



Best Practice Internal Controls For Reducing Fraud And Corruption Risk

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The Network

Compliance Week



AGENDA

- Discussion of current trends concerning risk, compliance and the use of technology to mitigate fraud risk
- Considerations in the preparation of a fraud risk assessment
- Implementing forensic tools to mitigate risks associated with fraud and corruption risks
- Using forensic tools to monitor the effectiveness of compliance programs and related controls meant to mitigate fraud risk
- Doing more with less - using forensic tools and data visualization to allocate limited internal resources to their highest and best use

FRAUD IS ON THE RISE

The **Corporate Fraud Index for 2013**, which measures the percentage of fraud-related incidents across all reports, **rose to 26.31%**, an all-time high since the Index was first reported in 2005. The Index stood at 23.6% in 2012.



Regulatory Environment

The collage features several news snippets:

- COMPLIANCE WEEK**: "Now Available: COMPLIANCE WEEK In-Depth Reports" and "Segregation of Duties".
- DOJ, SEC Announce Historic \$16.65 Billion Settlement With BofA** by Bruce Carton | August 21, 2014. Includes social media sharing options (PRINT, EMAIL, TWEET, LINKEDIN, FACEBOOK).
- LAW360**: "Overstock.com General Counsel Steps Down".
- THE WALL STREET JOURNAL**: "French Prosecutors Launch Formal Probe Against J.P. Morgan's Main U.S. Banking Unit". Sub-headline: "Under investigation is bank's role in deals entered into by Wendel Investissement executives in 2007".
- LAW360**: "Ex-MillerCoors Exec, Others Charged With \$7M Fraud Scheme". By Ben Conarck.
- Risk & Compliance Journal**: "SEC Gives More Than \$600,000 Whistleblower in Retaliation Case".
- THE WALL STREET JOURNAL**: "Banks Expected to Settle FX Probes for Billions". Sub-headline: "Citigroup Inc., Barclays PLC, J.P. Morgan Chase & Co. and Royal Bank of Scotland Group are expected to plead guilty to rigging foreign-currency exchange rates and pay billions in combined penalties".



In-House Trends

- ▶ Reporting structure
 - Involvement of Board of Directors & Executive Management
- ▶ Working with limited resources
 - Strong Demand to do more with less
- ▶ Increased focus on risk assessment and monitoring
 - Measuring effectiveness of compliance programs
- ▶ Growing adoption of technology
 - Using technology to monitor fraud and analyze data

In-House Trends



Professionals responsible for compliance risk measures are increasingly *reporting to higher levels in the company...*

DIRECTLY TO THE BOARD:

Globally = 31%
N. America = 30%
Europe = 32%

HEAD OF LEGAL WHO REPORTS TO CEO:

Globally = 21%
N. America = 26%
Europe = 16%

DIRECTLY TO CEO:

Globally = 40%
N. America = 34%
Europe = 46%

HEAD OF ANY OTHER FUNCTION WHO THEN REPORTS TO CEO:

Globally = 8%
N. America = 10%
Europe = 6%

81% Companies list executives as top beneficiaries of Data Analytics;
68% list Boards

In-House Trends



46% of Directors are more focused managing fraud risk

66% Directors are placing greater emphasis on awareness of fraud risk

88% Companies list compliance as the top concern of GCs, CEOs & BoDs.

66% Expect staffing costs to increase

65% Believe staffing constraints are the biggest obstacles to their ability to detect or mitigate risk

63% Believe data analytics is cost effective

Strong demand to do more with less!

In-House Trends



Increasing governmental emphasis on assessing risk

88% Boards include risk into strategic discussions

68% Companies try to measure effectiveness of compliance

90% Believe data analytics enhances risk assessment

74% Companies use data analytics when investigating fraud or bribery

In-House Trends



90% of the world's data has been generated only in the past 2 years

79% Believe data analytics can review larger amounts of data in a shorter amount of time

82% Believe it can detect fraud & corruption sooner

89% Believe it can detect potential misconduct that it couldn't detect before

26% Companies are actually using technology for monitoring fraud (and growing)

Assessing Fraud Risk



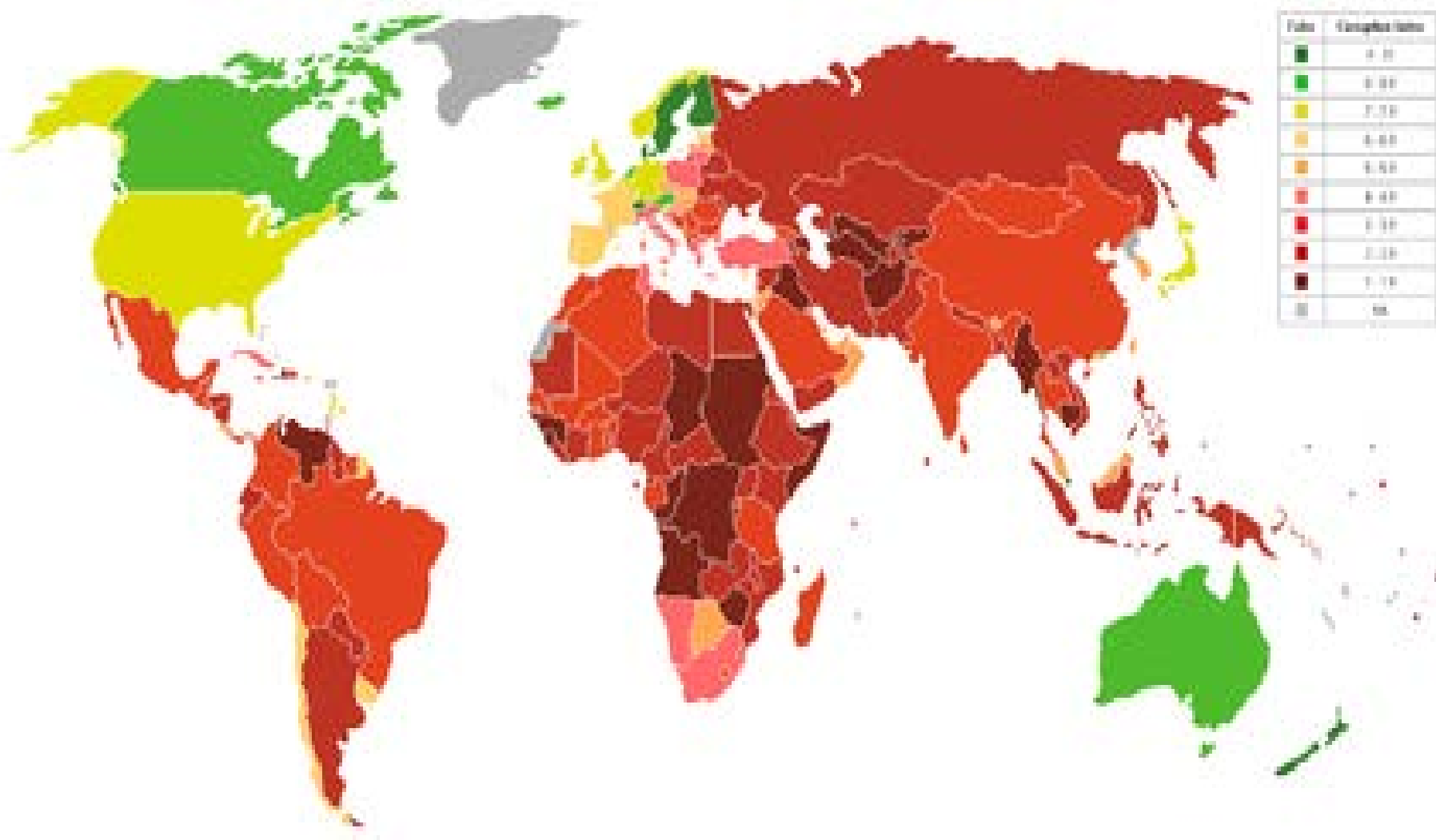
**There Is A
Better Way**



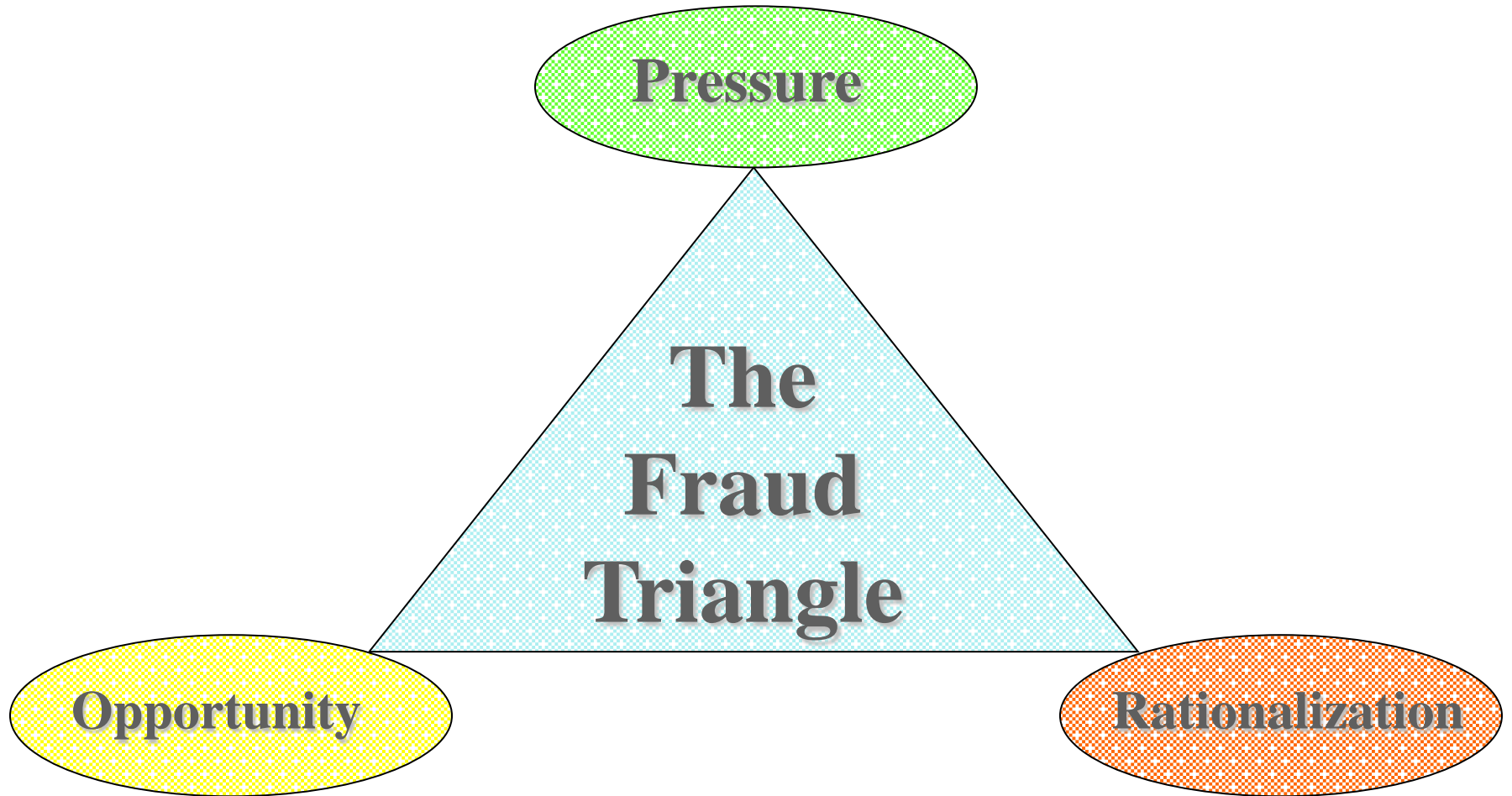
Fraud's Trajectory

- ▶ Typically starts out small
- ▶ Increases in complexity and aggressiveness
- ▶ Often grows in magnitude, and number of participants
- ▶ Will rarely cease on its own accord

Traditional Method



The Fraud Triangle



Assessing Fraud Risk

□ Particular risk factors might include:

- Level of anti-corruption compliance policies, procedures, and controls in place
- Content of training regimens (Internal Audit)
- Compliance with books and records provisions
- Procurement process (control environment)
- Product life cycles, sales cycles, and performance issues
- Competitive landscape
- Pace of international growth
- Acquisitions
- Compensation structure



Data Analytics Overview

- ▶ Analyzes the company's existing data
- ▶ Looks for transactions and relationships that fail to fit existing norms or company parameters (Potentially Anomalous Transactions or "PATs")
- ▶ The larger the data set, the more robust the results

