Do you have your customer's back?

Understanding the impact of effectively fighting fraud

Jeff Douglas, Solutions Manager, ECM Solutions

October 30, 2013

$ 994 Billion

IBM

Fraud costs private and public sector enterprises hundreds of billions in revenues each year …. $ 994 Billion in US alone

- Association of Certified Fraud Examiners

BANKING

There was a 25% rise in the fraudulent use of UK credit and debit cards last year (2007), with losses amounting to £535m…

ENERGY & UTILITIES

Customers have stolen power for decades, costing utilities 1% to 3% of revenue — or about $6 billion industry-wide

TAXATION

Federal revenue lost to tax evasion from 2001- 2010 estimated at $3.09 trillion

INSURANCE

Latest national estimate for claims fraud in the U.S. is $79 billion.

WARRANTIES

Upwards of 10% to 15% of claims are in some way suspect

WORKER'S COMPENSATION

25 percent of all workers compensation claims are fraudulent.

HEALTHCARE

Estimates place the loss due to health care fraud at a staggering **$226 billion** each year.

In the 2012 "Report to Nations", the Association of Certified Fraud Examiners (ACFE) reports that Occupational Fraud is estimated to cost organizations $3.4T annually

Interest in finding and fighting fraud is rising in terms of priorities for our public and private customers

1.Crime rings are increasingly turning to fraud

Fraud is low risk and relatively easy to conduct

2.Economic downturns lead to greater fraud and abuse

Individuals and businesses seek new ways to make ends meet

3.Market conditions pressuring our customers bottom line

Need to find new sources of savings

4.Advances in analytics are make finding and preventing fraud both possible & economical

We can now do what we previously couldn't

REPORT TO THE NATIONS
ON OCCUPATIONAL FRAUD AND ABUSE

2012 GLOBAL FRAUD STUDY

ACFE

- Survey participants estimated that the typical organization loses 5% of its revenues to occupational fraud each year

- The median loss caused by the occupational fraud cases in our study was $140,000

- 20% of the cases were greater than 1M

- The frauds reported to us lasted a median of 18 months before being detected

Fraud in news...

IBM

The Telegraph

HOME » FINANCE » NEWS BY SECTOR » BANKS AND FINANCE

HSBC chiefs grilled on banking standards - as it happened, Feb 6, 2013

The chief executive and chairman of HSBC, Stuart Gulliver and Douglas Flint, admit HSBC was not 'fit for purpose' when its lax controls allowed two cartels to move $881m in drug proceeds through the bank.

Britain's biggest bank was forced to pay $1.9bn (£1.17bn) fine to settle allegations by US regulators that it allowed itself to be used to launder billions of dollars for drug barons and potential terrorists for nearly a decade until 2010.

Insurance Fraud NEWS

Coalition Against
Insurance Fraud

Hospital CEO among six arrested in Medicare fraud scheme

April 17, 2013, Chicago, IL — FBI agents on Tuesday raided Chicago's Sacred Heart Hospital, arresting its CEO, another executive, and four physicians in connection with a kickback scheme that pushed patients to undergo unnecessary, risky procedures.

According to the Chicago Tribune, employees had been working undercover with the FBI gathering evidence as part of a three-year investigation into a scheme that involved billing Medicaid and Medicare for unnecessary procedures, including sedation, penile implants, and tracheotomies.

The scheme brought in at least $2 million in reimbursements, and more than $225,000 in cash kickbacks were paid to involved physicians since 2012, prosecutors say. Involved physicians also received indirect kickbacks, such as covering the salaries of employees and training costs for non-existent students, according to investigators.

Scam alerts

SCAM ALERT!

The Telegraph

Chip and pin scam 'has netted millions from British shoppers'

A sophisticated "chip and pin" scam run by criminal gangs in China and Pakistan is netting millions of pounds from the bank accounts of British shoppers, America's top cyber security official has revealed.

Print this article

Share   32

Facebook   11

Twitter   21

Email

LinkedIn   0

Photo: PA

By Henry Samuel in Paris
4:31PM BST 10 Oct 2008

12 Comments

Dr Joel Brenner, the US National Counterintelligence Executive, warned that hundreds of chip and pin machines in stores and supermarkets across Europe have been tampered with to allow details of shoppers' credit card accounts to be relayed to overseas fraudsters.

Law and Order
News »   World News »
Europe »   UK News »
Debates »

Elsewhere

Pictures of the day

Fraud undermines consumer confidence and effects loyalty;
It shapes the quality of customer you attract

Detroit Free Press
A GANNETT COMPANY
News

Detroit couple face fraud charges in Meijer gift card sprees

March 30, 2013 | 3 Comments   Recommend   14 people recommend this. Be the first of your friends.

Recommend   14   Tweet   1   +1   0   Pin it   A A

By Tresa Baldas
Detroit Free Press Staff Writer

FILED UNDER

Local News
City Of Detroit
Southfield
Lincoln

You could call them a modern-day Bonnie and Clyde -- but they were armed with illegally purchased gift cards, not guns.

A wild tale about a local couple hitting the road in midnight shopping sprees to buy high-end items from Meijer stores has surfaced in U.S. District Court in Detroit.

