



Business challenge

As companies seek growth in markets where levels of fraud, corruption and other risks are perceived to be higher, forensic data analytics is increasingly seen as a key capability to invest in.

Transformation

EY provides its clients with comprehensive protection against fraud and security risks. IBM Analytics helps EY rapidly detect potential threats before they escalate.



Vincent Walden
Partner – Fraud Investigation &
Dispute Services
EY

Business benefits:

Queries

run in minutes, not hours,
helping clients rapidly
identify and eliminate threats

Proactive

Stance against fraud
enabled by earlier detection
of potential issues

Broader

coverage against security
threats facilitated by a
holistic view of operations

EY

Big risks requires big data thinking: helping clients target and prevent fraud

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services EY delivers help build trust and confidence in the capital markets and in economies the world over, and help to build a better working world for EY's people, clients and communities.

*"IBM's big data platform
is going to be an industry
game-changer."*

Vincent Walden
Partner – Fraud Investigation &
Dispute Services
EY

Share this



Smarter risk detection

Over the past decade, the staggering increase in volume, variety and velocity of business information has changed how companies approach fraud and corruption investigations and compliance monitoring. Issues such as bribery and corruption, financial misstatements and malicious insiders are critical business risks, which cannot be effectively managed by traditional rules-based tests and spreadsheet tools.

Leading professional services firm EY recognizes that today's fraud risks require a new way of thinking – big data thinking – that incorporates multiple data sources, of both structured and unstructured types, and analytics that move beyond traditional rules-based tests. This sort of thinking starts with the premise that to drive better decisions, we must first ask the right business questions and then seek answers in the data.

Vincent Walden, Partner – Fraud Investigation & Dispute Services at EY explains: “Companies are increasingly seeking growth in markets with higher perceived levels of fraud, bribery and corruption risk, while regulators and law enforcement bodies are intensifying their activities.

“As a result, EY has seen significant corporate investment in employee training, policy development and internal audit procedures designed to raise awareness of anti-fraud or anti-corruption policies. For many companies, there has also been an increase in the use of more sophisticated, proactive uses of forensic data analytics (or “FDA”) capabilities designed to prevent and detect areas of fraud, waste and abuse.

“Our clients, like us, know very well that fraud risks are always changing. They demand solutions that can help them get ahead of the curve and squash potential threats before they escalate.

“As fraud and financial crimes continue to grow in global coordination and sophistication, we realized the need for a more holistic way of identifying and responding to the many threats posed to our clients' operations. To stay on top of these threats, we wanted to bring together multiple data sources, such as payment data and third party data, and perform deeper, real-time risk analysis.”

Infusing big data and analytics into the business

EY selected IBM® Counter Fraud Management and IBM BigInsights® as the technology foundation for a first-of-its-kind offering: EY Counter Fraud. This offering has been configured exclusively to combine decades of EY's fraud, investigation and compliance experience and industry-specific knowledge with the big data computing power, intelligence and scalability of IBM technology.

IBM Counter Fraud Management is delivered as an all-in-one, forward-looking platform which uses comprehensive analytics – entity, predictive, behavioral, context, content, geospatial, forensic, and social network – to detect and highlight potentially suspect activity. Combined with the big data capabilities of IBM BigInsights, the solution allows EY to detect any potential fraud, respond promptly by applying fraud insights, investigate suspicious activity and review historical data, analyze patterns and build watch lists to monitor potentially fraudulent activities.

From proactive anti-fraud prevention and detection measures, to high-stakes regulatory investigations or “bet-the-company” litigation, IBM Counter Fraud Management is designed to provide a cost-effective, rapidly deployable platform to meet the high volumes, velocities and varieties of data required for an effective forensic data analytics (FDA) program.

A key element of the EY Counter Fraud offering is EY’s FDA solution, powered by IBM, which incorporates leading rules-based anti-fraud tests developed over years of investigative experience. These tests seek to identify anomalies and fraud risk areas using relational database or spreadsheet techniques such as matching, sorting, filtering and query design, which require the investigator to ask questions about the data based on pre-defined rules.

