

CASE 3.2

Business Case: Financial Intelligence Fights Fraud

The Financial Crimes Enforcement Network (FinCEN; fincen.gov) is a bureau of the Treasury Department and the financial intelligence unit of the United States. The bureau reports to the undersecretary for terrorism and financial intelligence. FinCEN's mission is to safeguard the financial system from abuses of financial crimes, to institute anti-money laundering (AML) programs, and to promote national security through the collection, analysis, and dissemination of financial intelligence.

Constrained by Deficient Data Analytics

Prior to 2008, FinCEN was not able to effectively gather data, analyze them, and deliver them to users. Data that financial institutions had to report to FinCEN suffered from inconsistent quality and lack of validation and standardization. When trying to analyze its data, FinCEN was limited to small datasets and simple routines. The bureau could not conduct analysis across massive datasets and lacked capabilities for proactive analysis and trend prediction.

Reporting data to agencies was done using numerous offline systems. Data had to be cleaned and transformed, thus delaying user access. Analytics and reporting deficiencies made it difficult for FinCEN to quickly detect new and emerging threats and aid in disrupting criminal enterprises.

FinCEN Upgrades Data Analytics and Query Capabilities

In 2008 FinCEN launched a major effort to upgrade its analytics capabilities, IT infrastructure, and databases. Upgraded analytics were needed to better collect and analyze data from multiple sources and provide them to federal, state, and local law enforcement and regulatory authorities.

Then in May 2010 FinCEN launched the Bank Secrecy Act (BSA) IT Modernization (IT Mod) program and further improved its IT infrastructure. The IT Mod program has improved data quality and the ability of 9,000 authorized users to access, search, and analyze data. The bureau provides federal, state, and local law enforcement and regulators with

direct access to BSA data. These users make approximately 18,000 queries of the extensive database each day.

Additional milestones achieved by FinCEN were:

- Converted 11 years of data from its legacy system to FinCEN's new System of Record. FinCEN is able to electronically receive, process, and store all FinCEN reports.
- Deployed a new advanced analytics tool that provides FinCEN analysts with improved analytic and examination capabilities.
- Released the FinCEN Query Web-based app, a new search tool accessed by FinCEN analysts, law enforcement, intelligence, and regulatory users as of September 2012. FinCEN Query provides real time access to over 11 years of BSA data.

Predictive Capabilities Attack Crimes

Consulting firm Deloitte helped FinCEN with the massive critical tasks of deploying systems and populating data, providing user access, and ensuring system security. Effective data analytics identify patterns and relationships that reveal potential illicit activity. This intelligence has increased the speed and ability to detect money launderers and terrorist financiers and disrupt their criminal activity.

Sources: Compiled from FinCEN.gov (2014), Fact Sheet Bank Secrecy Act (BSA) IT Modernization (IT Mod) Program (2013), and Deloitte (2014).

Questions

1. Explain FinCEN's mission and responsibilities.
2. What data and IT problems were limiting FinCEN's ability to fight financial crime?
3. Describe the IT upgrades and capabilities needed by FinCEN in order to achieve its mission.
4. On what does financial intelligence depend?
5. Why is the ability to identify patterns and relationships critical to national security?
6. Research recent financial crimes that FinCEN has detected and disrupted. Explain the role of data analytics in crime detection.

CASE 3.3

Video Case: Hertz Finds Gold in Integrated Data

Finding CRM gold after integrating customer data, Hertz is dominating the global rental car market by giving customers unique, real time offers through multiple channels, with upwards of 80,000 during peak times. Visit Teradata.com and search for the video "Hertz: Finding Gold in Integrated Data."

1. Describe Hertz's new strategy and data solution.
2. How did Hertz strengthen customer loyalty?

3. What did Hertz need to do to its data prior to implementing its new solution?
4. Describe the potential short-term and longer-term business benefits of integrated data.