An electronic paper trail helped federal agents bust the scheme, which, records show, involved buying iPads, expensive vacuums and pricey razors from Meijer stores using gift cards, and then selling the goods to employees at a Southfield gas station.
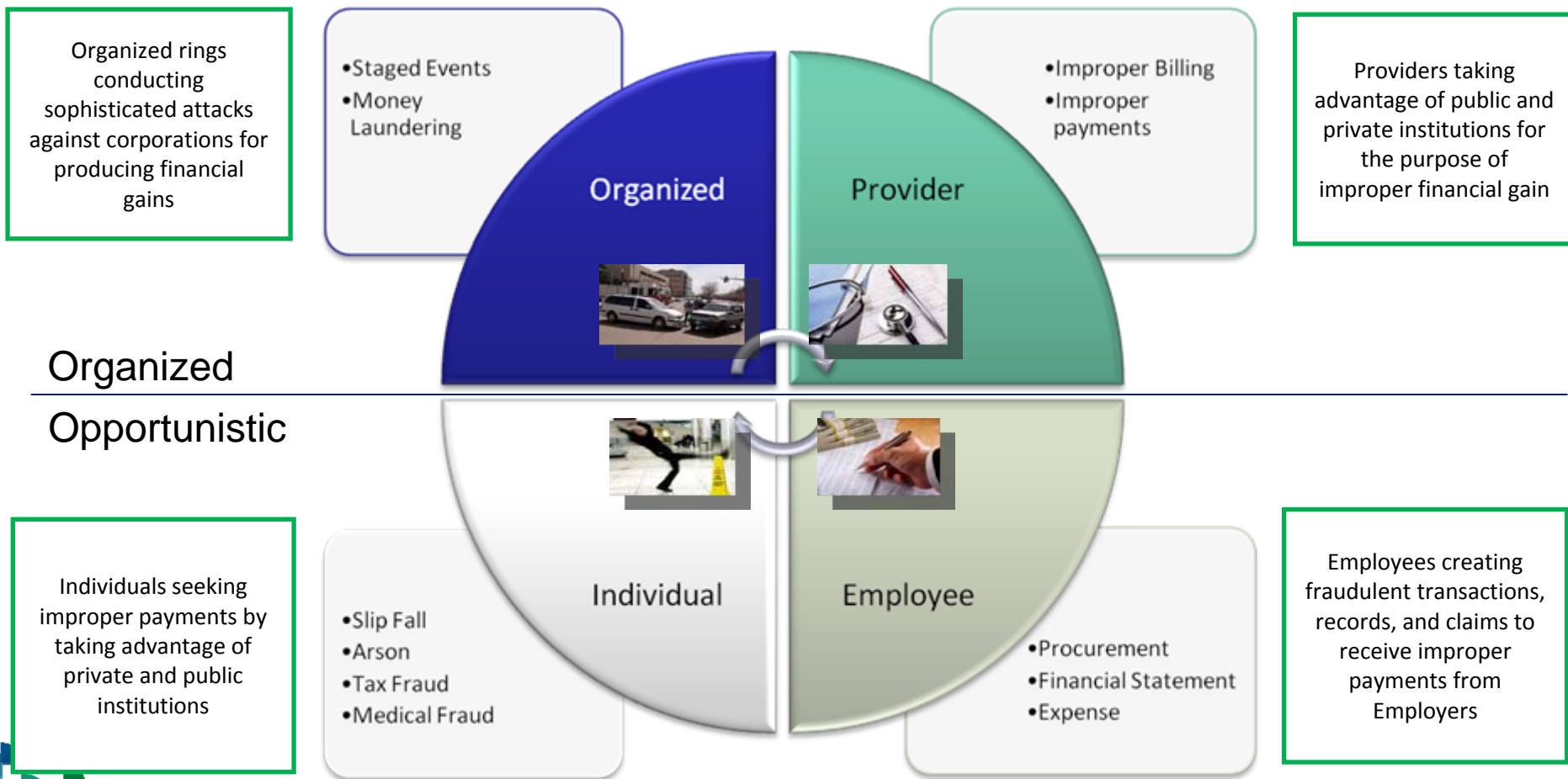
Revolutionizing th oil indust

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Most Popular   Most Commented

Fraud is a deliberate misrepresentation or deception intended to result in financial gain. Fraud is a criminal act, while **Abuse** refers to similar actions not proven to be criminal;. **Threat** is also similar to fraud but can include political and other non-financial objectives

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Organized rings conducting sophisticated attacks against corporations for producing financial gains

- Staged Events
- Money Laundering

Organized

- Improper Billing
- Improper payments

Providers taking advantage of public and private institutions for the purpose of improper financial gain

Provider

Organized

Opportunistic

Individuals seeking improper payments by taking advantage of private and public institutions

- Slip Fall
- Arson
- Tax Fraud
- Medical Fraud

Individual

Employee

- Procurement
- Financial Statement
- Expense

Employees creating fraudulent transactions, records, and claims to receive improper payments from Employers

