Counter Fraud and Improper Payments

Social Services organizations are on the front-line of government efforts to deliver better outcomes to citizens with limited resources. Since funding for social services typically represents one of the largest components of government spending, there is increasing pressure to do more with less and be as efficient as possible. This means balancing equitable serve to citizens with minimal waste and error.

The problem is that **fraud, abuse and improper payments** are on the rise. These fraudulent schemes are being driven by both opportunistic individuals and sophisticated criminal organizations who are early adopters of technology and employ a dynamic agile business model. It is therefore incumbent for a government agency to base their counter fraud operations on technology and processes that can both scale to handle the volume of occurrences, and are flexible and responsive to react, and continuously adapt, to new suspicious patterns and activities.

The Asseg.ai's *Counter Fraud Management and Improper Payments* solution is designed to help agencies avoid the 'pay and chase' scenario by intercepting transactions in real time that are potentially fraudulent, while detecting, identifying, and building the case against past fraudulent activity and improper payments. Looking at counter fraud operations as an entire lifecycle, this solution introduces advanced analytics and investigative analysis throughout the entire process. Implementing this holistic approach allows agency staff to more effectively manage case workloads, optimize business processes and target high probability areas for fraud and abuse, thereby driving greater compliance and enhanced service to those citizens worthy.

A PARADIGM SHIFT ON HOW HEALTH AND HUMAN SERVICES AGENCIES CAN COMBAT FRAUD.

Traditionally, observation spaces for agencies have existed in silos. Valuable sources of analytic data reside in many different system silos in a government organization, such as healthcare, social services, justice, public safety and community agencies. The business units operate and manage fraud vertically with point solutions. Relevant data is not shared, and records are incomplete. These silos create critical intelligence gaps within the organization. Suspicious activity and fraud patterns can remain undetected. In addition, disconnected and niche fraud solutions increase overall operating costs and resource needs.

The Asseg.ai's *Counter Fraud Management and Improper Payments* solution helps bridge these gaps by building an ecosystem of tightly woven capabilities that use big data

and entity analytics to eliminate information silos, expand the observation space, and enable unified enterprise business intelligence.

Designed for the lifecycle of tracking and resolving fraudulent activity, Asseg.ai's *Counter Fraud Management and Improper Payments* delivers strong insights that enable proactive and anticipatory decision making within the four operating components of detect, respond, investigate and discover (See Figure 1). It meets the needs of all agencies, and provides investigators, caseworkers and auditors with the ability to harness a deep set of unique analysis capabilities.

Figure 1. Holistic approach to counter fraud management and improper payments

Users can also proactively assess the impact of changes to operations and productivity. Visualizations depict contextual correlations that help team members gain deeper fraud insights. Asseg.ai's *Counter Fraud Management and Improper Payments* solution employs multi-layered analytical techniques throughout the observation space. Rich analytics extract insights, develop actionable intelligence, and invoke automated response capabilities using leading market analytics tools, as listed in Figure 2.

Figure 2. The counter fraud management solution offers rich analytical and decision-making capabilities.

Utilizing state-of-the-art Machine Intelligence technology to detect and prevent fraud

As Illustrated in Figure 3, Asseg.ai uses state-of-the-art Machine Intelligence technology to counter fraud and improper payments. Although the Counter Fraud Management and Improper Payments solution makes use of a toolbox of rich analytical and decision-making capabilities, Asseg.ai's typically recommends a machine learning-based approach for the following reasons:

- Traditional ideas of finding patterns through hand crafted, careful querying, does not scale to
- large data sets
- Prior rule based engines do not make use of information from multiple attributes at the same
- time
- Machine learning concerns with algorithms that can learn from data such as multivariate
- statistics, automated predicted analytics, and deep learning
- Even tiny increase in accuracy can lead to millions of Pounds in savings
- Fraudsters are becoming increasingly smarter and adaptive. There is a need for cost-effective
- solutions that can model complex attack patterns not previously observed
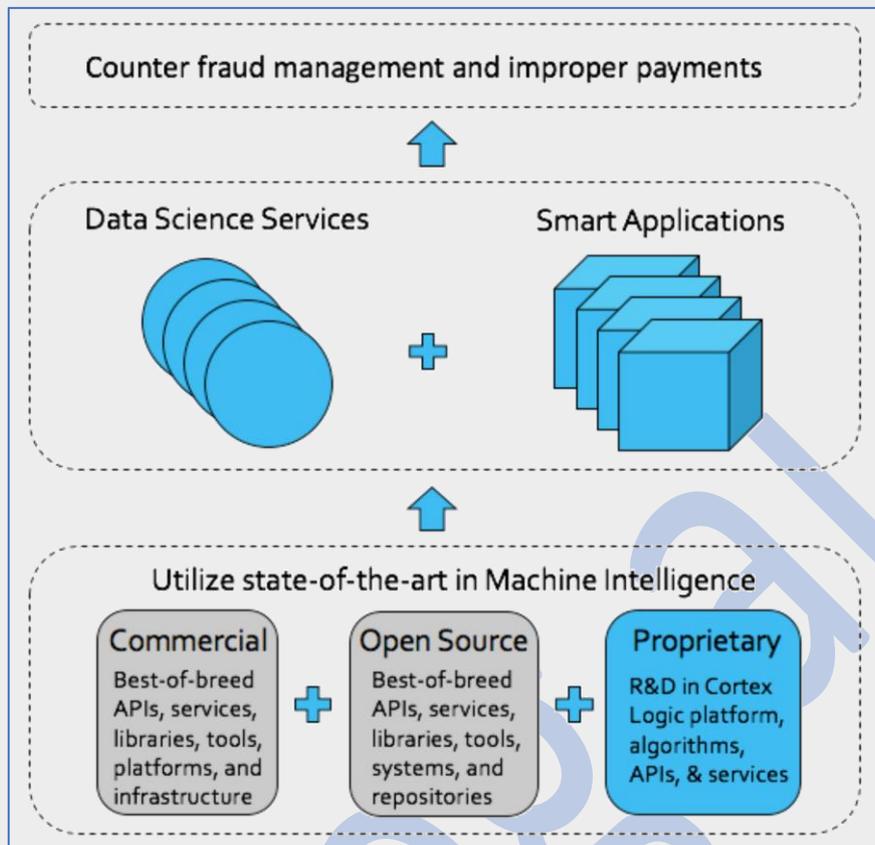- There is a need for scalable and computationally efficient prediction models

Figure 3. Asseg.ai's uses state-of-the-art Machine Intelligence technologies to counter fraud management and improper payments.