Internal Drivers for Employing Forensic Tools

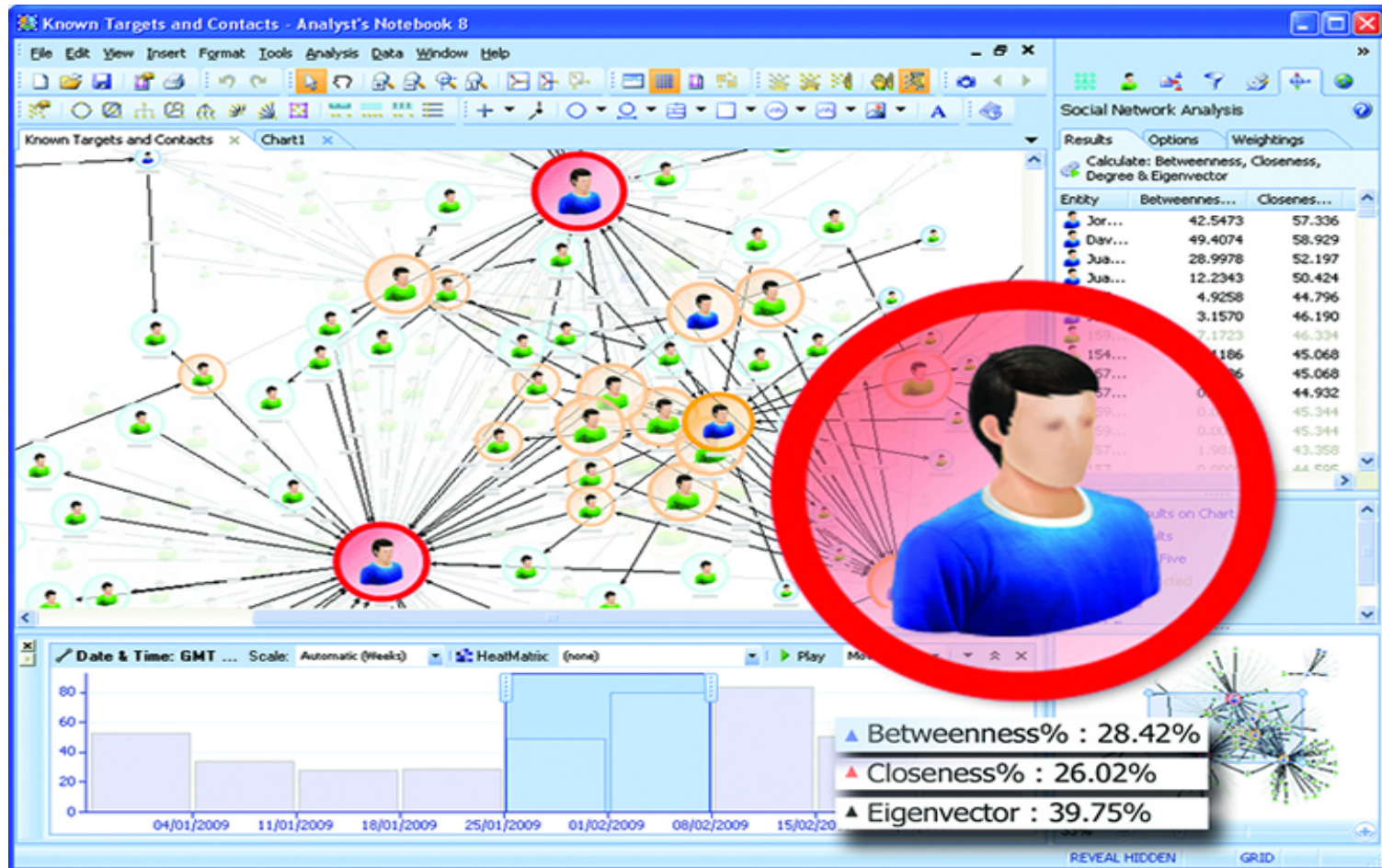
- ▶ Data volumes are growing exponentially
- ▶ People fail to identify complex patterns and anomalous trends
- ▶ Business processes and controls don't operate perfectly
- ▶ Toxic employees exist
- ▶ Performance pressures have not abated
- ▶ Compliance assets are being spread thinner



Trying to Answer a Number of Questions

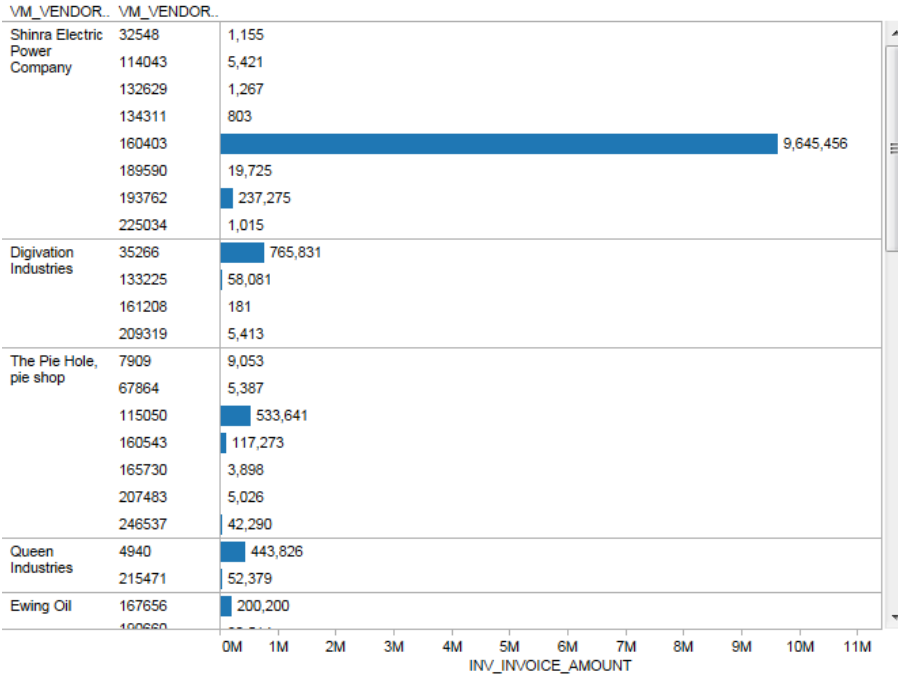
- ▶ What happened in the past?
- ▶ What is happening currently?
- ▶ What are the trends?
- ▶ What does the data tell you?
- ▶ How reliable are the indicators?
- ▶ What are the most pressing risks?

