# Using IBM Case Manager for Investigations to Address Real-World Challenges

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#### **Please Note**

#### **Enterprise Content Management** Advanced Case Management



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#### Random Samples of White Collar Crime from Oct 2014\*



- Former Chief Information Officer of Foundry Networks Found Guilty in Manhattan Federal Court of Participating in Insider Trading Scheme That Reaped More Than Tens of Millions in Unlawful Gains
- Loan Officer at TARP Bank and Accomplice Sentenced for Bank-Related Fraud
- Brother and Sister, One Other Person Convicted at Trial in \$15 Million Mortgage Fraud Scheme
- Centennial Man Sentenced to Six Years in Prison for Mortgage Fraud Scheme
- Clifton Ambulance Service Provider Arrested, Charged with Health Care Fraud
- Investment Firm's Founder and Two Former Associates
   Plead Guilty in Fraudulent Investment Scheme to Market
   Pharmaceutical Ointment

\*Source FBI: http://www.fbi.gov/collections/white-collar-crime

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# Detecting and investigating criminal activity is becoming even more complicated

The information tidal wave is making it harder to apply analytics effectively, just when it matters most... A deluge of data – volume, variety, and velocity



Volume of Digital Data



Variety of Information



**Velocity of Decision Making** 

Source: IBM Institute for Business Value

Lack of Insight

Inefficient Access Inability to Predict

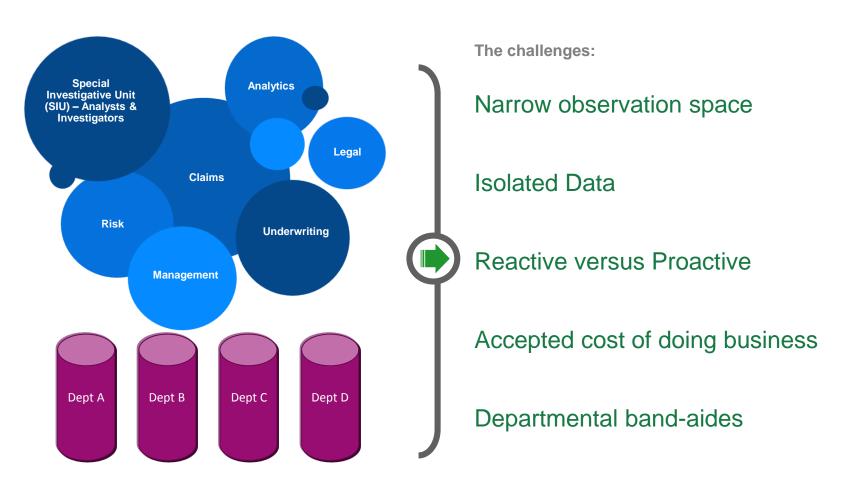
"4 zettabytes of data created in 2013..

more than created in the previous 5,000 years combined..."

- Scope & Size of Data Sets
- Complexity, Connectedness and Growth Rates
- Context & Importance Of Integration



## Within an enterprise, point solutions and corporate silo culture directly contribute to risk





#### Investigation challenges in the public sector



### Pro-Active Investigation

Identifying high risk fraud and at risk internal controls within an organization. Policy and Process assessment and automation improving data governance strategy and automation of rules and internal controls to mitigate risk



#### Reactive Investigations

Automation of investigation procedures and the need to provide a collaborative environment to co-ordinate all forms of evidence to decision to prosecute to prosecution documentation. Interviews and material management



#### Pattern Identification

Identify type of fraud:
Duplicate Fraud, Multipayer; shell-game; defective goods; defective service need to use technology to be more flexible in identifying pattern and type in order to properly investigate activity.



#### **Evidence**

Evidence gathering is key. The need to assess data, transactions, terms, times, contracts, video, social media, audio, records is critical. Technical capabilities are needed to aggregate..