The Challenges of Fighting Back

Fraud schemes are becoming more complex

- Complex patterns ; many channels
- Structured and unstructured data
- Tight deadlines to assess risk and investigate possible fraud
- (LOB) Investigation Unit is focal part of the solution, involve other stakeholders to enrich investigation and raise awareness
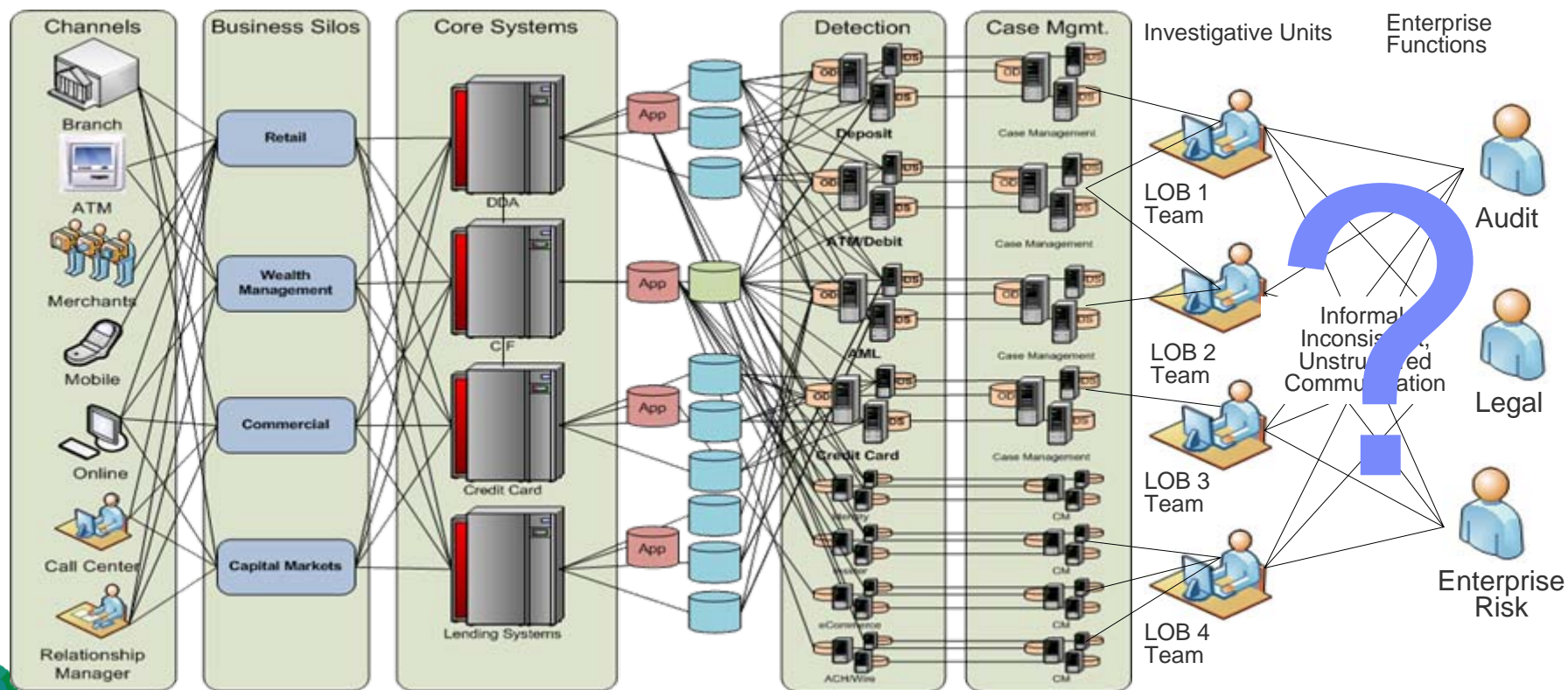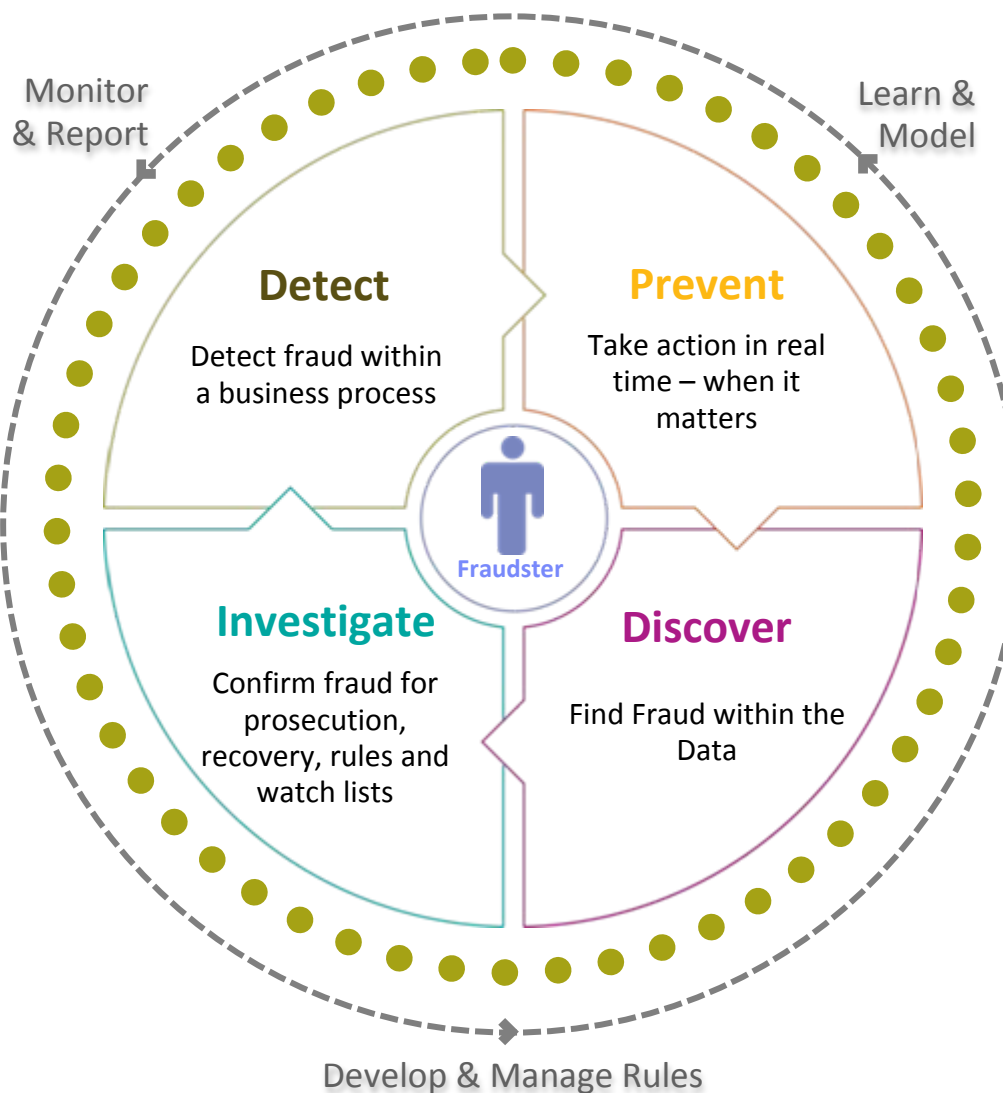
We approach reducing fraud by providing the capabilities to address the four specific capabilities common across all industries and most forms of fraud