Example: Link Analysis

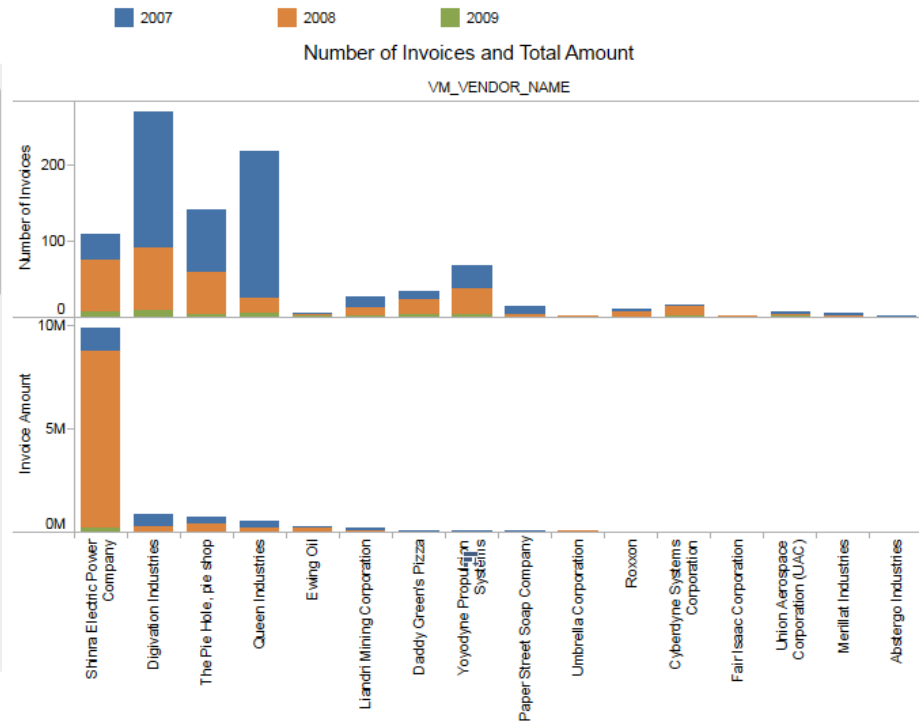


Example: Duplicate Vendors

Duplicate Vendor Name

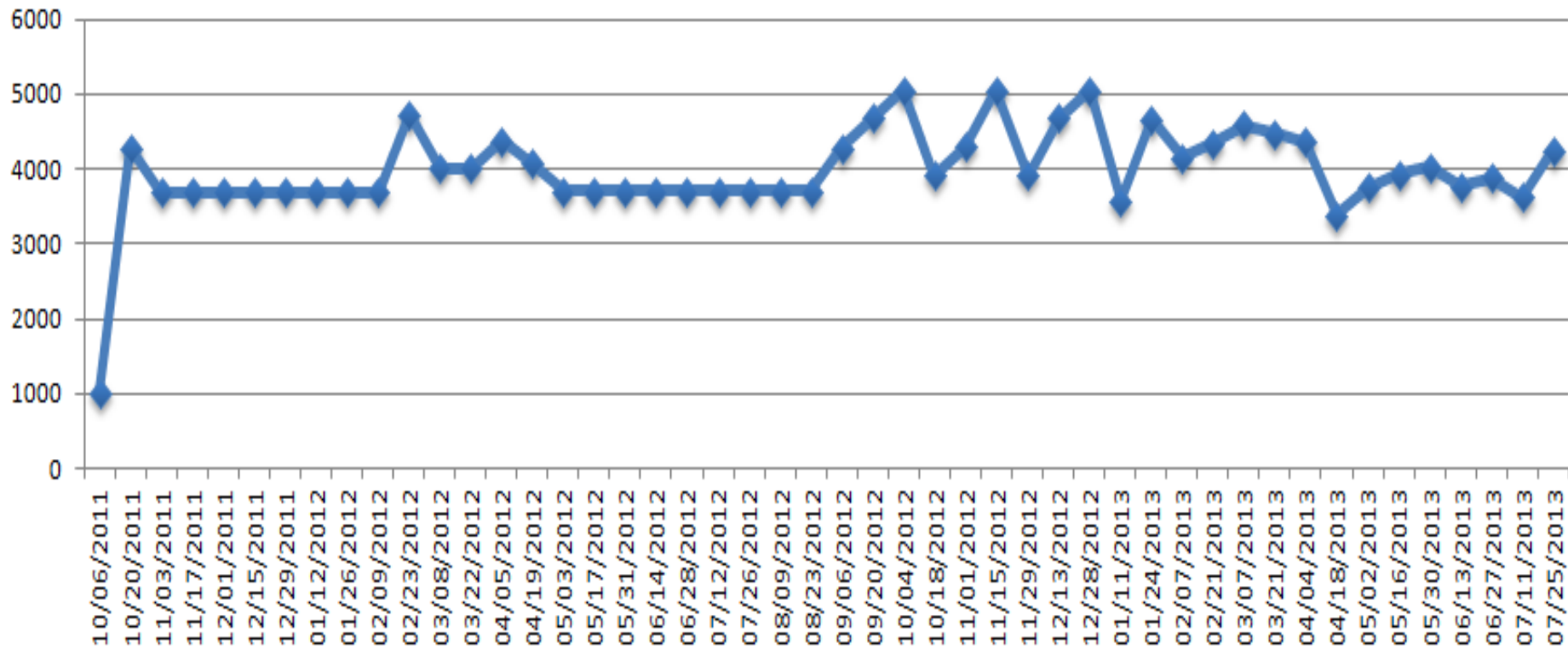


Number of Invoices and Total Amount



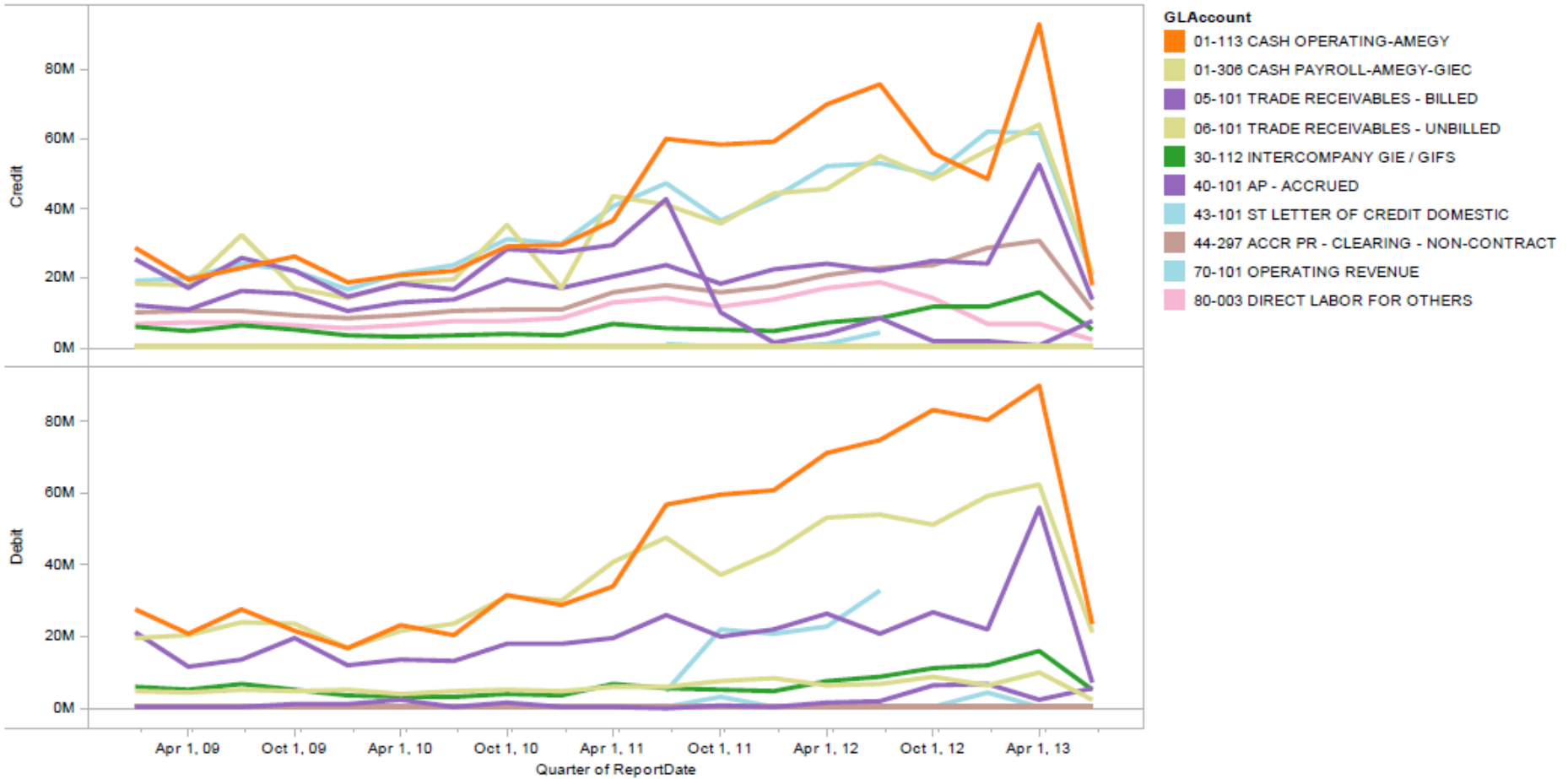
Example: Payroll Trends

Payroll Trend for Assistant Chief Inspector



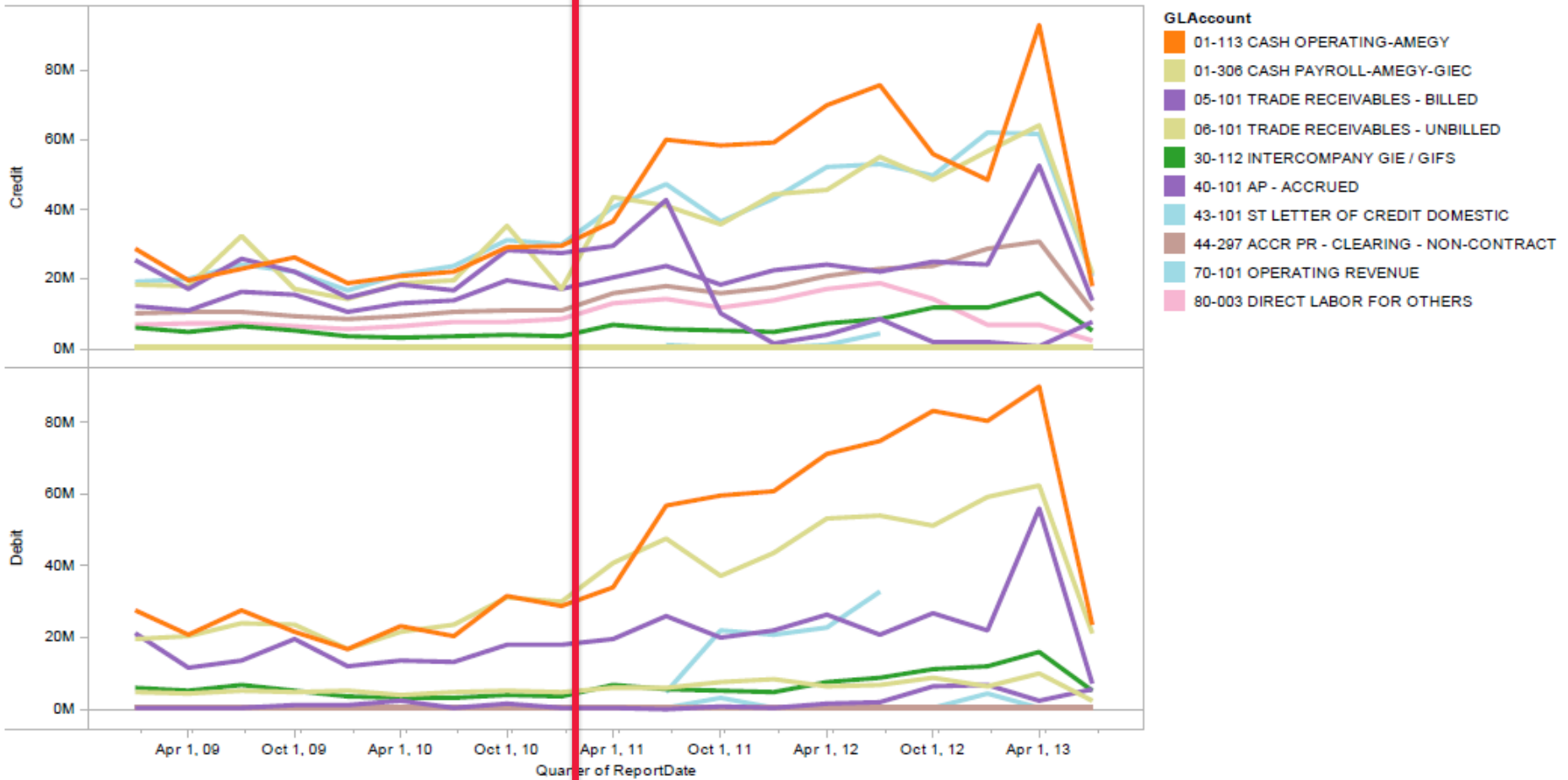
Example: GL Entries without Description

GL Entries without description



Example: GL Entries without Description

GL Entries without description



Data Analytics: Challenges

▶ Accessibility:

- Are there issues with legacy systems and acquisitions?

▶ Reliability/Completeness:

- Do non-numeric fields contain numeric data (and vice-versa)?
- Can it be reconciled to a control point?

▶ Integrity:

- Has data transferred from legacy systems been adversely affected, altered, corrupted or truncated?

▶ Consistency:

- Are date formats consistent across the data sets?

Analytics Challenges - PATs

- ▶ There are several fundamental challenges, including:
 - Potentially anomalous transactions fail to reveal that they have no legitimate business purpose
 - Potentially anomalous transactions fail to indicate that they were consummated for less than equivalent value
- ▶ False positives
 - Techniques should identify transactional patterns in the form of more complex combinations

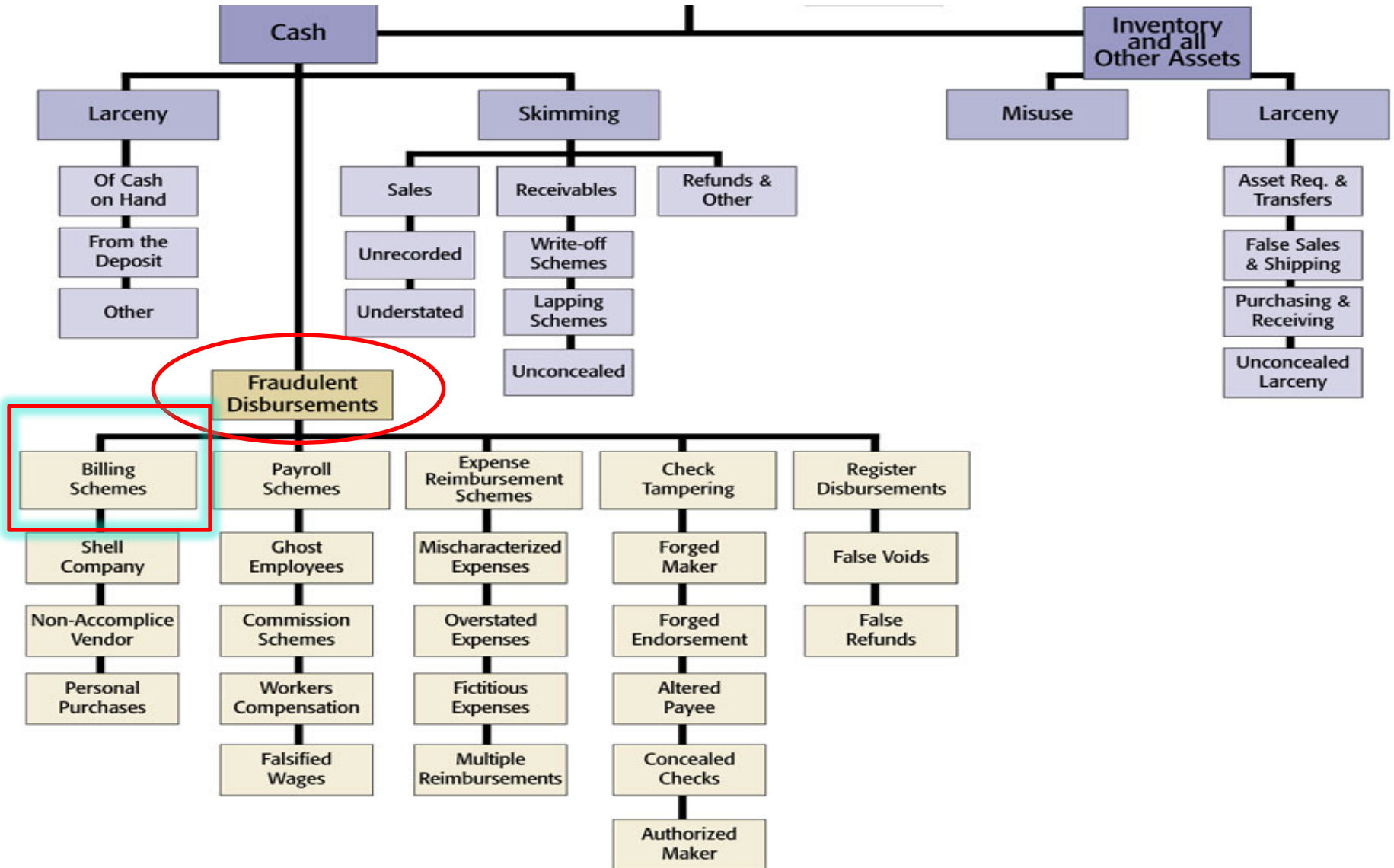
Theft via “Conflicted” Purchases

Common schemes for Purchases from conflicted vendors:

[What This Means: Buying from a supplier/vendor where the employee has an undisclosed interest.]

- Employee negotiates a higher price than normal
- Bid rigging, manipulating competitive quotes
- Purchases of off-grade product disguised as a good product
- Employee approves invoices for phantom goods or services

Misappropriation of Assets



Analytical Testing - PATs

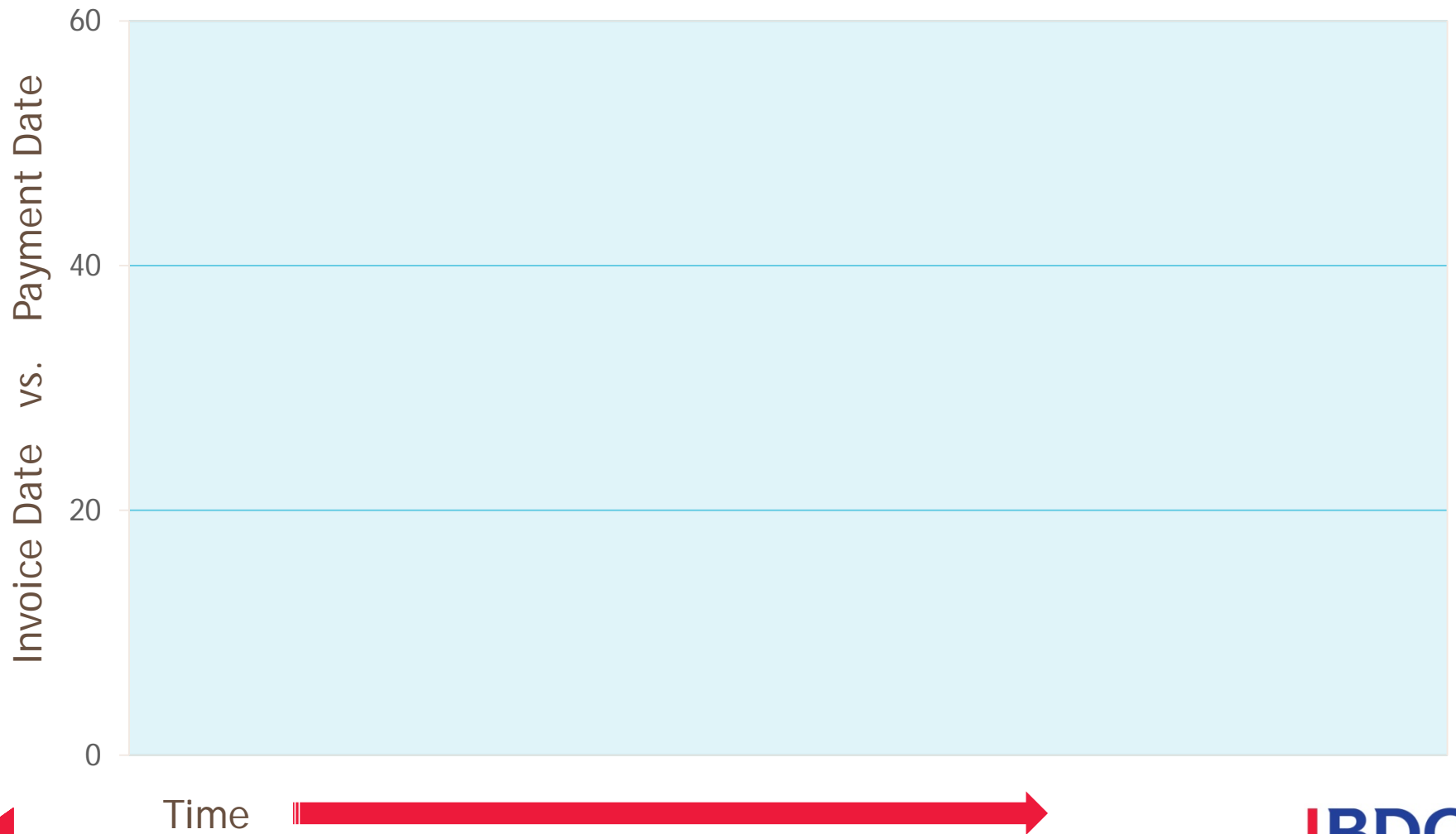
- ▶ Stratification
- ▶ Gaps/Duplicates
- ▶ Filter/Sort
- ▶ Non-Recurring
- ▶ Aging
- ▶ Join/Relate
- ▶ Relational Analysis
- ▶ Ratio Analysis
- ▶ Frequency Analysis
- ▶ Missing Data
- ▶ Trends/Regression
- ▶ Benford's Law



