdullah**

[Back](#) [Evaluate Another User](#)

+89

Low Risk

*Source: Machine Learning Model*

-10

Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.

*Source: application\_letter.txt*

-10

Admits to past regulatory breaches with the Securities Commission, indicating a history of compliance issues.

*Source: application\_letter.txt*

-10

Acknowledges serious audit issues, downplaying them as 'technical differences' while still 'being rectified'.

*Source: application\_letter.txt*

-10

Colluding to misrepresent revenue is a major red flag.

-10

Implies manipulating financial audit.

[Summarise](#)

0

Final verdict: Reject Loan

[Approve Anyway](#)

# Evaluation

Clear citation from each evidence

**Evaluating: Datuk Karim Abdullah**

+89

Low Risk

Source: Machine Learning Model

+1

Highlights involvement in large, successful business ventures.

Source: <https://www.forbes.com/profile/mohd-abdul-karim-abdullah/>

+1

Shows successful business formation and leadership.

**Source Text Content**

Subject: Working Capital Requirement - Project Renaissance - Serba Dinamik Holdings

To the Head of Corporate Banking,

Serba Dinamik Holdings is seeking RM 12,000,000 in working capital to fulfill secured engineering order books in the Middle East. Despite recent media speculation regarding our statutory audit, I assure you these are technical interpretational differences that are being rectified.

Our core business fundamentals remain strong with an order book of RM 10 Billion. The requested funds are essential to procure materials for the Abu Dhabi project. We have successfully completed the settlement of previous compounds with the SC, and our focus is now entirely on execution.

Attached are our management accounts. Please note that the **audited FY24 accounts are pending final sign-off due to a change in external auditors (formerly KPMG)**, but the cash flow projections attached demonstrate our ability to service this debt.

Regards,  
Datuk Dr. Mohd Abdul Karim Abdullah  
Group MD/CEO

Back

Evaluate Another User

-10

Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.

Source: application\_letter.txt

-10

Acknowledges serious audit issues, downplaying

**Summarise**

**Reject Loan**

**Approve Anyway**

# Evaluation

Evidence are gathered from different sources

**Evaluating: Datuk Karim Abdullah**

[Back](#) [Evaluate Another User](#)

+89

Low Risk

Source: Machine Learning Model

-10

Company faces severe legal and regulatory issues, impacting financial health.

Source: <https://www.malaymail.com/news/malaysia/2022/05/16/report-serba-dinamik-ceo-claims-hidden-hands-out-to-destroy-company-and-plo/2059147>

+1

Highlights involvement in large, successful business ventures.

Source: <https://www.forbes.com/profile/mohd-abdul-karim-abdullah/>

+1

Indicates significant business success and substantial company value.

Source: [https://www.annualreports.com/HostedData/AnnualReportArchive/b/bion-plc\\_2019.pdf](https://www.annualreports.com/HostedData/AnnualReportArchive/b/bion-plc_2019.pdf)

-10

Disposed of all warrants, suggesting lack of confidence or personal financial strain.

Source: <https://theedgemalaysia.com/article/ceo-abdul-karim-disposes-entire-holding-serba-dinamik-warrants>

-10

Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.

Source: application\_letter.txt

+1

Shows successful business formation and leadership.

+1

Demonstrates strong entrepreneurial drive and professional achievement.

-10

Admits to past regulatory breaches with the

-10

Acknowledges serious audit issues, downplaying

Summarise

0 ✓ Final verdict: Reject Loan

Approve Anyway

# Evaluation

TD;LR summary for quick reading

+89

Low Risk

Source: Machine Learning Model

+1

Highlights involvement in large, successful business ventures.

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## Evaluation Summary

⚠ New evidence added. Refresh Summary

Average Score: **0/100** Total Evidence: **23**

Here's a comprehensive summary of the loan evaluation results for Datuk Karim Abdullah:

**1. Overall Assessment of the Loan Application:** Despite an initially strong machine learning model assessment based on extensive credit and employment history, the application for Datuk Karim Abdullah presents critical and irreconcilable red flags. The total score of 0.0/100 reflects an overwhelming amount of negative evidence pointing to severe financial governance issues, regulatory non-compliance, and potential fraudulent activities.

