hmx.ai

Practical Enterprise AI Solutions

Proud to #BuildFor2030 with Microsoft

GOAL-DIRECTED TO ACHIEVE RESULTS

The HMX Tax Intelligence System (TIS) helps meet tax collection goals and eliminate corruption using a unified compliance model that maps specific goals to fraud and anti-corruption situations.

HUMAN-AI PARTNERSHIP

Human expertise and knowledge developed over decades of real-world experience are captured and used by HMX TIS. TIS adds machine learning (ML) to augment human experience with the power of deep analytics and continuous improvement.

AZURE READY

TIS is optimized for Azure for on-demand scalability, zero downtime, and integration with the full portfolio of Azure services. TIS is available for hybrid deployments with on-premises servers plus Azure cloud.

Tax Intelligence System

Helps governments build sustainable cities and communities*.

- Developed in partnership with leaders in tax compliance, fraud, and anti-corruption.

- Leverages the power of cognitive science and machine learning.

- A managed service built on a unified platform for AI and with a dedicated service representative.

- Deployed in the Microsoft Azure cloud.

- Goal-driven situation intelligence for results-oriented recommendations.

- Multiple situation intelligence assessors including Bayesian Networks that combine human expertise with ML, and 3rd-party models.

HMX's AI-powered Tax Intelligence System (TIS) goes beyond traditional pattern matching, profile segmentation, and rules processing. Instead, subject matter experts, operational teams, and data scientists combine their time-tested knowledge with TIS data discovery to better detect fraud and non-compliance.

HMX's technology uniquely partners humans - analysts and auditors - with AI by using a proprietary data model that is goal-driven. TIS constantly identifies potential fraud and compliance situations, how they impact your goals and success metrics, and provides explanations as to the reasoning behind its findings. TIS explainability is key to making the power of AI actionable in real world applications.

TIS was developed over a ten-year period at HMX. It began as an integrated platform combining the latest in machine learning and graph database. Over the years, experience in decision-support for mission-critical solutions demonstrated the need to better partner AI with human users and avoid "black box" tools with opaque algorithms. This emphasis on explainability gives analysts and users more visibility and control.

TIS delivers its explainable AI via a service that leverages an easy-to-use workbench that integrates all the tools necessary for a fully functional tax compliance and anti-corruption engine so that customers and partners have complete visibility and control.

hmx.ai

hmx.ai

RAPID DEPLOYMENT

HMX uses Goal-Directed Task Analysis or GDTA, a method for rapidly defining goals, situations, and actions to get your TIS application deployed quickly and continuously improved.

PARTNER CENTRIC

HMX works with both end-user governments and their preferred partners or vendors to ensure the availability of local representation and a deep understanding of the key requirements and concerns of regional governments.

CUSTOMIZED SERVICES & TRAINING

HMX and its partners offer TIS as a managed service and can train your staff on all aspects of the TIS. Our commitment to a long-term relationship guarantees your success at every stage in the dynamic, ever-changing fraud and anti-corruption environment.

For more information on the TIS and other services available from HMX, please visit us on the Web at: hmx.ai

TIS Simulator Enhances Compliance Development & Testing

TIS includes a scenario simulator to enable rapid definition of application use cases that can be examined in a virtual environment before deploying the solution to production. A pre-defined reference architecture provides an environment for analysts to make changes to scenarios, configure actual data for input, and perform 'what if' simulations to see how changes to goals, situations and actions will affect a reduction in fraud and corruption.

HMX dedicated representatives help analysts to structure their use cases, capture the right knowledge and data, and interpret the results of simulated scenarios. A complete verification and validation protocol is defined to help ensure that a TIS deployment will meet the desired fraud and corruption reduction targets.

Explainable Technologies are the Foundation of TIS

- TIS applies explainable AI technology that engenders trust with users.

- Get to key results quickly through narratives automatically generated from TIS analytics.

- Standard reports and Power BI dashboards are designed for every level and every role within the enterprise.

- TIS Bayesian networks enable human-like reasoning under uncertainty, tracking of root-causes of fraud and corruption, and elimination of common biases in decision-making.

hmx.ai