Detect

Detect in real time if a transaction, request, application, document, etc. is potentially fraudulent by applying models and rules in real time to determine the propensity for fraud

Prevent

Apply the results of Detection to stop processing known fraud, or encourage fraudsters to abandon their objective by showing more is known than they think should be known about their activities and intentions

Investigate

Gather data about fraudsters and/or schemes DETECTED or DISCOVERED. Build cases for prosecution, recoveries, or denial of payments. Build watch lists and rules to apply to DETECTION and/or DISCOVERY

Discover

Discover fraud that may exist in in a business or public organization by retrospectively reviewing past data and identifying individuals or organizations that may be conducting fraudulent activities
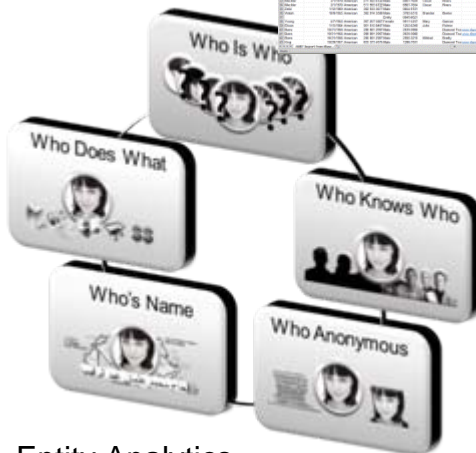
Monitor & Report

Learn & Model

Detect
Detect fraud within a business process

Prevent
Take action in real time – when it matters

Investigate
Confirm fraud for prosecution, recovery, rules and watch lists

Discover
Find Fraud within the Data

Fraudster

Develop & Manage Rules

IBM Fraud Solution Framework

Operational Systems

Advanced Industry Libraries:
Data Models, Predictive Models, Rules, Reports, Process, External Fraud Data etc.

Real Time / "In line"

Back Office Analytics

Prevention

Integration

Action

Guidance

Rules

Detection

Predictive Analytics

Rules

Decision Management

Discovery

Selection

Evaluation

Anomalies

Identification

Investigation

Case Management

Relationship Visualization

Investigative Analytics

Reporting

Operational Reporting

Dashboards

Feedback

Observation Space

Information Domains

Internal Sources   External Sources   Evolving Unstructured Sources   Fraud Use Case Libraries

DETECT, PREVENT, INVESTIGATE, REPORT

IBM

Resolution, Relationships Watch List Identification

New Claim

Customer

Detection Engine

Business Rules

Predictive Fraud Model

Optimize Fraud Decisions

Entity Analytics

Anomaly Detection

Entity Analytics
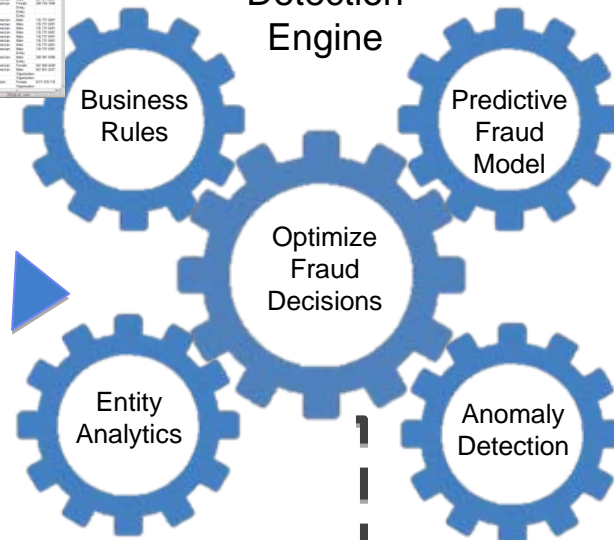
Real Time Alert

New Investigation

Intelligent Fraud Dashboards

Case Management

Intelligent Investigation

- Visual Intelligence
- Exposes Unknown Organized Crime Rings
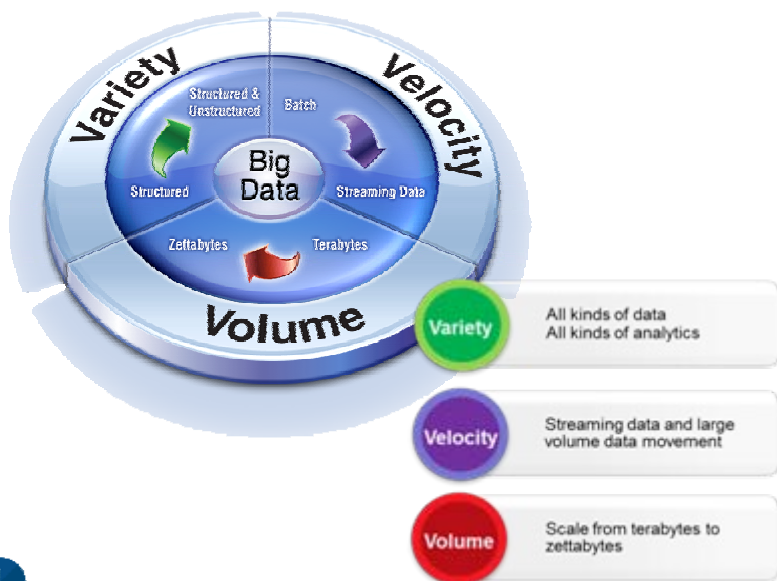- Intelligence Sharing & Collaboration
- Alert created for High Risk Claims

