

Business Problem

Artificial Intelligence has been the rapidly evolving catalyst that has been reshaping industries, conventional workflows and societal norms. The role of AI in the legal system is no exception but the integration and adoption of AI systems into legal workflows comes with a set of challenges.

1

Fear & Stigma Surrounding AI – Lack of Awareness

2

Incorporation of AI in everyday Judicial Processes

3

Identification & Flagging of AI Generated Content

Judges remain wary and slightly hesitant in incorporating AI assisted workflows even though it comes at the cost of streamlined processes. Their inability to identify AI generated and AI altered content has also made them uneasy about how to perceive evidence during trials and discovery. Our solution aims to combat this skepticism, improve efficiency leading to savings in time and costs.

Reduction in Negative Sentiment

< 10%

↓

AI Supported Daily Workflows/Use-Cases

5+

↑

Accuracy in Flagging AI Content

~80%

🎯

Analytics Problem

This initiative transforms abstract organizational challenges into data-driven tasks: quantifying AI awareness gaps through judicial surveys and usage analytics, identifying workflow automation candidates via process mining , establishing probabilistic thresholds for GenAI text detection, and crafting multimodal media guidelines combining metadata checks and AI tools.

Lack of AI Awareness

→

Quantify Organizational Gaps in AI Awareness

AI Agnostic Daily Workflows

→

Process Mining for Workflow AI Integration

Identifying GenAI Content

→

Probabilistic Detection of GenAI Content

Flagging AI Altered Content

→

Multimodal Synthetic Media Detection

Data

The project is built on the foundations of survey responses from judges in the Indiana courts assessing their comfort, requirements, concerns related to AI. This was combined with qualitative research and interviews to identify major pain points and optimal solutions.

1

Survey Responses from 100+ Judges

2

Qualitative Interview Transcripts

3

Qualitative Research & Process Mining

Methodology

We started our work with analysis of the survey responses to understand the existing sentiments around AI and performed semi-structured qualitative interviews to further understand common concerns.

The interviews also helped gain visibility into expectations from AI to device the right integration plan. The plan was supplemented with a study of the current tools in the market based on cost, limits, transparency etc.

