CIOReview

The Navigator for Enterprise Solutions

20 Most Promising Enterprise Risk Management Solution Providers - 2017

Enterprise Risk Management is taking the center stage in how companies run their business. Advancements in cognitive technologies, artificial intelligence and data analytics are helping organizations go beyond traditional ways of managing risks by using smart machines to detect, predict and prevent risks. Today, since the entire nature of the risk discipline and their consequences are evolving, organizations should look beyond regulation and cost-reduction and view risk management as a strategic element of their value chain.

Some of the smart devices that comprise the Internet of Things (IoT) and artificial intelligence (AI) have the capability to help organizations detect risk events, derive crucial risk insights and even take immediate actions–resulting in a real-time, pervasive, dynamic risk management environment. With a predicted 20.8 billion connected devices in use by 2020, new GRC challenges abound. IoT developers often overlook security. As cloud computing grows in popularity, the landscape is moving toward XaaS—everything as a service. This will transform business value chains, as data will be able to flow seamlessly and securely across different platforms and infrastructures. The transition to the modern cloud and hyperconvergence not only strengthens their focus on data privacy and security, but also improve the transparency of audits, legal, and regulatory compliance, while refining business continuity planning. On the other hand the risk intelligence gathered from AI and machine learning platforms will also lead organizations to achieve higher levels of performance.

In recent years, since workforces become more mobile, businesses demands new frameworks to deal with the risks and requirements in terms of security, authentication measures, infrastructure security, data encryption, and country-specific regulations. Witnessing this growing challenge and opportunity, myriad of risk management solution providers have emerged to offer their powerful tools that is supported by latest technologies.

Our selection panel has evaluated hundreds of enterprise risk management solution providers based on the ability to assist CIOs and enterprise holders in overcoming the challenges in the sector.

We present to you CIOReview's 20 Most Promising Enterprise Risk Management Solution Providers 2017.

TTEK

recognized by CIOReview *magazine as*

20 MOST PROMISING
ENTERPRISE
RISK MANAGEMENT
SOLUTION PROVIDERS - 2017

An annual listing of 20 companies that are at the forefront of providing Enterprise Risk Management solutions and impacting the marketplace

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Company:
TTEK

Key Person:
Chris Thibedeau
CEO

Description:
Specializes in utilizing and deploying technology for the optimization of customs and border processing

Website:
ttekglobal.com

TTEK
Modernizing Customs and Border Processing

In a customs and border environment, analysts and officers are required to make a decision on high-risk cargo and passengers in real time. Such ability helps them to identify high-risk cargo and passengers before arrival at the border, and conduct an inspection when there is a serious enough threat present. While there are numerous predictive solutions designed to operate on historical data, only a few provide the actionable insight essential for customs in the front end border operation where real-time decisions are made. With years of domain experience, TTEK endorses a blend of cutting-edge products with operational and academic subject matter expertise to assist nations with modernizing their border processing systems and methodologies. Leveraging a predictive model of known intelligence indicators that match an inbound shipment or passenger, the company can help to provide a strategic and operational target of a looming threat.

Although a new start-up, TTEK's legacy is rooted in a former company named GreenLine Systems that was eminent for crafting deductive and inductive targeting solutions for several global customs administrations. Presently, TTEK collaborates with Data Science Ltd., a New Zealand-based firm that has a deep understanding of customs data and machine-learning approaches. "We bring in Data Science's expertise on predictive analytics, and merge this with our knowledge of border/commercial trade processing to deliver a risk based solution for custom services worldwide to help these clients boost their ability to identify high-risk cargo as well as passengers," explains Chris Thibedeau, CEO at TTEK.

Together with Data Science, TTEK develops a risk management application called 'RiskLab.' In the customs landscape, 90 nations use ASYCUDA (Automated System for Customs Data), a rudimentary UN customs processing system whose risk management capabilities are next to inexistent. What TTEK does is integrate RiskLab with ASYCUDA via an API for data access. "We use an array of machine learning based models on historical data to predict threats in real time," notes Thibedeau. Once these models are developed based on historical

Chris Thibedeau

> " **We use an array of machine learning based models on historical data to predict threats in real time** "

data, they are installed to complement ASYCUDA to more effectively detect high-risk consignments. When inbound shipments fit the model, the container is flagged to the inspection team for closer scrutiny and a potential inspection. Thereafter, the results of the inspection are collected and inserted into RiskLab to re-initiate the analytics cycle and refine the modelling activity. This cycle then continues perpetually.

On the technology front, TTEK classifies risk applications into three categories—deductive, inductive, and predictive. The customs and border environment demands the inclusion of all three approaches to obtain utmost results and this is what TTEK precisely offers to its clients. In a nutshell, TTEK brings a perspective on how customs organizations can enable themselves to promote the secure flow of low risk trade, minimize release times, and foster interoperability and coordination between Customs and other border administrations while concentrating resources on dicey, cross-border shipments.

TTEK boasts an outstanding track record, as it's members and associates have worked with several global customs administrations, including clients such as U.S. Customs and Border Protection, the Canada Border Services Agency, the Netherlands Ministry of Defense, Barbados Customs and Excise Department, the Royal Malaysian Customs Department, Dubai Customs, Saudi Arabia Customs, Haiti Customs and many others. In particular, TTEK's team of experts have assisted several customs administrations in boosting their inductive targeting systems with additional data which augmented end-to-end supply chain visibility, border visibility, and incorporated new rules and a risk assessment framework for improved decision-making.

In future, TTEK plans to initiate an early adopter program for countries interested in RiskLab in addition to launching a sales and marketing effort for all countries running ASYCUDA. "Under this development model, we won't focus solely on regional growth, but will attempt to scale growth through clusters of nations based on GDP," the CEO winds up. CR