**2. Key Positive Factors:**

- Strong Personal Profile:** Datuk Karim Abdullah has a long and stable credit and employment history (25 years each), contributing to an initial "Low Risk" assessment by the machine learning model.
- Significant Wealth and Business Acumen:** He holds high-level executive positions (Group MD & CEO of Serba Dinamik Holdings Bhd), has been recognized among Malaysia's 50 Richest, and has received entrepreneurial awards, demonstrating

-10

Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.

Source: [application\\_letter.txt](#)

-10

Acknowledges serious audit issues, downplaying them as 'technical differences' while still 'being rectified'.

Source: [application\\_letter.txt](#)

Summarise (Updated)

# Evaluation

## Evidence overriding workflow

Click

**Evaluating: Datuk Karim Abdullah**

**+89**  
Low Risk  
Source: Machine Learning Model

**+1**  
Highlights involvement in large, successful business ventures.  
Source: <https://www.forbes.com/profile/mohd-abdul-karim-abdullah/>

**+1**  
Indicates significant business success and substantial company value.  
Source: [https://www.annualreports.com/HostedData/AnnualReportArchive/b/bion-plc\\_2019.pdf](https://www.annualreports.com/HostedData/AnnualReportArchive/b/bion-plc_2019.pdf)

**+1**  
Shows successful business formation and leadership.

**-10**  
Company faces severe legal and regulatory issues, impacting financial health.  
Source: <https://www.malaymail.com/news/malaysia/2022/05/16/report-serba-dinamik-ceo-claims-hidden-hands-out-to-destroy-company-and-plo/2059147>

**-10**  
Disposed of all warrants, suggesting lack of confidence or personal financial strain.  
Source: <https://theedgemalaysia.com/article/ceo-abdul-karim-disposes-entire-holding-serba-dinamik-warrants>

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Admits to past regulatory breaches with the

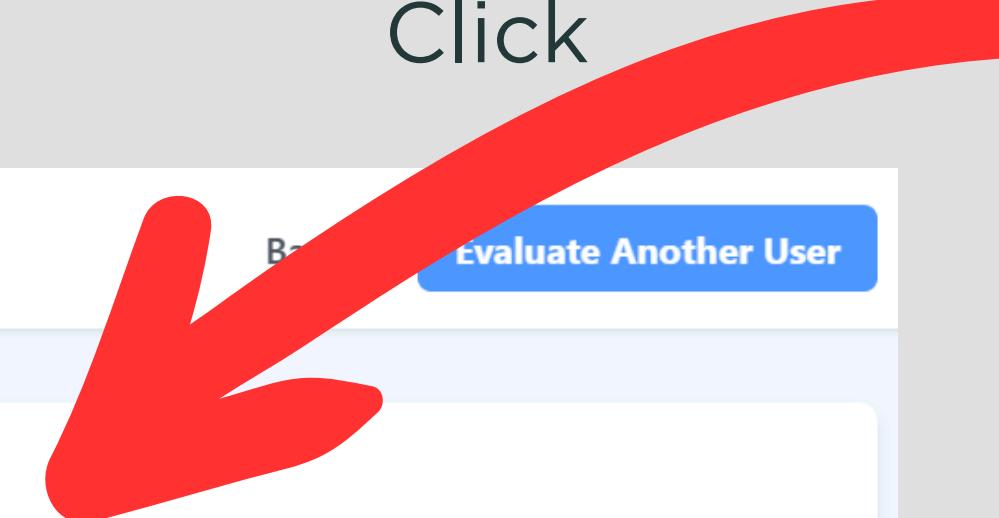
**-10**  
Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.  
Source: application\_letter.txt

**-10**  
Acknowledges serious audit issues, downplaying

**Summarise**

**Final verdict: Reject Loan**

**Approve Anyway**



# Evaluation

## Evidence overriding workflow

**Evaluating: Datuk Karim Abdullah** **Evidence Details**

**SCORE**  
**-10**

**DESCRIPTION**  
Company faces severe legal and regulatory issues, impacting financial health.

**CITATION**  
company's legal troubles with market regulators were caused by "hidden hands"

**SOURCE**  
<https://www.malaymail.com/news/malaysia/2022/05/16/report-serba-dinamik-ceo-claims-hidden-hands-out-to-destroy-company-and-plo/2059147>