#### Investigations in the Intelligence community

As the defense and national security landscape continues to evolve, mission objectives and requirements remain in place

Shrinking resources and reduced budgets

do more with less

Increasing operational requirements

Greater accountability and transparency

Increasing demand for interlocking and information sharing Moving from campaign to contingency operations changes business models as well as partner and agency relationships



## Multi-layered analytics provide an

optimum mix of techniques to deliver more accurate fraud detection

#### **Identity Context Analysis**

- Resolve identities
- Identify relationships

#### **Segmentation**

- · Company, Region
- Fraud types

#### **Predictive Models**

 identify potential fraud through patterns and trends in the data

#### **Business Rules**

- Industry specific rules
- Business expertise

#### **Anomaly Detection**

- Compare with normal behavior
- Association exposes relationships

Uniquely identify entities and relationships

Automatically group based on similarity

Encode what we already know

Use historical experience to predict current fraud

Identify atypical events



Case

#### IBM Case Manager for Investigations is the hub of a holistic approach

#### Enterprise Performance

**Dashboards** 

Analytics



**IBM Cognos** 

- Create and deploy easy-to-understand reports, dashboards, and scorecards
- · View information with real-time monitoring to make decisions in real-time

#### Intelligence Analysis

- Any data source
- Risk scorecard
- Cross channel analysis
- Multi-stakeholder investigation
- · Role based briefing





- Comprehensive case management
- Integrated collaboration and rules
- Case analytics
- Content-centric business process mgmt

#### Threat Detection **Analytics**



**IBM SPSS** 

- Automated Pattern Discovery
- Analyze trends, forecast
- · Predict future outcomes
- Conduct ad-hoc analysis
- · Prescribe interventions using business rules

#### **Content Analytics**



- processing and content
- Extract entities, facts and concepts
- Explore trends, patterns, correlations, anomalies,



- Identities and relationships are pre-calculated and perpetually updated
- Suspicious pattern alerting
- Massive data volumes and real-time performance
- Context accumulation technology
- Properly addresses multicultural name variations

Owned / Open









Search and Explore

Analyze

and Visualize

Aggregate

and Extract











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#### **IBM Case Manager for Investigation components**



IBM i2 Intelligence Analysis

for conducting forensic analysis in the context of the investigation

IBM Content Analytics for driving the discovery process across all available data during the investigation



Introducing IBM Case Manager for Investigations

A new solution for optimizing investigations

- Leverages capabilities of IBM Case Manager, IBM i2 Fraud Intelligence Analysis and Watson Content Analytics
- Efficiently process cases and coordinate activity across the investigative team
- Conduct forensic analysis, generate leads, visualize the scope of the fraud and gather evidence. Capture results directly into the case.
- Discover new entities, patterns and insights by searching through structured and unstructured content
- Facilitate the management of the case including the handoff to supervisors, litigators or other authorities
- Provide transparency into the effectiveness of the investigative process using integrated KPI reporting and analytics
- Use pre-configured capabilities to quickly and easily tailor the solution to your specific requirements

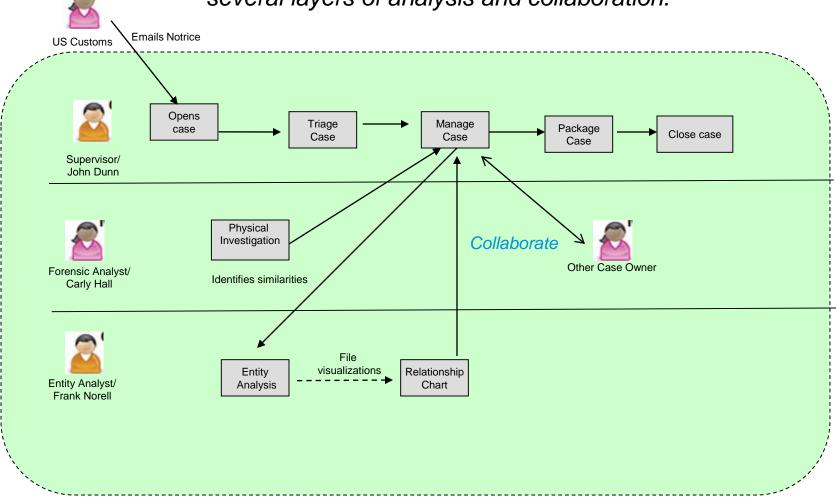






#### Demo

Scenario: Based on a notes from Customs a fraud Supervisor initiates an investigation that includes several layers of analysis and collaboration.





#### **IBM Advanced Case Management**

#### Brings people, process and information together ... in context of a case



- Delivers optimized case outcomes
- Supports dynamic, runtime work management
- Delivers trusted information to the case – structured or unstructured
- Manages and governs entire case lifecycle
- Provides the line-of-business and IT with tools to rapidly deliver case-based solutions