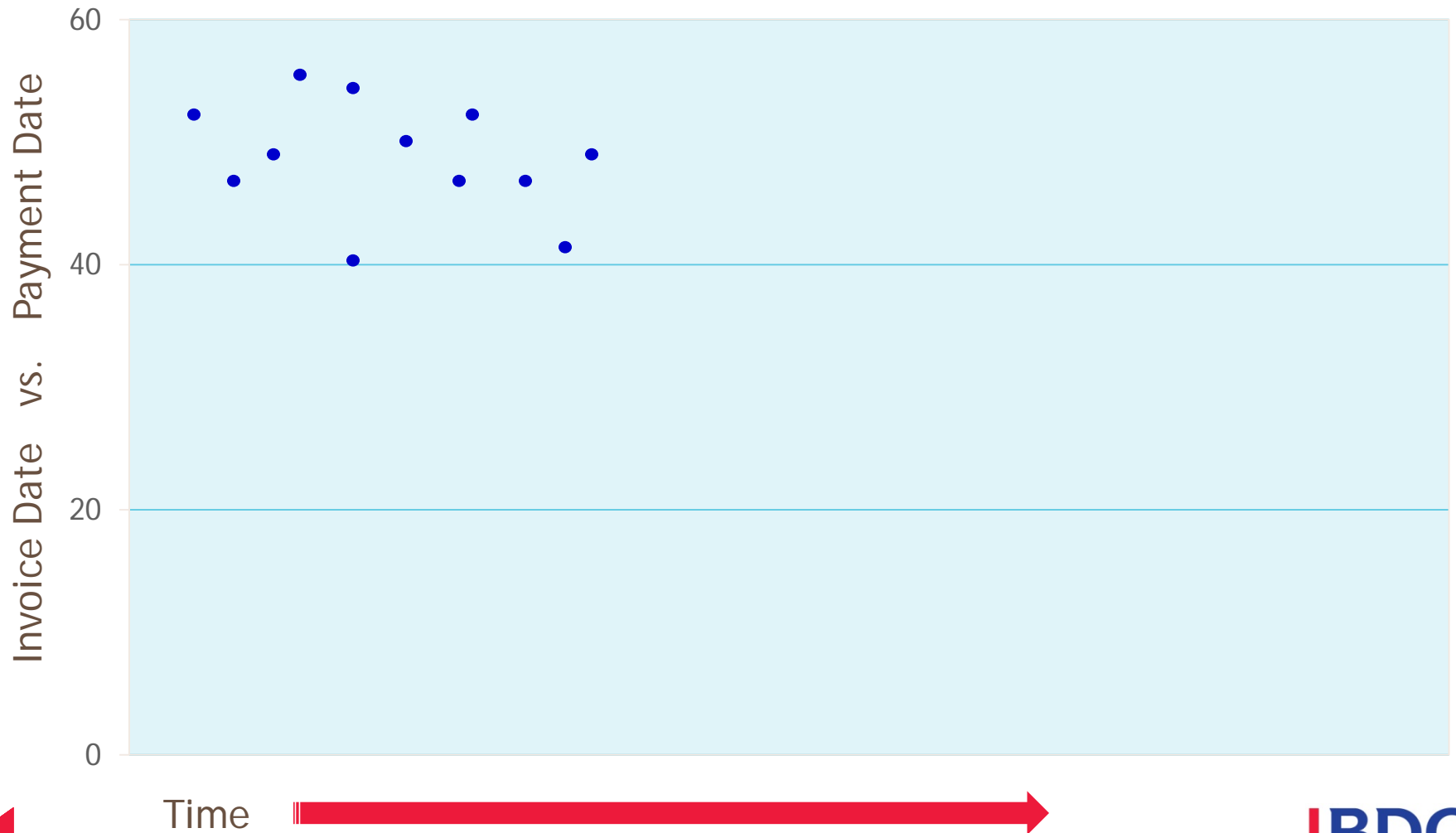
Analytical Testing - PATs

- ▶ Aging
- ▶ Frequency Analysis
- ▶ Trends/Regression

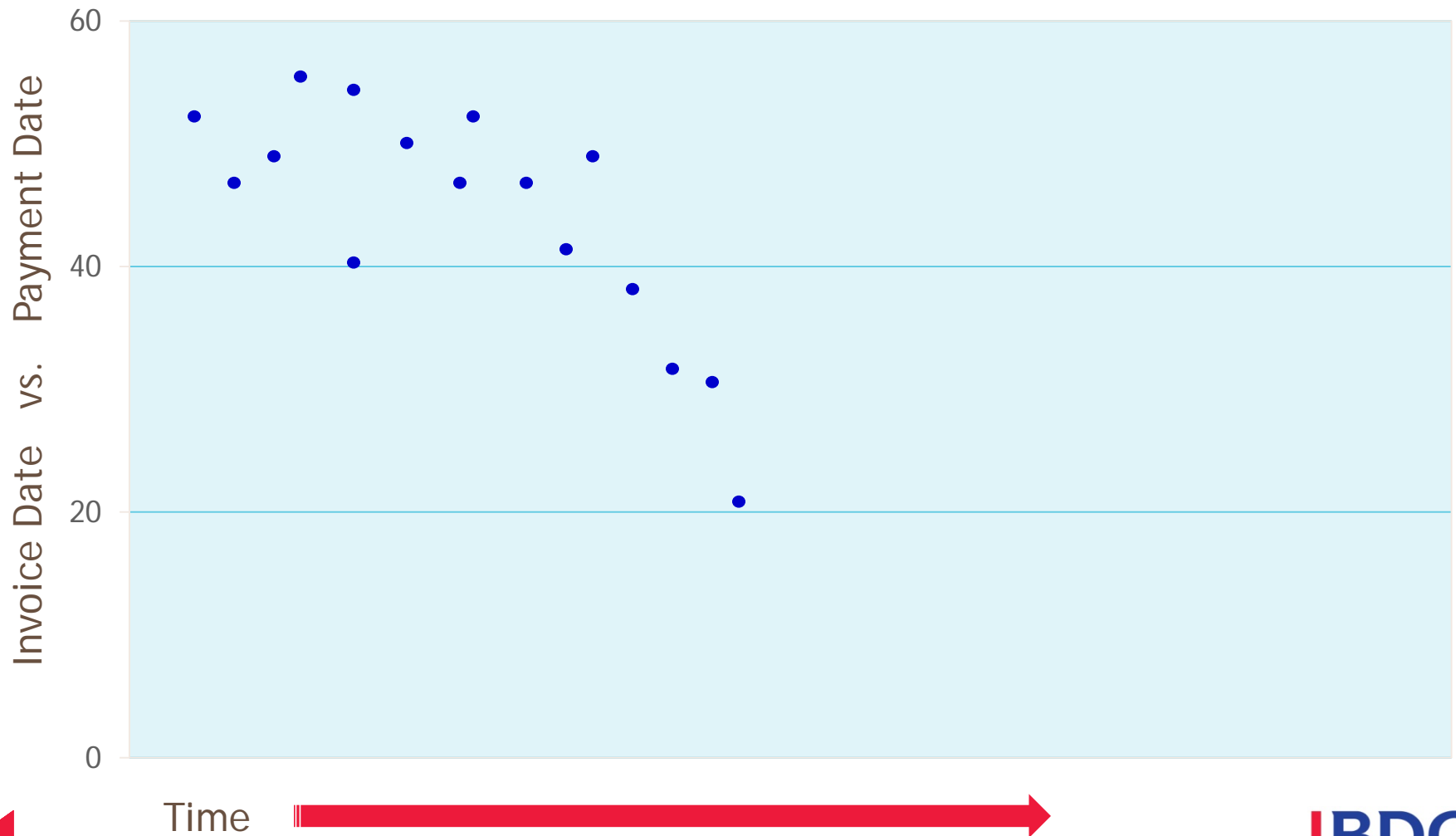
Vendor Payments Attribute Analysis



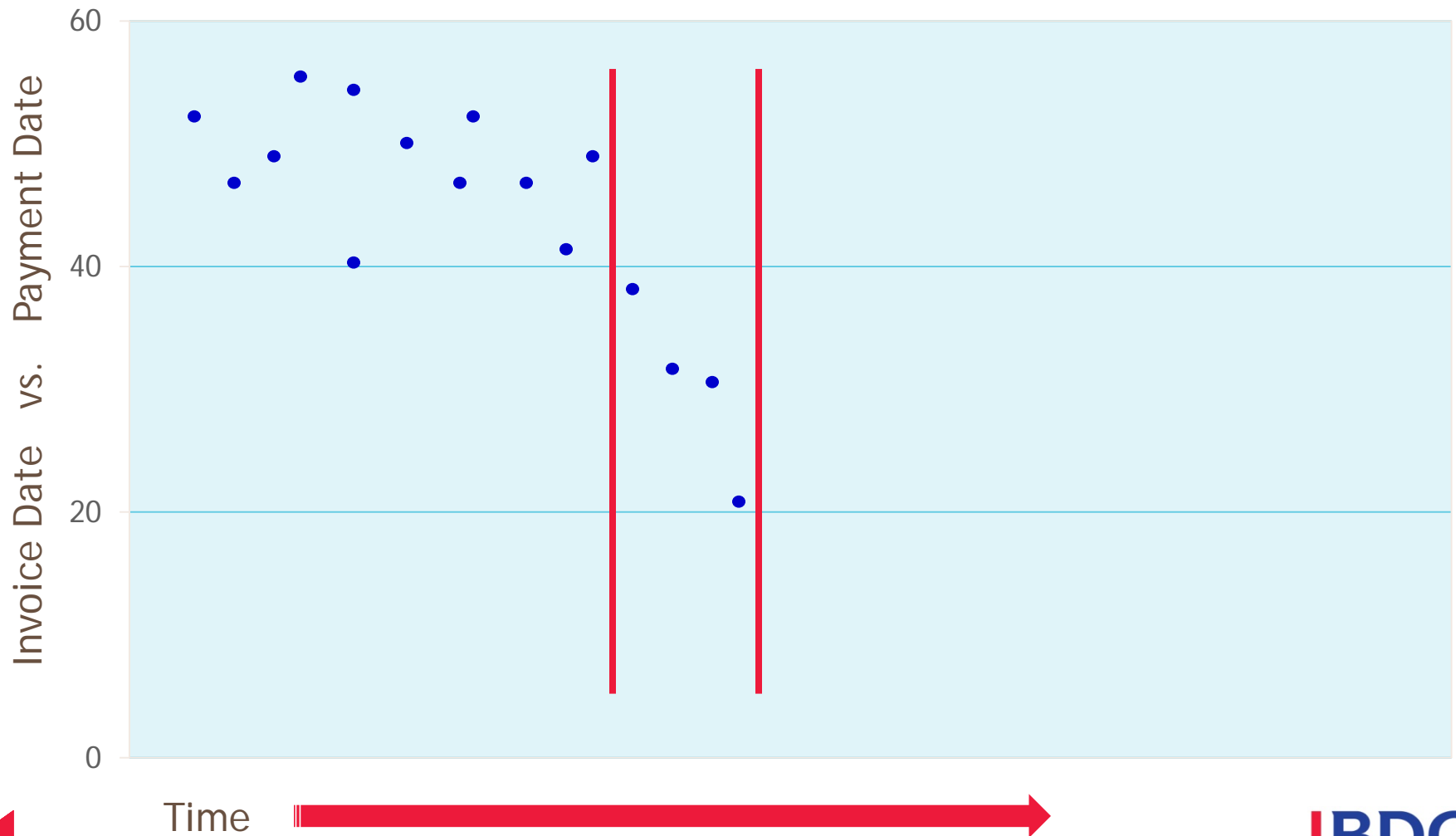
Vendor Payments Attribute Analysis



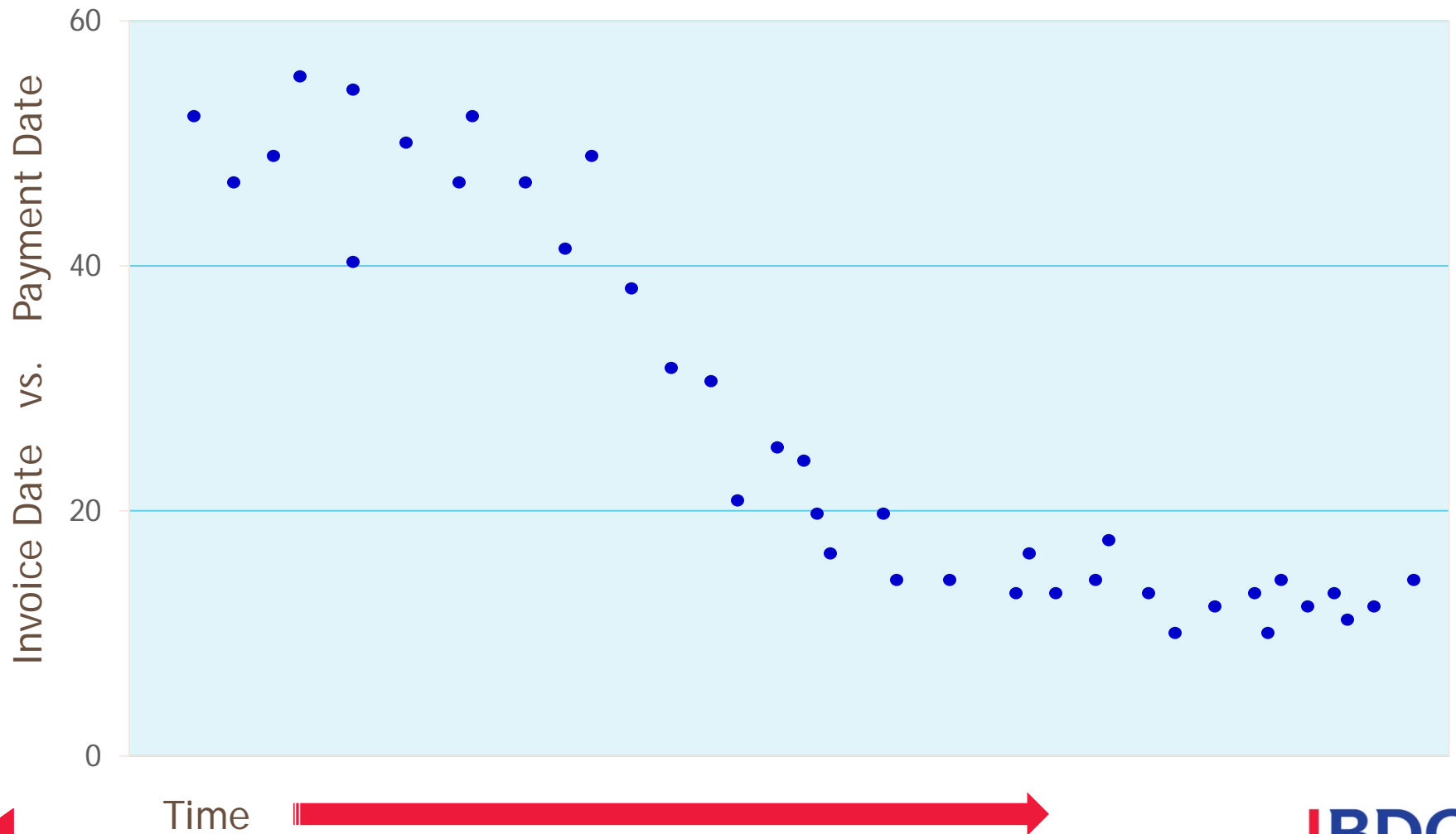
Vendor Payments Attribute Analysis