However, as many anti-fraud professionals are experienced, relying solely on rules-based, relational database techniques can often result in a high number of false positives or missed fraud detection opportunities. This is why EY’s enhanced FDA analytics solution is designed to integrate with today’s leading enterprise resource planning, financial accounting and business information repositories and, when appropriate, to incorporate data visualization, predictive text and a host of other advanced anti-fraud techniques that seek to let the data define itself – outside the typical constraints of a database or spreadsheet analysis.

EY also integrates IBM’s case management, decision support and content management tools to assist the investigator with workflow and documentation.

Vincent Walden comments: “The IBM platform is crucial to our strategy: we can now use our library of anti-fraud tests and our years of expertise, and work with our clients to set up EY Counter Fraud powered by IBM via the cloud or on premise.”

Picking up on suspicious activity

Using IBM BigInsights software, the solution gathers data from multiple sources and applies real-time analytics to identify hidden patterns and anomalies that can be indicators of rogue or criminal activity. By identifying indicators of suspicious behavior early, the solution helps clients understand whether something is a false positive – such as a mistake in a form submission – or the result of true corrupt intent.

Vincent Walden elaborates, “For instance, the built-in text-mining capabilities offered by IBM BigInsights allow EY Counter Fraud powered by IBM to automatically flag up suspicious payment descriptions, such as ‘Friend fee’ or ‘Specialty payment’, that are often used to mask fraudulent or corrupt transactions.

“Clients can then investigate further and establish whether further investigation is warranted. Another powerful capability that the IBM platform brings is its flexibility and ability to process a wide variety of data types – from journal entries and payment streams to e-mail, news feeds and social media. Combining these multiple data sources in a single, big data platform allows us to ask new questions of the data that we have never been able to ask before.”

Slashing query response times for analytics on-the-fly

IBM BigInsights and IBM Counter Fraud Management have equipped EY with highly advanced and sophisticated anti-fraud capabilities, enabling its professionals to perform deeper and more detailed analysis and investigations.

Vincent Walden says, "We have seen analytics searches go from taking hours on a traditional SQL-based platform to literally minutes on the IBM solution. Such incredible time savings allow us to run queries in larger numbers and greater complexity, so we can look at data from all angles to pin down where the issues lie.

"IBM's big data platform is going to be an industry game-changer: among other features, it allows us to combine disparate data sources effectively and efficiently, which enables us to ask questions of our clients' data that we have never been able to ask before due to technology constraints."

Solution components

- IBM® BigInsights®
- IBM Counter Fraud Management

Take the next step

For more information about EY, visit: www.ey.com

IBM Analytics offers one of the world's deepest and broadest analytics platform, domain and industry solutions that deliver new value to businesses, governments and individuals. For more information about how IBM Analytics helps to transform industries and professions with data, visit ibm.com/analytics. Follow us on Twitter at @IBMAalytics, on our blog at ibmbigdatahub.com and join the conversation #IBMAalytics.

Connect with us



© Copyright IBM Corporation 2015, IBM Corporation, 1 New Orchard Road, Armonk, NY 10504 U.S.A. Produced in the United States of America, December 2015.

IBM, the IBM logo, ibm.com, and BigInsights are trademarks of International Business Machines Corp., registered in many jurisdictions worldwide. Other product and service names might be trademarks of IBM or other companies. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at ibm.com/legal/us/en/copytrade.shtml.

This document is current as of the initial date of publication and may be changed by IBM at any time. Not all offerings are available in every country in which IBM operates. The performance data and client examples cited are presented for illustrative purposes only. Actual performance results may vary depending on specific configurations and operating conditions. THE INFORMATION IN THIS DOCUMENT IS PROVIDED "AS IS" WITHOUT ANY WARRANTY, EXPRESS OR IMPLIED, INCLUDING WITHOUT ANY WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND ANY WARRANTY OR CONDITION OF NON-INFRINGEMENT. IBM products are warranted according to the terms and conditions of the agreements under which they are provided.

The client is responsible for ensuring compliance with laws and regulations applicable to it. IBM does not provide legal advice or represent or warrant that its services or products will ensure that the client is in compliance with any law or regulation.



IMC14962-USEN-00