Fraud Intelligent Briefing & Reporting

13

Driving the investigation

Fraud investigative challenges

- Enterprise data is stored across many disparate systems; and data volumes are large (and growing)

- Fraud is perpetrated across multiple channels (online, mobile, call center, cross-brand etc) and possibly includes insider collusion

- Investigation is only possible by joining all relevant information and presenting it in an actionable, easy-to-digest format


	All kinds of data All kinds of analytics
Variety	
Velocity	Streaming data and large volume data movement
Volume	Scale from terabytes to zettabytes

- The investigation must be completed quickly to minimize the costs (fraudulent payments, internal investigation costs and costs of recovery)

- Existing **detection** systems often lack the flexibility (ability to include ad-hoc data to support investigation) ease of use and "white box" approach

- Fraud is high on the boardroom agenda ; failure to deal with it is damaging to brand, customer and regulator relationships, shareholder value and profitability.

The IBM Intelligent Investigation Manager Solution
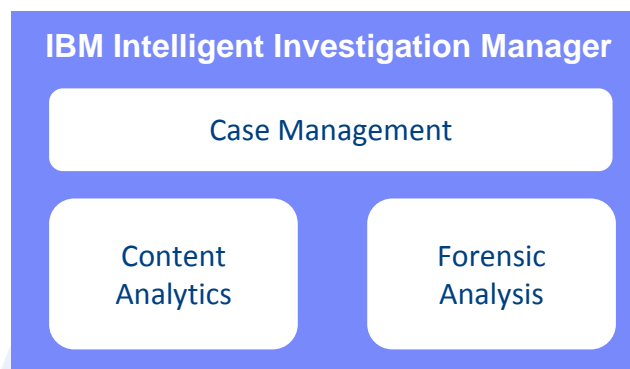## *Integrating case management, forensic analysis and content analytics to optimize fraud investigation*

- *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 i*nto the effectiveness of the investigative process using integrated KPI reporting and analytics
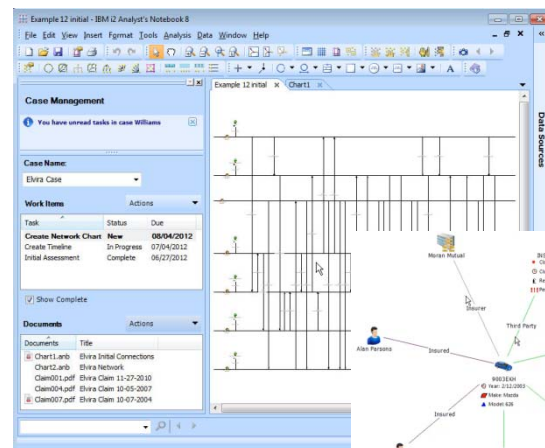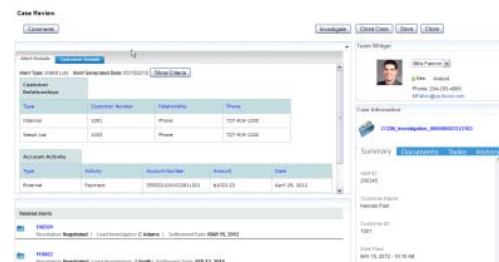
Intelligent Investigation – a new approach
Combining analytics and case management to optimize investigation

IBM Intelligent Investigation Manager

Case Management

Content Analytics

Forensic Analysis

Advanced Case Management for delivering customized investigative solutions that enable investigative teams to efficiently manage an investigation

Forensic Analysis in the context of the investigation for generating leads, identifying scope, and gathering evidence.

Content Analytics for driving the discovery process across all available data during the investigation
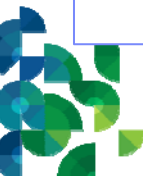
Demonstration – Account takeover

IBM

Customer

Files Dispute

Fraud analytics

Sam Bennett calls his bank because he notices charges on his statement he doesn't recognize
Or
The fraud analytics engine detects a pattern of unusual transaction activity and generates an alert that results in a case being opened.