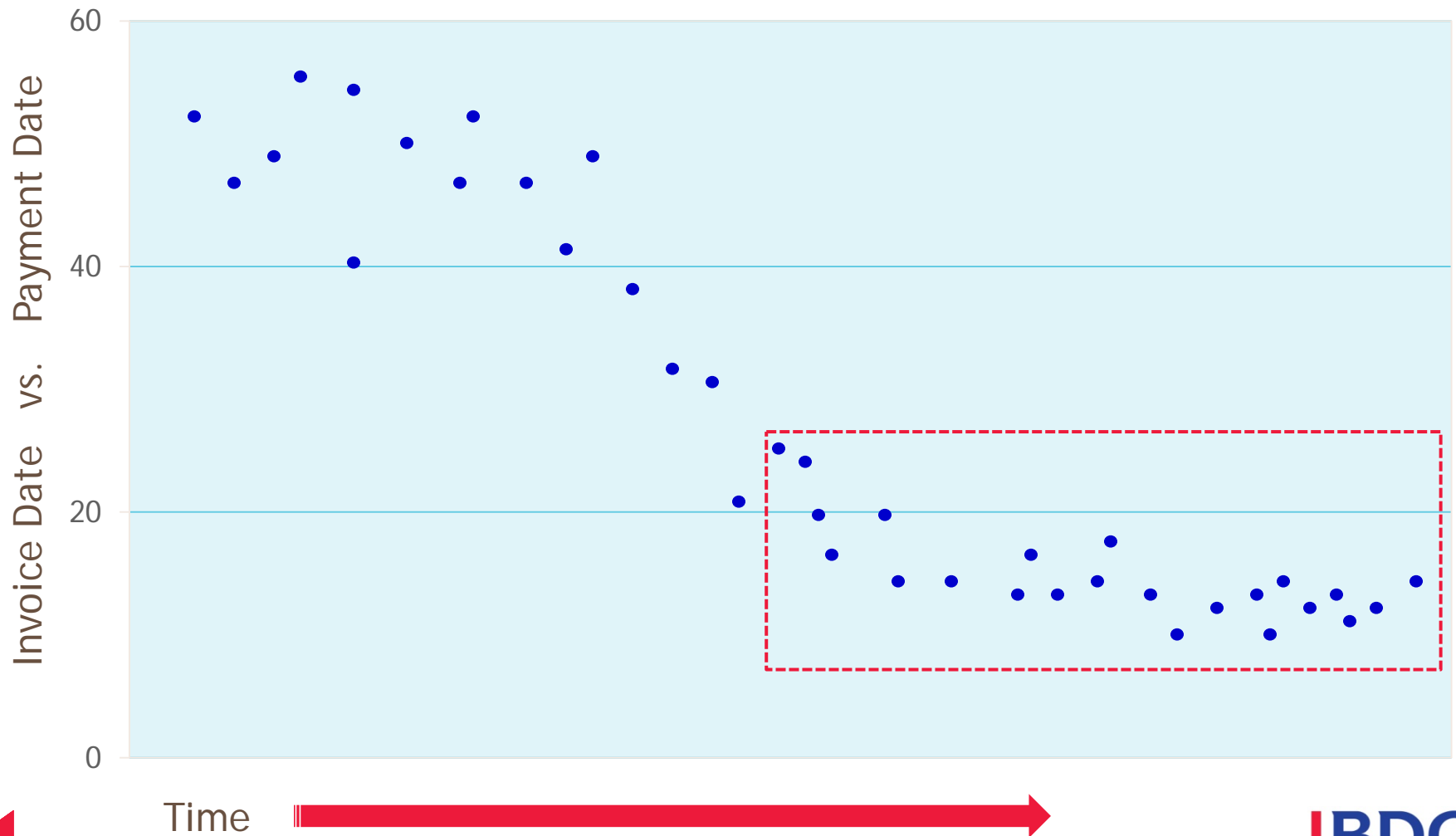
Vendor Payments Attribute Analysis



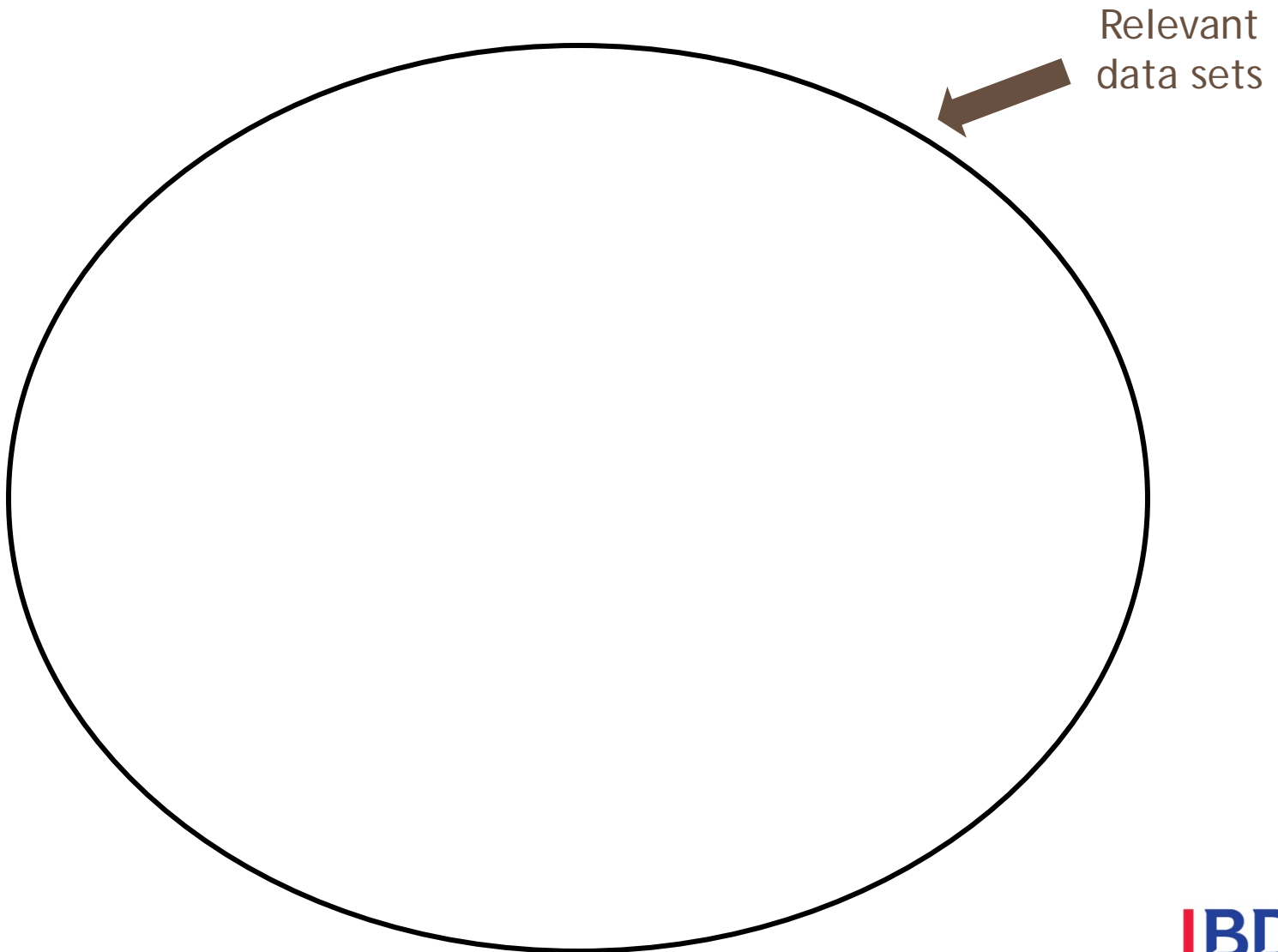
Vendor Payments Attribute Analysis



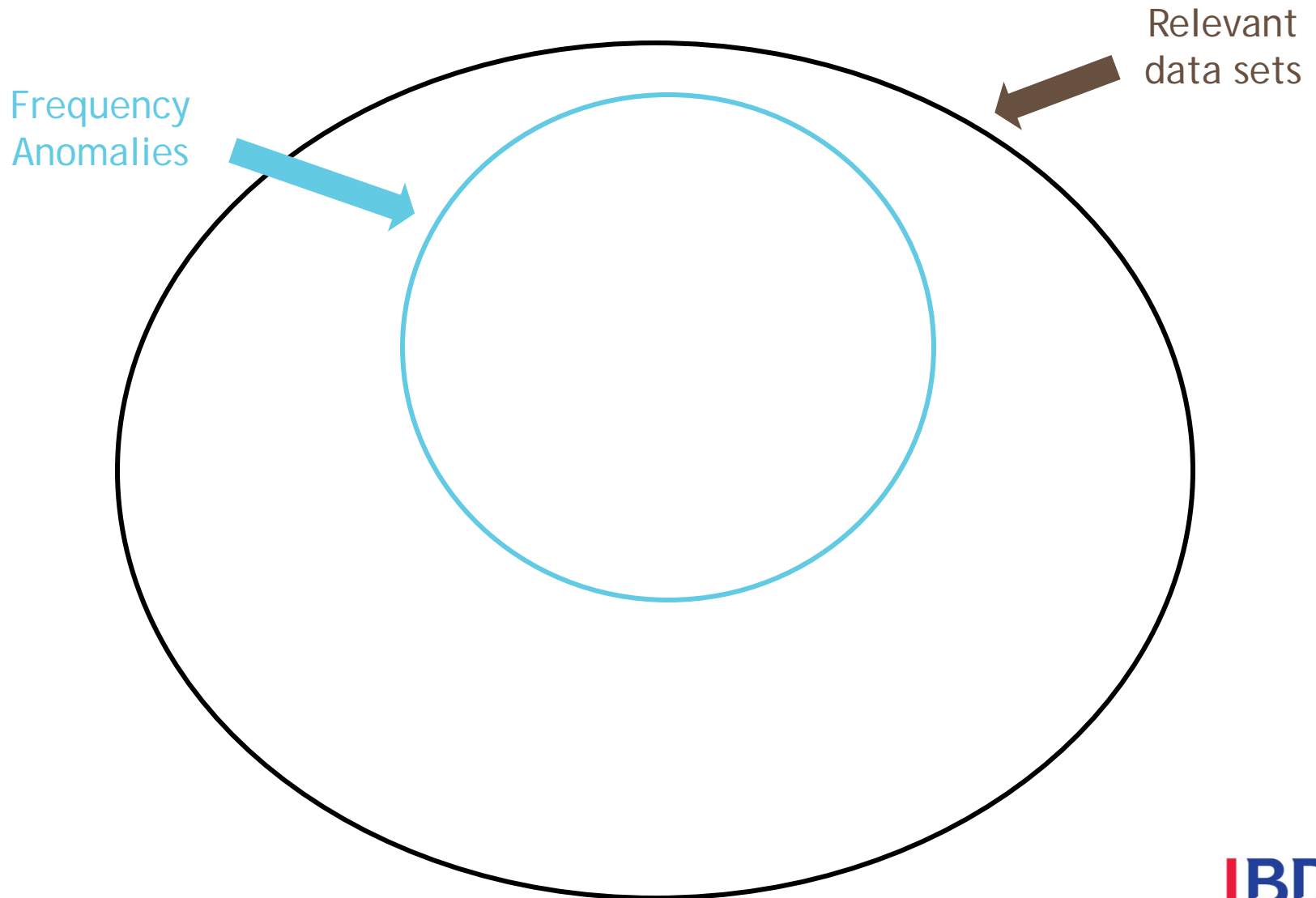
Vendor Payments Attribute Analysis



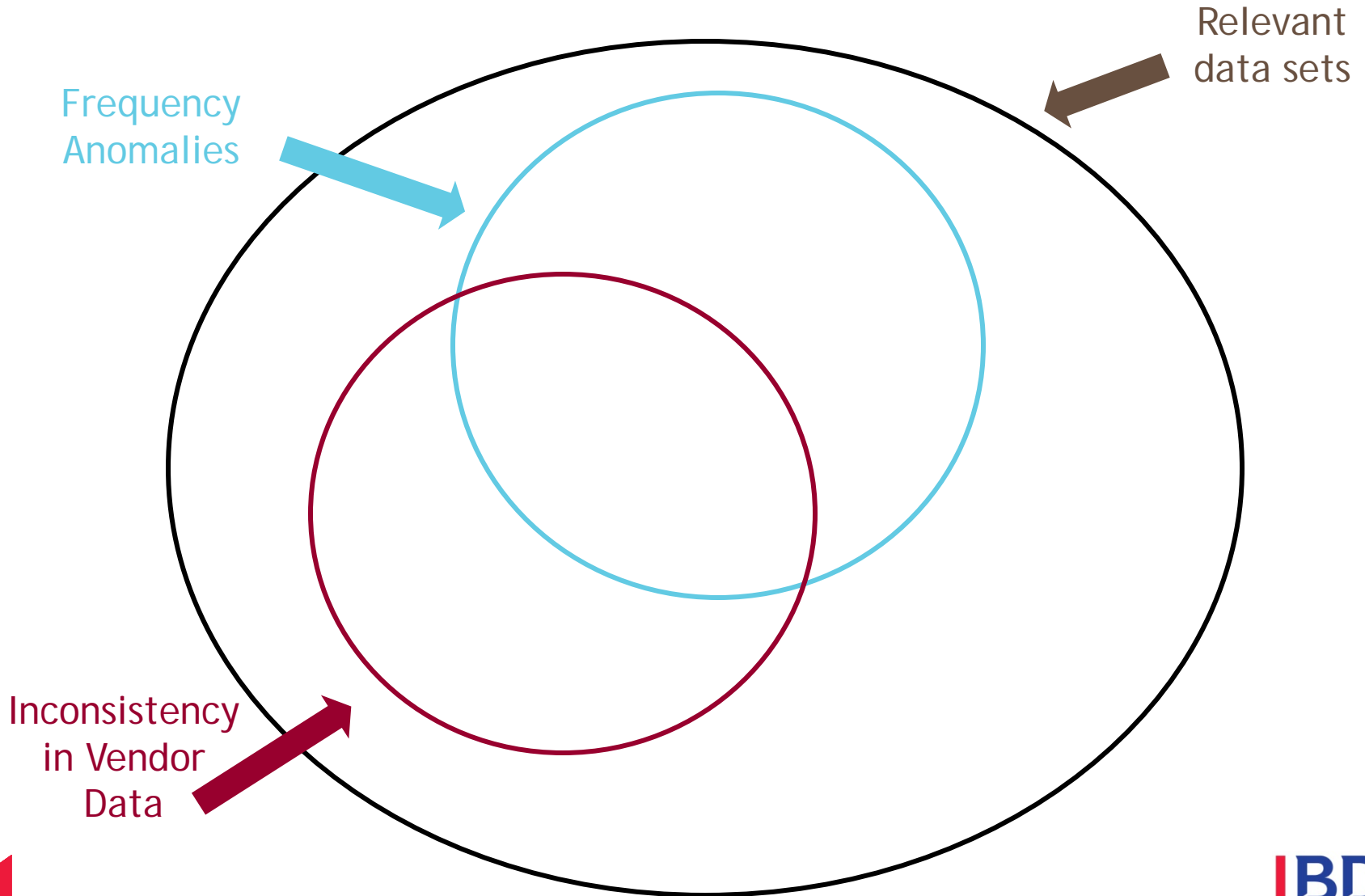
Coordinate Analytics



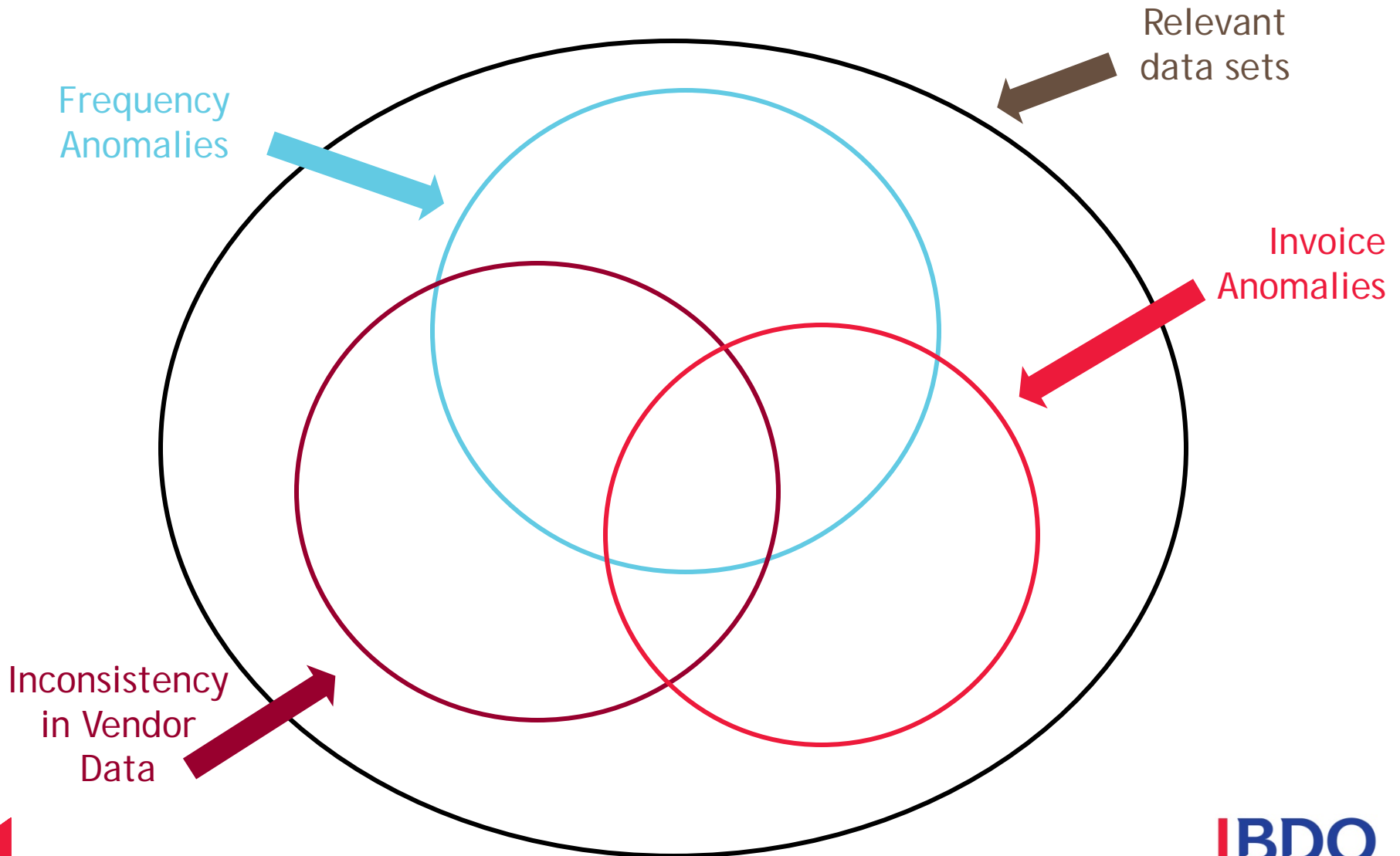