Process Mining 2

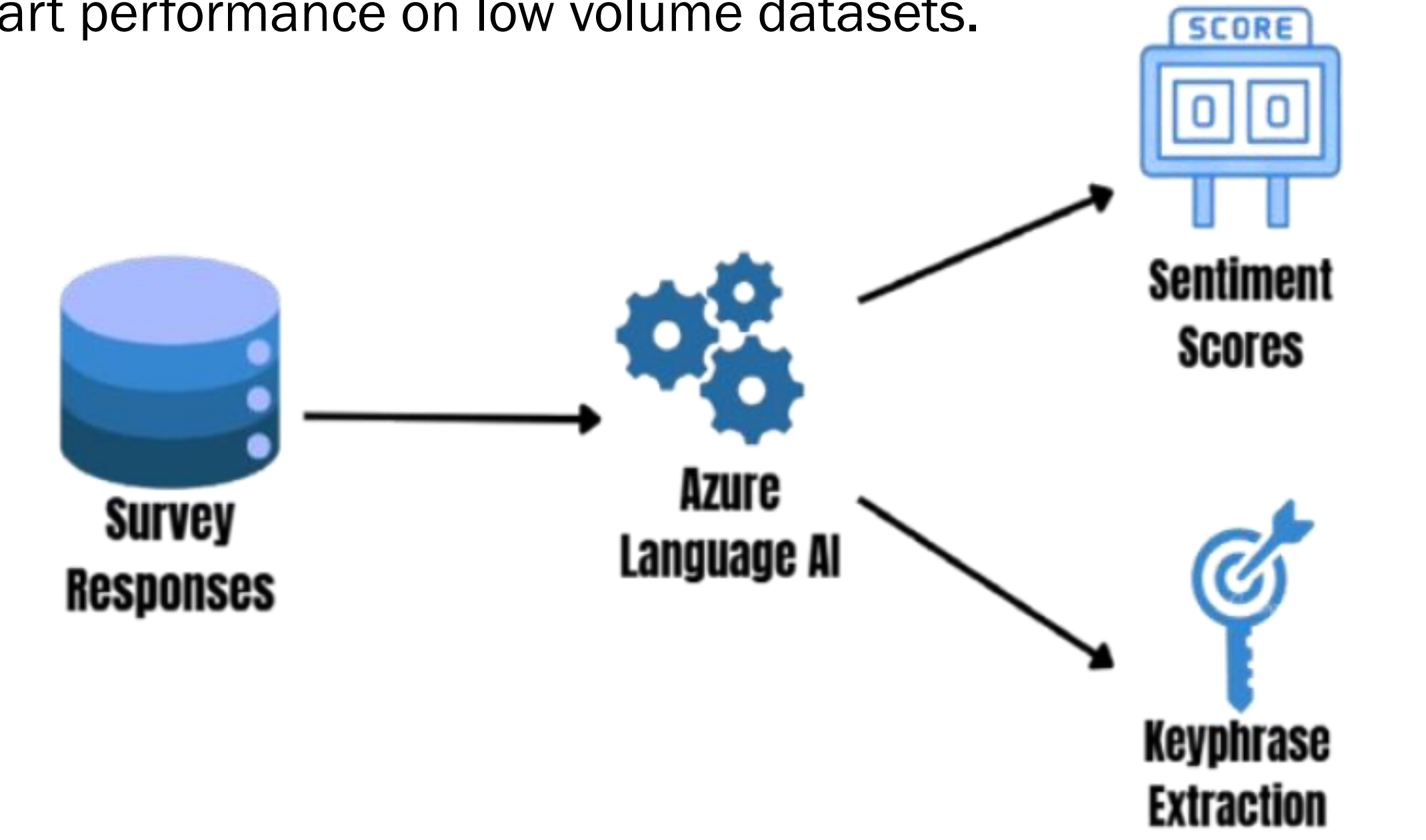
AI Content Detection 4

1 NLP Analysis

3 Thematic Analysis

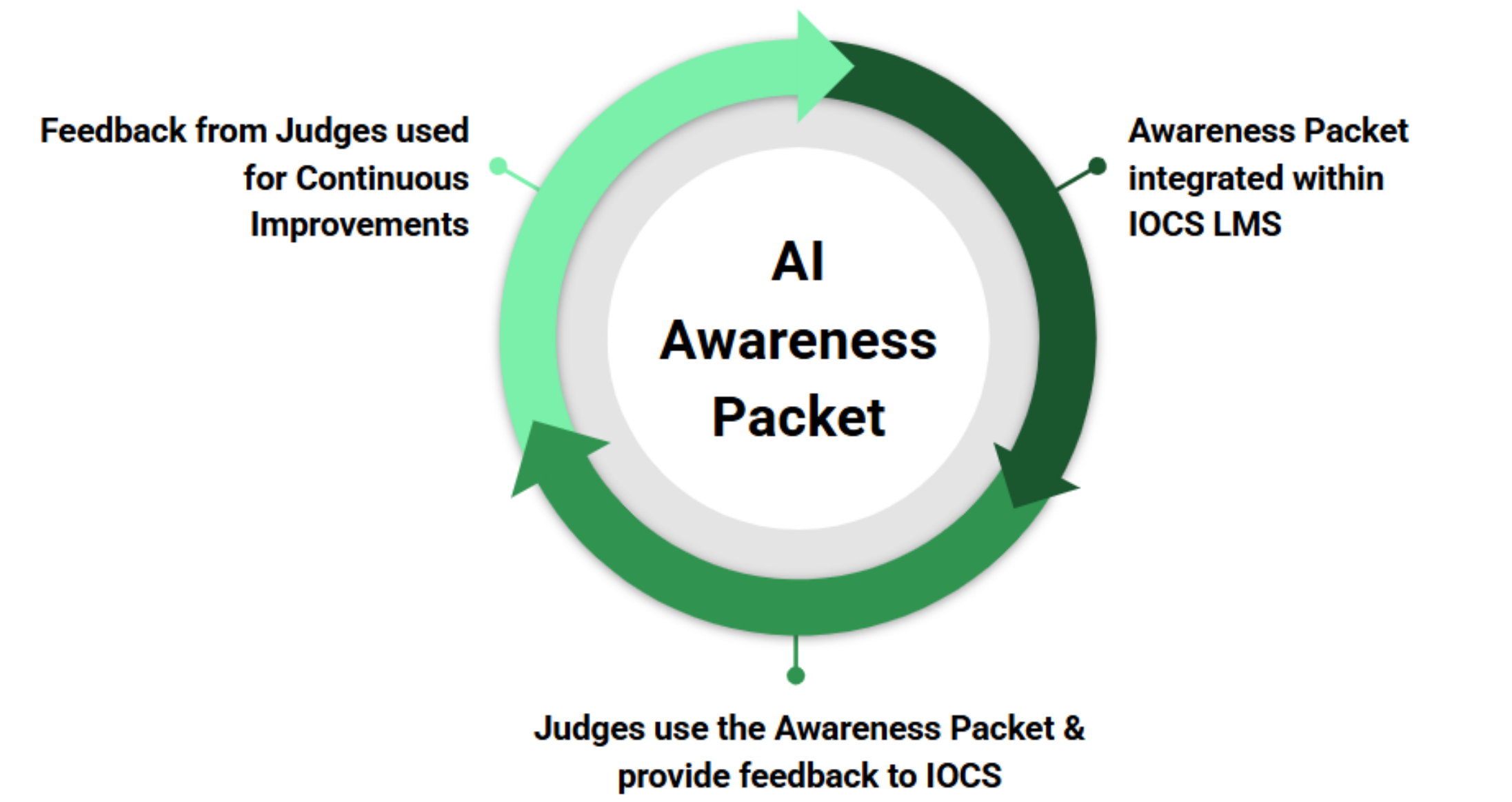
Model Building

The survey data was put through an NLP pipeline built to capitalize on Azure Language AI’s pre trained analysis models. This allows us to leverage cutting edge state of the art performance on low volume datasets.



Deployment & Life Cycle

The AI awareness packet will be integrated into the IOCS (Indiana Office of Court Services) learning management system. The current LMS tool being used by IOCS is Moodle. Once added to Moodle, the packet will be rolled out to all judges under the Indiana court system for consumption and their feedback will be used to iteratively improve the content.



The suggestions for daily workflows along with the relevant tools, supplemented with their risk and performance analysis will be forwarded to the IOCS special panel of judges for review. Upon review the judges can decide, for or against, about the verdict on the suggestions.

The synthetic media identification framework will also be proposed as a suggestion for the IOCS to review and act upon as per their own discretion. The student team has no say or authority to influence their decision in any capacity.

AUTHORS