This is not Him |  

**Invalidate Evidence**

**Back** **Evaluate Another User**

**-10**  
Delay in audited accounts and a change from a major auditor (KPMG) is a critical red flag.  
Source: application\_letter.txt

**Summarise (Updated)**  
Acknowledges serious audit issues, downplaying

**Select: Reject Loan** **Approve Anyway**

# Evaluation

Final Verdict: Model suggestion & Human Approval

**Evaluating: Datuk Karim Abdullah**

**Back** **Evaluate Another User**

**+89**

Low Risk

Source: Machine Learning Model

**-10**

Company faces severe legal and regulatory issues, impacting financial health.

Source: <https://www.malaymail.com/news/malaysia/2022/05/16/report-serba-dinamik-ceo-claims-hidden-hands-out-to-destroy-company-and-plo/2059147>

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**-10**

Delay in audited accounts and a change from a major auditor (KPMG) is a critical warning.

Source: application\_letter.txt

**+1**

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**+1**

Demonstrates strong entrepreneurial drive and professional achievement.

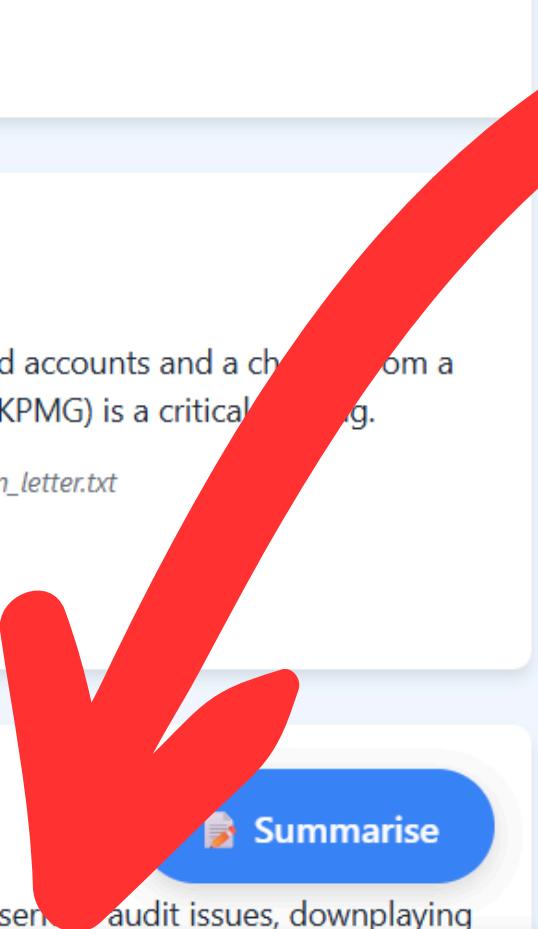
**-10**

Admits to past regulatory breaches with the

**-10**

Acknowledges serious audit issues, downplaying

**Summarise**



**0** **Final verdict: Reject Loan** **Approve Anyway**

# Tech Stack (APIs, Tools)



**AI**

LangChain / LangGraph  
Tavily



**LLM**

Gemini 2.5 flash



**Machine Learning**

Scikit-Learn (Random Forest)



**Backend**

FastAPI



**Frontend**

React



# Innovation & Differentiation

## Competitors

Single Agentic AI  
responsible for  
everything  
(Black Box)

## GlassScore

- Score-based evaluation. AI does not hallucinate the final score.
- Multiple agents working together, preventing bias
- Every risk flag is transparent, cited, and debatable

# GlassScore

Enter your username (Operator)

Tan Shan Chien

Enter System

## Business Impact



**Catches suspicious loan application that look financially healthy.**



**Override Log ensures every decision is audit-ready.**

# GlassScore

# Thank You

Presented by: Solo Leveling