Coordinate Analytics



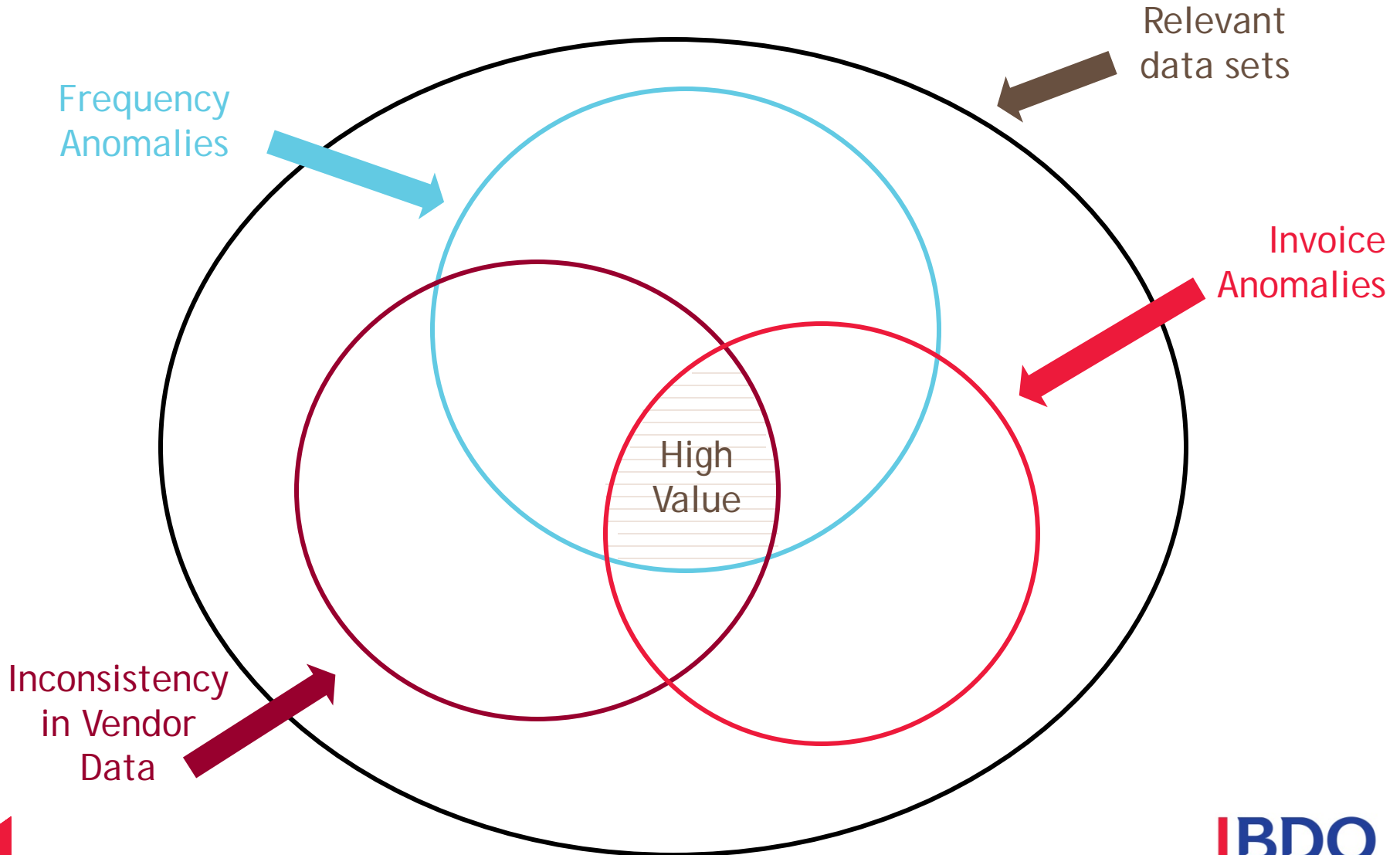
Coordinate Analytics



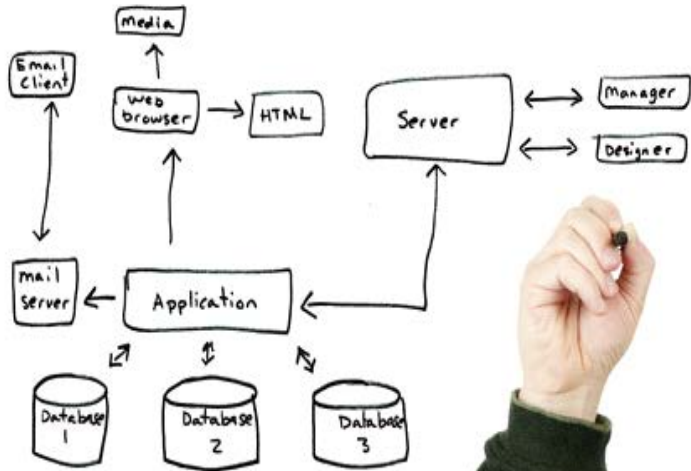
Coordinate Analytics



Coordinate Analytics



Employing Monitoring Tools



**Doing More
With Less**



The Monitoring Process

Data mining software coupled with advanced analytics and exception management capabilities