Capture Details

CSR

Alert Generated

Triage Analyst

Triage Alert

Escalate

Senior Analyst

Analyze Alert

Collaborate

Investigator

Gather Details

Insider threat

Prepare For review
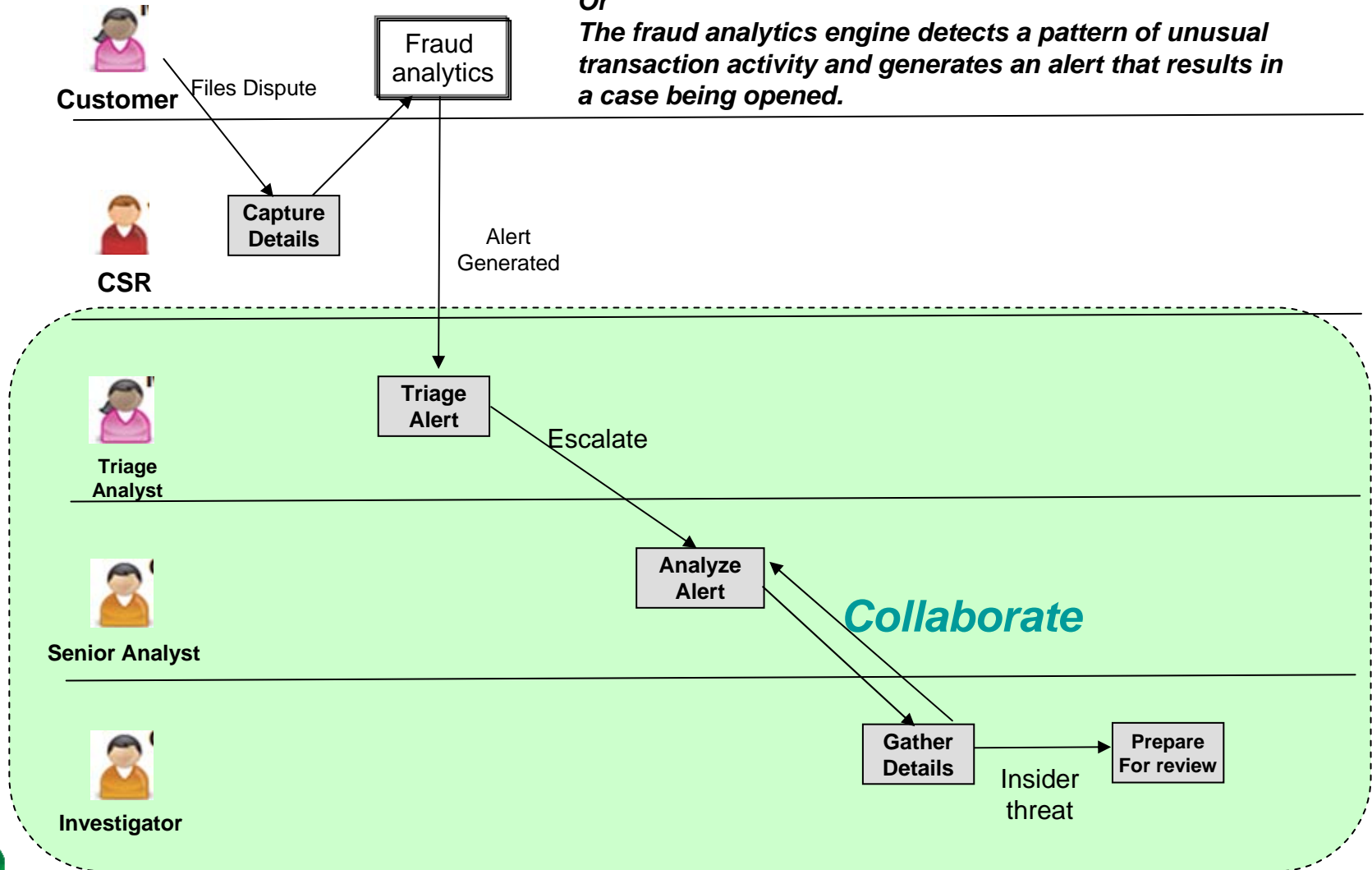
IBM Advanced Case Management

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

process

people

Case Management

information

- 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

Simplifying the delivery of Fraud case-based solutions

| Detect | Prevent | Discover | **Investigate** | Report |

IBM Intelligent Investigation Manager provides the following benefits:

✓ Rapid time-to-value; better, faster, more cost effective Fraud investigations

✓ Organizations will not lose sight of fraud cases

✓ Cases are always visible and can be escalated with timers and rules

✓ All information is integrated within the context of a fraud case
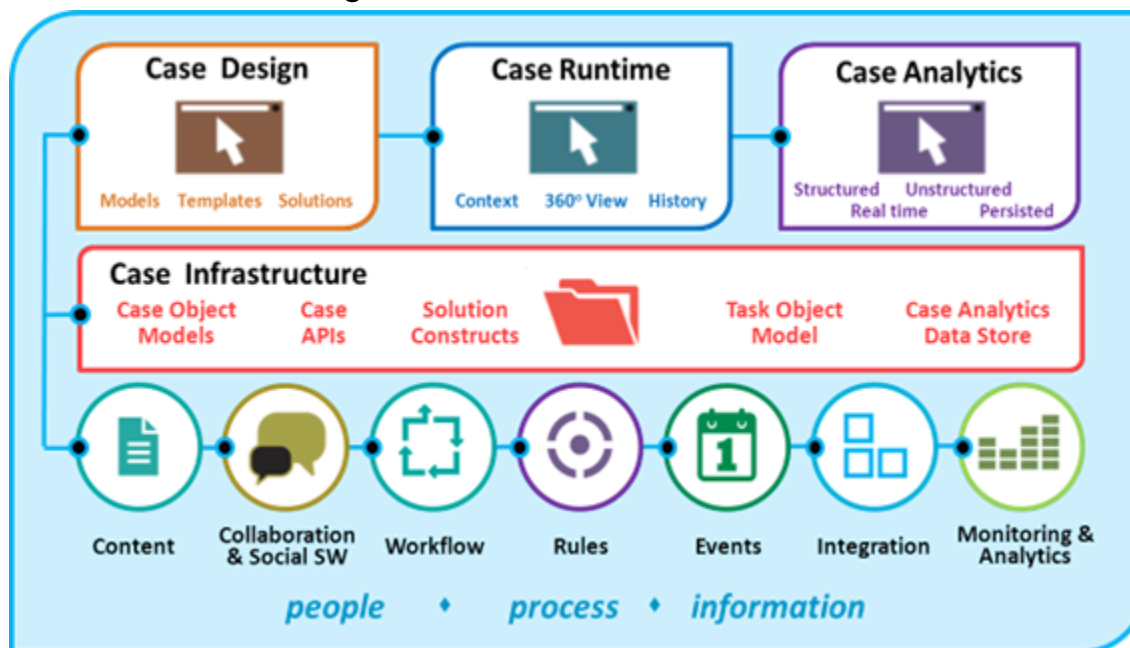
Analytics for Investigations

