Response to: National Archives and Records Administration/Department of Justice
                NextGen FOIA Tech Showcase Day 1 Topic 4 (AI)

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Introduction

The Chief FOIA Officers Council's Technology Committee, in conjunction with The Office of Information Services (OGIS) at the National Archives and Records Administration and the U.S. Department of Justice (DOJ) Office of Information Policy (OIP), is seeking advanced technologies to assist with and improve future FOIA case processing needs. One of the four key categories of technology under consideration is Artificial Intelligence (AI). This document is an RFI response which focuses exclusively on this AI component.

The Problem

According to www.justice.gov the US government received an estimated 800,000 FOIA requests in FY 2020. This is an increase of 33% over 2010 figure which were in the 600,000 range. This increase in requests comes in the context of exponential growth in digital data, seismic political and cultural shifts, and an increasing emphasis on data privacy, governance, risk, and compliance. Given the massive challenges these realities present, and the highly manual processes currently required, the need for intelligent and trusted automation to speed up the process of request processing and fulfillment has never been higher.

Nuix NLP Overview

Nuix NLP is a no-code, AI-driven text analytics platform that automates natural language comprehension, prioritization, and risk identification. In short, Nuix NLP is a robot book worm with a turbo-charged yellow highlighter. The product was built to help organizations make sense of their rapidly growing data quickly and accurately, without programming or data science required.

Nuix NLP enables investigators, researchers, and domain experts to transform unstructured content to actionable insights in minutes without a single line of code. Nuix NLP ingests, discovers, classifies, and quantifies complex content in documents, emails, chats, forms, and social media with industry leading accuracy and flexibility.

Nuix NLP Core Capabilities

- PRE-BUILT MODELS: Thousands of pre-built NLP models come out-of-the-box to identify text category, PII and sensitive artifacts; and document type (contract, patent, arrest warrant).

- NO-CODE UI: Easy-to-use interface empowers non-technical people to create, test, and optimize text classification models to meet their specific/unique requirements.

- ADVANCED ENTITY EXTRACTION: A proprietary feature called Compound Lexemes uses AI and deep contextual analytics to identify thousands of entities without relying on keyword searches, which drastically reduces false positives.
- RISK ASSESSMENT: Built-in risk engine enables users to assign risk-levels or importance values to their data to meet their own unique, subjective requirements.

Nuix NLP For FOIA

Nuix NLP uses a powerful combination of cognitive computing technologies including machine learning, deep learning, and semantic analysis, backed by proprietary human language models. Using Nuix NLP, any Federal employee with domain expertise, regardless of technical background, can dramatically accelerate content intelligence, investigation, and risk mitigation efforts that could adversely impact their organization.

Key Features of Interest for FOIA Case Management Include:
- Ability to apply subjective risk and importance values to ensure the engine meets targeted FOIA case requirements

- Thousands of pre-built text analysis models come out-of-the-box to deliver immediate value with minimal effort

- Text Categorization based on thousands of topic models that identify the category of each piece of content being analyzed to add context and "clusterization" to the analysis

- DocType Classification based on 200+ document type classifications that come standard, offering accurate identification of a comprehensive list of commonly used document categories (i.e. HR, finance, legal, compliance, IT, M&A, etc.)

- Advanced entity extraction allows users to go hyper-granular right away with 1000+ entities, pre-built to identify the risks and liabilities buried needed for redaction (PII, PHI, IP, etc.)

- Dramatically reduce false positives with AI-powered, context-enabled extraction

- Achieve the highest levels of accuracy in the industry using built-in model validation and optimization (both automated and assisted)

- Built-in model transparency and explainability, providing insights into how/why the AI made its decisions, including options to minimize biases that can creep into AI solutions.

Key Benefits

- Reduces false positives by up to 90% in most cases
- Accelerates content intelligence, investigations, and risk mitigation efforts 5-10x
- Reduces reliance on grueling manual effort, which is prone to human error.

Conclusion

In short, Nuix NLP is cutting edge AI technology that is uniquely suited to help NARA & DOJ with the myriad challenges associated with FOIA case processing.