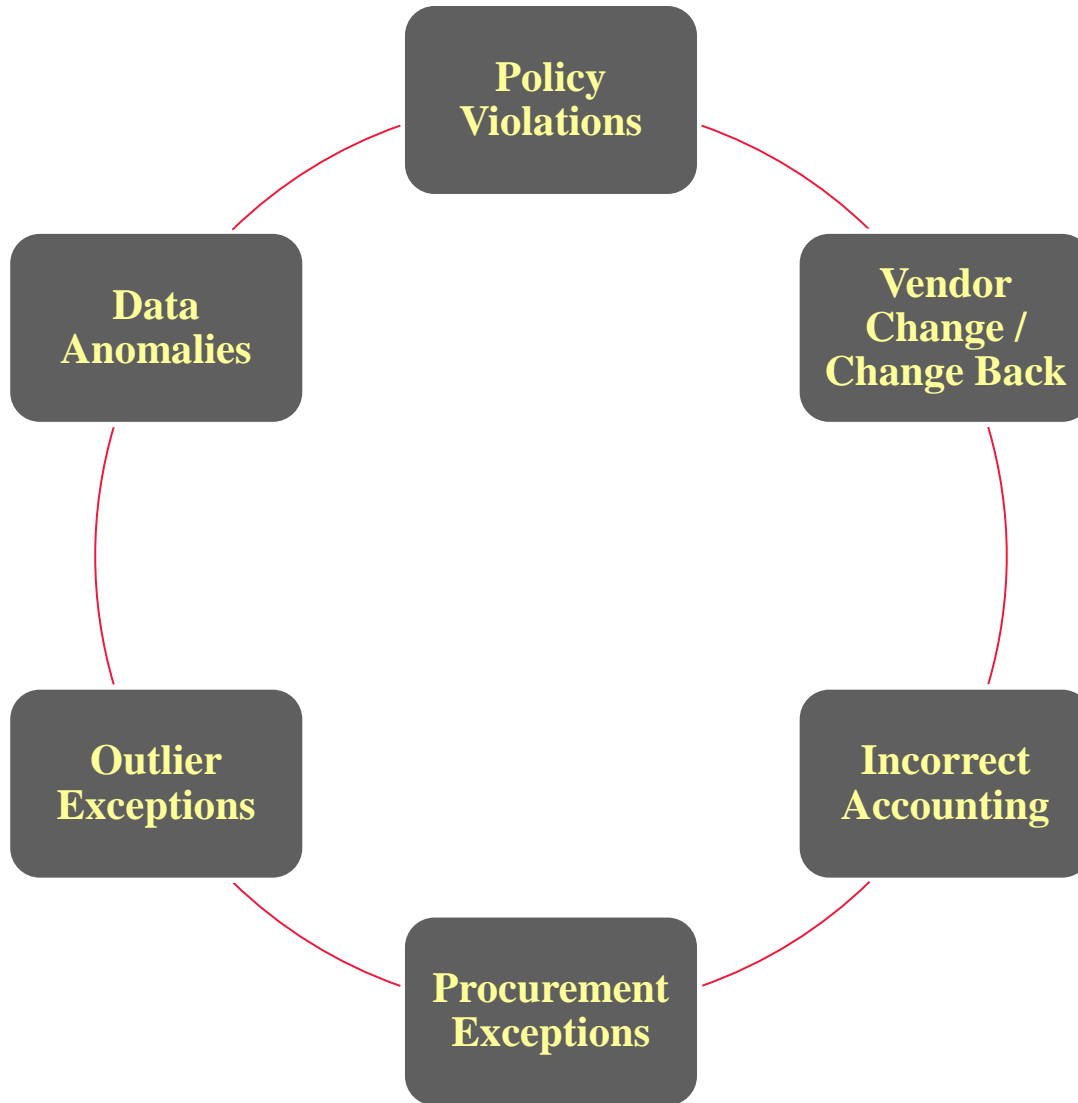


Established forensic protocols and recognized investigative methods



- Real-time (or near real-time) detection of:
 - ❖ Inefficiencies in purchasing
 - ❖ Potentially anomalous transactions
 - ❖ High-risk relationships
 - ❖ Compliance failures
 - ❖ Circumvention of controls

Monitoring Applications



Monitoring vs. The Traditional IA Approach

Ongoing Monitoring

- Evaluates 100% of the transactions or associated target functions
- Transactions or functions requiring further review are identified in real-time (or near real-time)
- Process is highly automated and can be repeated on as frequent a basis as required
- Automatically brings in relevant outside data
- Leads to optimal allocation of limited internal resources
- Timely correction of errors and identification of prohibited behaviors

Traditional Approach

- Evaluates only a small percentage of transactions or targeted functions
- Transactions or functions requiring further review are identified during scheduled reviews
- Process is somewhat automated and is repeated on a rolling basis as determined by IA
- Outside data is considered only if it is specifically sought
- Internal resources are dispatched in less than optimal fashion
- Errors and prohibited behaviors are not identified on a timely basis

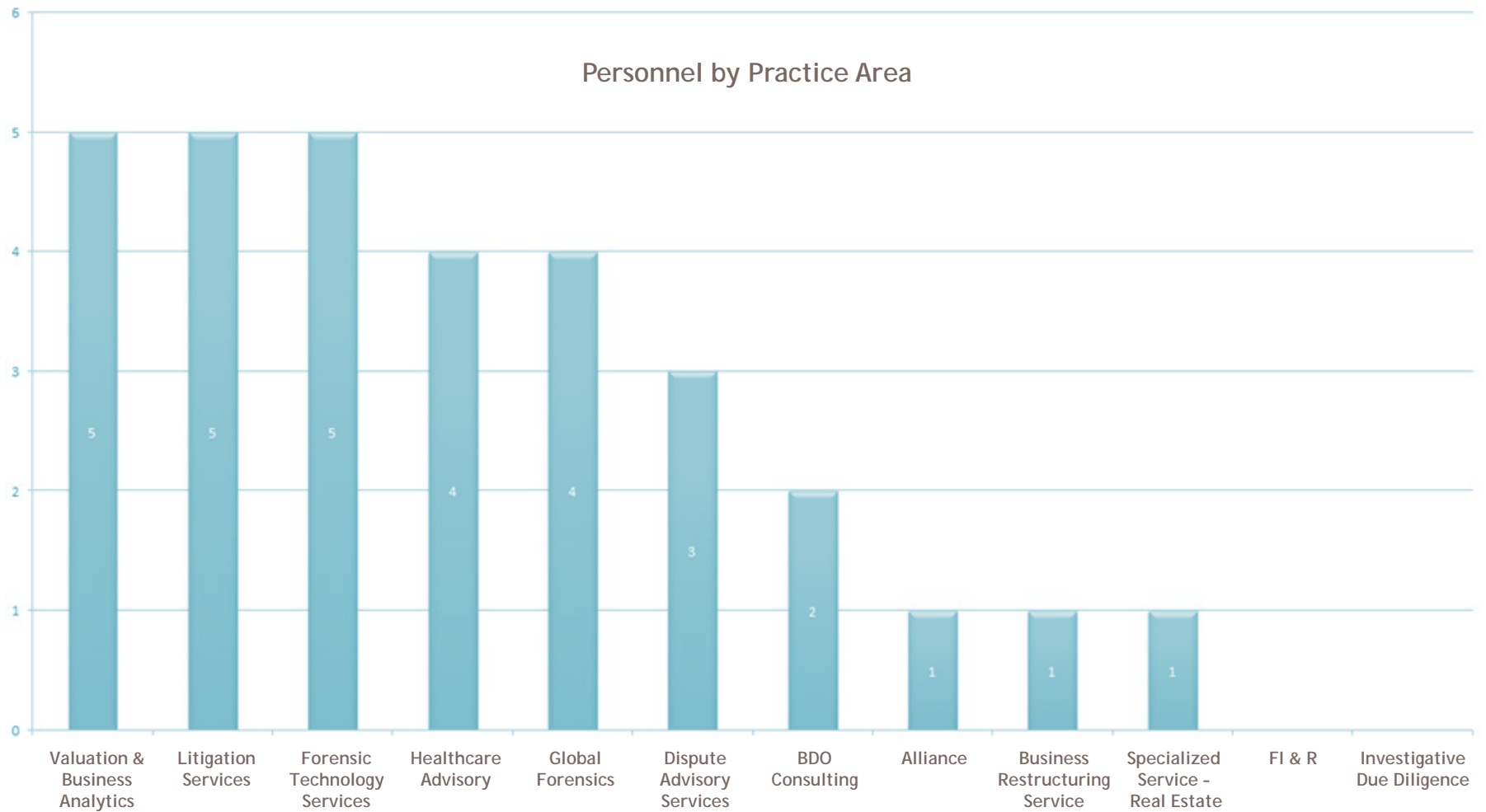
Ongoing Benefits Include...

- Identify potential instances of non-compliance on a timely basis
- Continually evaluate efficacy of existing control environment
- Implement measures to fill gaps in the existing control environment
- Improve/augment the qualitative nature of data being captured
- Objective basis for quantifying system-wide risk
- Allocate limited resources to their highest and best use
- Timely correction of errors
- Eliminate waste and inefficiencies in the supply chain
- Uncover and eliminate high risk 3rd party relationships
- Evaluate training regimens
- Improve/augment existing IA protocols
- Assess overall compliance with the books & records provisions of the FCPA and other pertinent laws
- Monitor compliance and ongoing risk of newly acquired businesses

Who is Here?

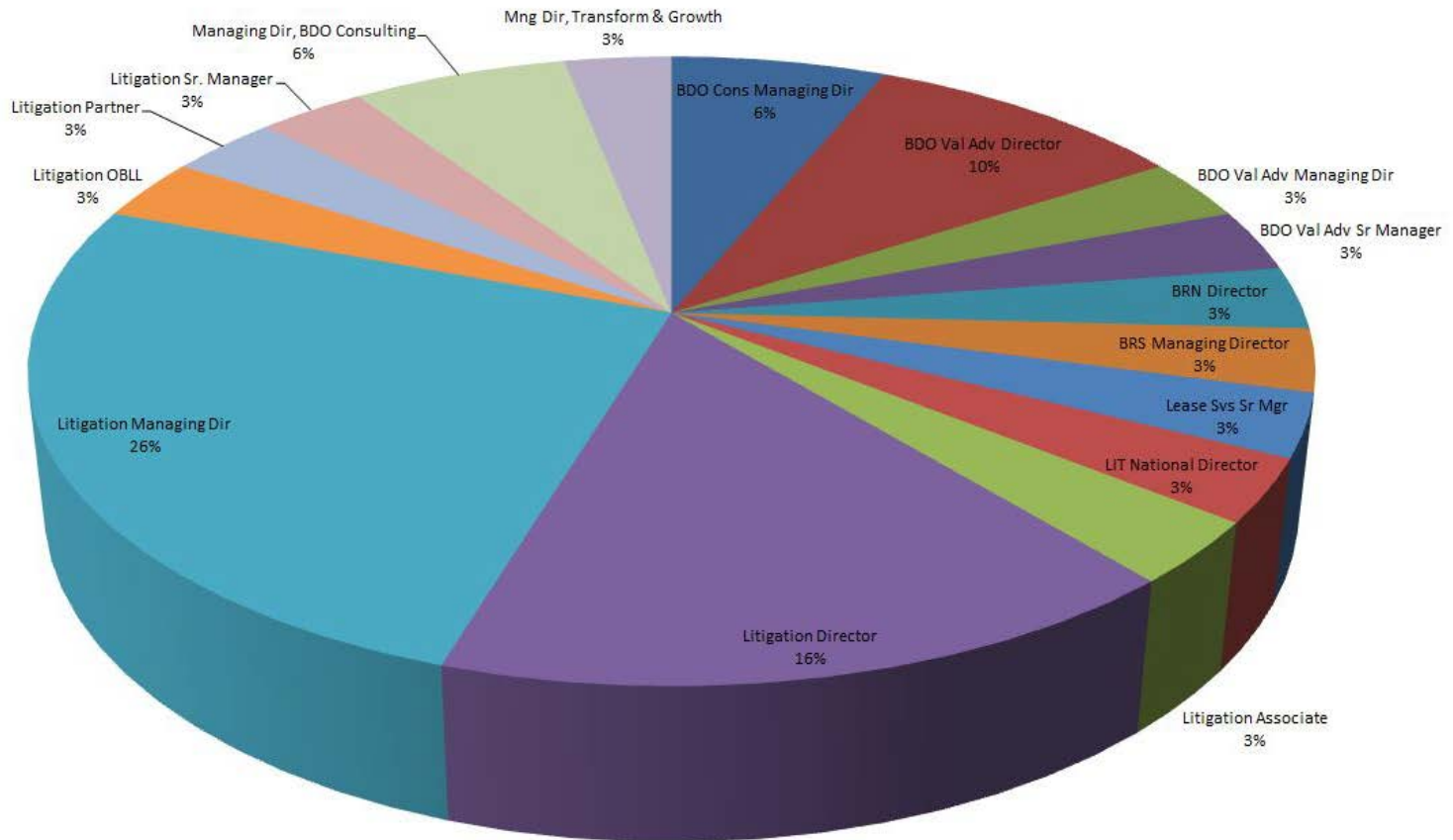
FIRST NAME	LAST NAME	TITLE	LOCATION	PRACTICE AREA
Pablo	Alfaro	BDO Val Adv Sr Manager	New York	Valuation & Business Analytics
Chris	Alger	BDO Cons Managing Dir	Pittsburgh	BDO Consulting
Heather	Baranowski	Litigation Director	Pittsburgh	Dispute Advisory Services
Michael	Barba	Litigation Managing Dir	New York	Forensic Technology Services
David	Friend	Managing Dir, BDO Consulting	New York	Healthcare Advisory
Stephanie	Giammarco	Litigation Partner	New York	Forensic Technology Services
Jeffrey	Harfenist	Litigation Managing Dir	Houston	Global Forensics
Jeff	Johnston	Litigation Managing Dir	Minneapolis	Litigation Services
John	Kwon	BDO Val Adv Managing Dir	New York	Valuation & Business Analytics
Sam	Lau	Litigation Sr. Manager	New York	Forensic Technology Services
Rachel	Laureno	Litigation Director	New York	Healthcare Advisory
Tom	Mannion	BDO Val Adv Director	Atlanta	Valuation & Business Analytics
Michele	Michaelis	BRS Managing Director	New York	Business Restructuring Service
Brandon	Otis	Litigation Managing Dir	Pittsburgh	Dispute Advisory Services
Michael	Pappas	Lease Svs Sr Mgr	New York	Specialized Services - Real Es
Carl	Pergola	LIT National Director	New York	Litigation Services
Tom	Pierce	Mng Dir, Transform & Growth	New York	BDO Consulting
Patrick	Pilch	BDO Cons Managing Dir	New York	Healthcare Advisory
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Marc	Simon	Litigation Managing Dir	New York	Litigation Services
Judith	Spry	Litigation OBLL	Chicago	Litigation Services
John	Stevenson	BDO Val Adv Director	Minneapolis	Valuation & Business Analytics
Kirstie	Tiernan	Litigation Director	Chicago	Forensic Technology Services
Daniel	Ventricelli	Litigation Managing Dir	New York	Litigation Services
Venson	Wallin	Managing Dir, BDO Consulting	Richmond	Healthcare Advisory
Keith	Winnacott	Litigation Associate	Pittsburgh	Dispute Advisory Services
Pei-Li	Wong	Litigation Director	New York	Global Forensics
Charles	Wunderlich	BRN Director	Minneapolis	Alliance
Gerard	Zack	Litigation Managing Dir	Greater Washington D.C.	Global Forensics