| Detect | Prevent | Discover | **Investigate** | Report |

IBM's i2 solutions bring together seemingly unrelated information for high-value awareness and provides sophisticated solutions to:
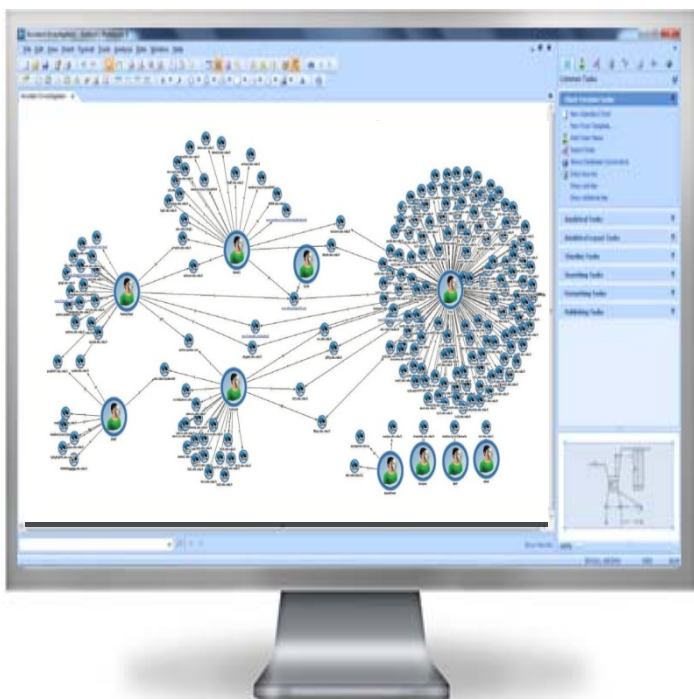

Mine

Analyze

Visualize

Share & Communicate

Collaborative data intelligence

Powerful search & discovery

Enhanced discovery of connections

Robust and highly configurable fraud security model

World class leader in visual & link analysis

Embedded media sources-video, audio, images, documents, etc.

Social network analysis
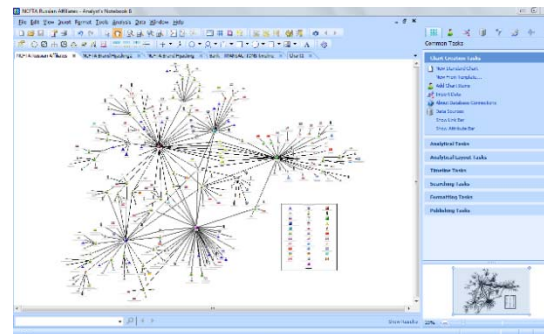
Structured & Unstructured Analysis

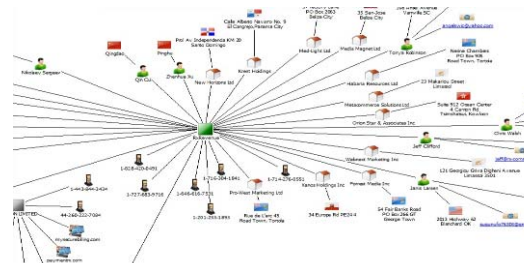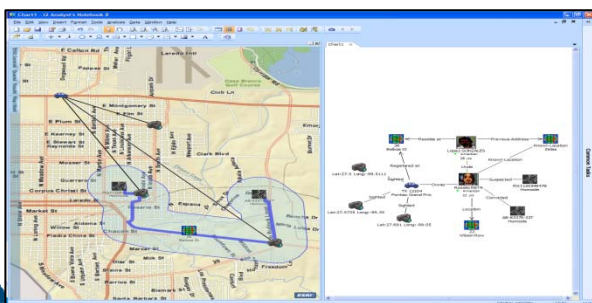# Solution "deliverables" – document, repudiate, prosecuting
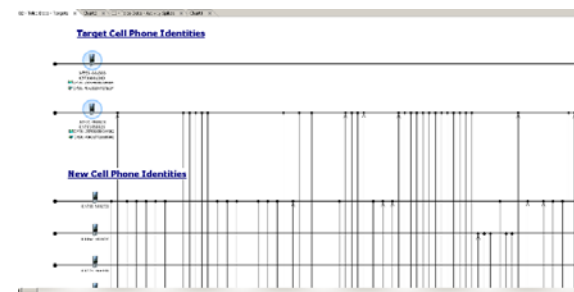## Quickly and effectively
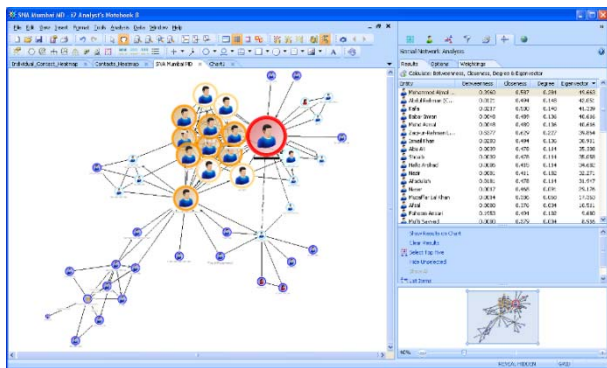
WHO
Document
fraud rings

WHAT
Visualize and
analyze complex
networks and
events

WHERE
Document incidents to
support investigation
and prosecution

WHEN
Plot transactional
timelines

The Intersection of Content and Analytics

Documents

Web Pages

Text Messages

Emails

DO NOT
by twisting the
"twisted" wrinkles
compared to my old
washer and buy a Mo
washer leaves the cloth
but before putting them
anent press" cycle. It's v
out very wrinkled. I would
The matching washer le
I shake them out before
re is no "permanent pre
clothes come out very
aves the clothes look
putting them into t
s" cycle. It's ye
rinkled. I

*Over 80% of stored information is unstructured**

Search, Analyze and Classify overlapping with Content

Content Analytics with Enterprise Search is a unified content analytics and search platform that helps anticipate and shape business outcomes by surfacing new insight and unknown realities from enterprise content, tackling complex analytics issues, even as your information grows to Big Data scale
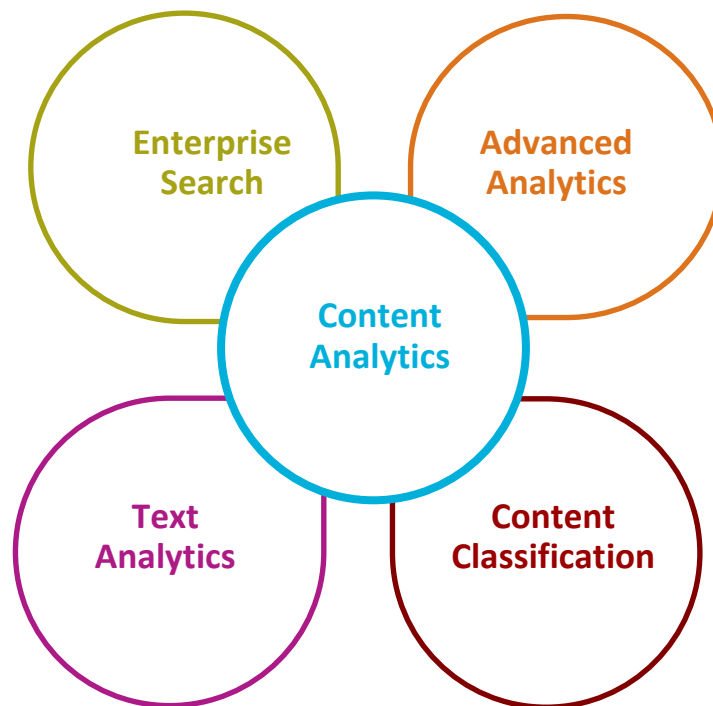
Putting it all together

Bringing it all together…

Intelligent Investigation Manager provides:

Advanced Case management for
- Efficiency and transparency to investigative process
- Coordination and management of overall investigation
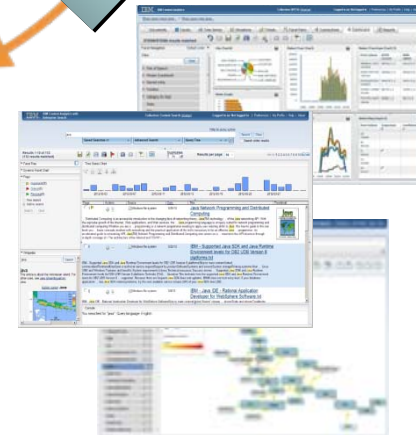
Forensic Analysis to drive the investigation
- More leads
- Visibility into relationships and scope
- Evidence

Content Analytics for
- Deeper insights
- Undiscovered realities, patterns, entities and anomalies

process

people

Investigation Management

information
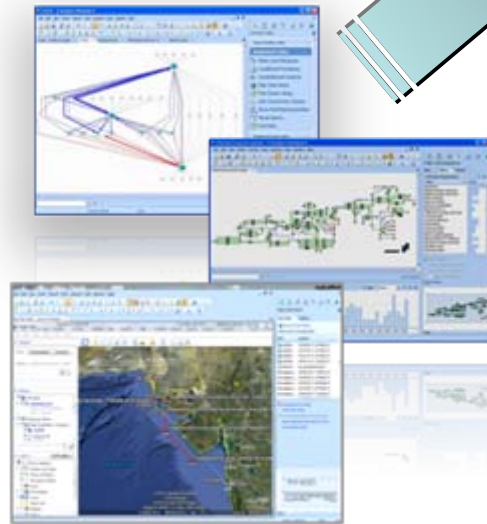
Content Analytics

Forensic Analysis

Why IBM

- **We believe that our approach offers a unique, high quality solution**
- **to address your unique challenges around fraud.**
- **These can be summarized by our core values**
  <u>**Key elements which make our proposal unique are:**</u>

- **World Class Integrated Claims Fraud Solution**
  Fully integrated Best of breed, proven solutions

- **Completeness of Vision**
  IBM's vision for fraud extends to all aspects and is unique in its comprehensiveness in detecting, preventing, discovering, and investigating fraud

- **Skills and Expertise**
  From data architects to predictive modelers to badge carrying investigators – IBM is unique in the number and nature of skills to make this solution a success

- **IBM Research**
  What is proposed in the attached just scratches the surface in terms of what's possible. Your solution will continue to grow and expand in capabilities that no one else can match

- **IBM Commitment**
  IBM is committed to your success, and to structuring a partnership that ensures a mutually beneficial outcome

Question & Answers