Who is Here?



Who is Here?

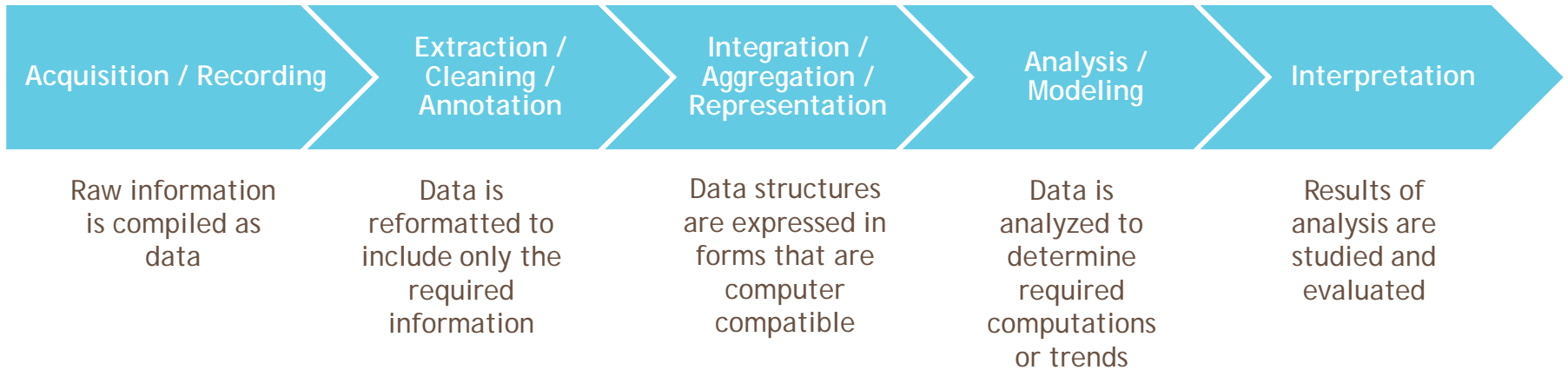
Personnel by Title



Who is Here?



The Premise of DV: Data Analytics Process



¹Challenges and Opportunities with Big Data, *Computing Research Association*

The Premise of DV: Challenges of Data Analysis



Heterogeneity



Scale



Timeliness



Privacy



Human collaboration



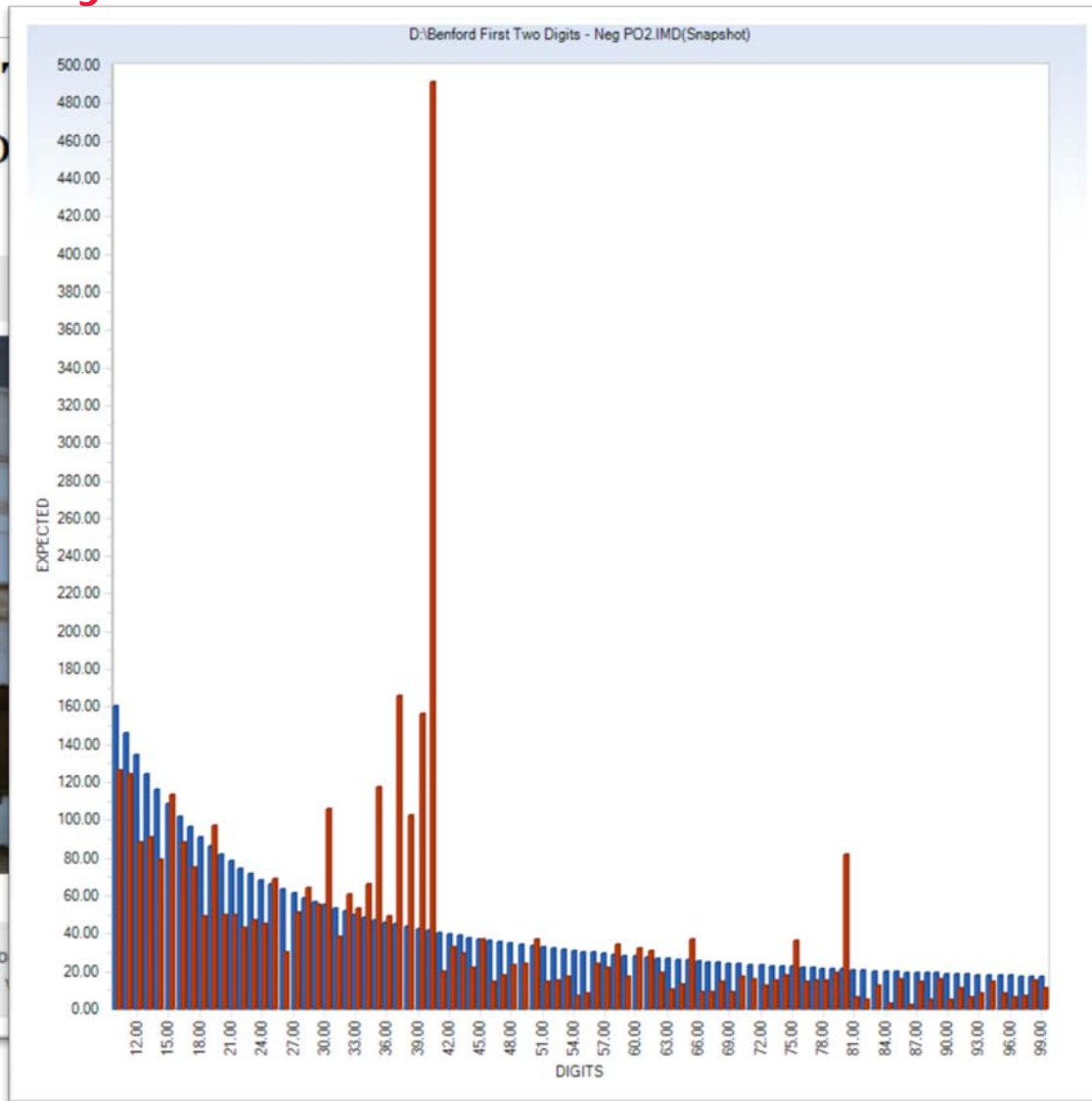
Data Visualization - Background

19 Fascinating Statistics That Make the Case for Using Visual Content in Your Marketing - TOP 6

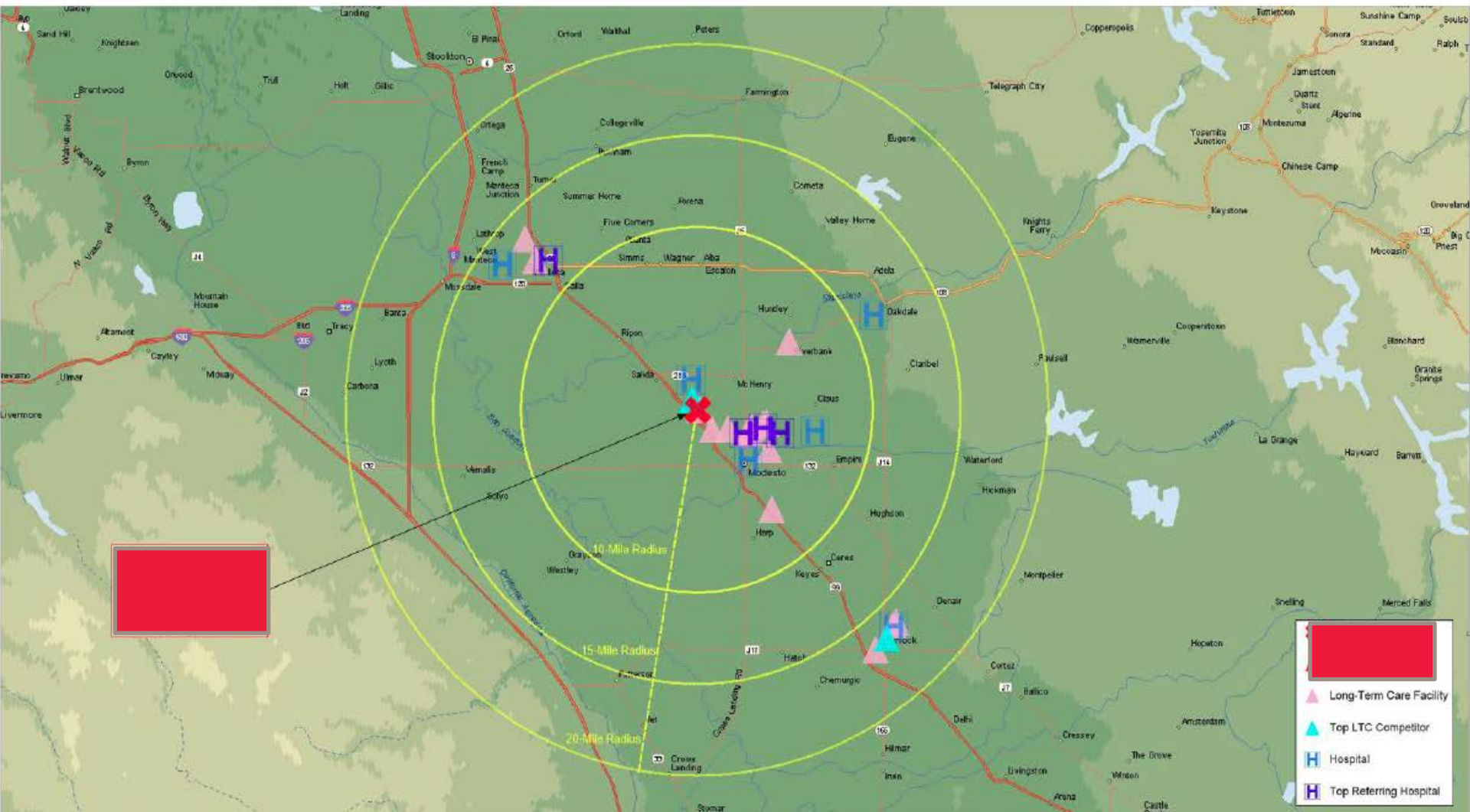


1. 90% of information transmitted to the brain is visual, and visuals are processed 60,000X faster in the brain than text. (Sources: [3M Corporation](#) and [Zabisco](#))
2. 40% of people will respond better to visual information than plain text. (Source: [Zabisco](#))
3. 46.1% of people say a website's design is the number one criterion for discerning the credibility of the company. (Source: [Stanford Persuasive Technology Lab](#))
4. Publishers who use infographics grow in traffic an average of 12% more than those who don't. (Source: [AnsonAlex](#))
5. Posts with videos attract 3 times more inbound links than plain text posts. (Source: [SEOMoz](#))
6. Visual content drives engagement. In fact, just one month after the introduction of Facebook timeline for brands, visual content -- photos and videos -- saw a 65% increase in engagement. (Source: [Simply Measured](#))

DV - Use Fancy Math Tricks - Benford's Law



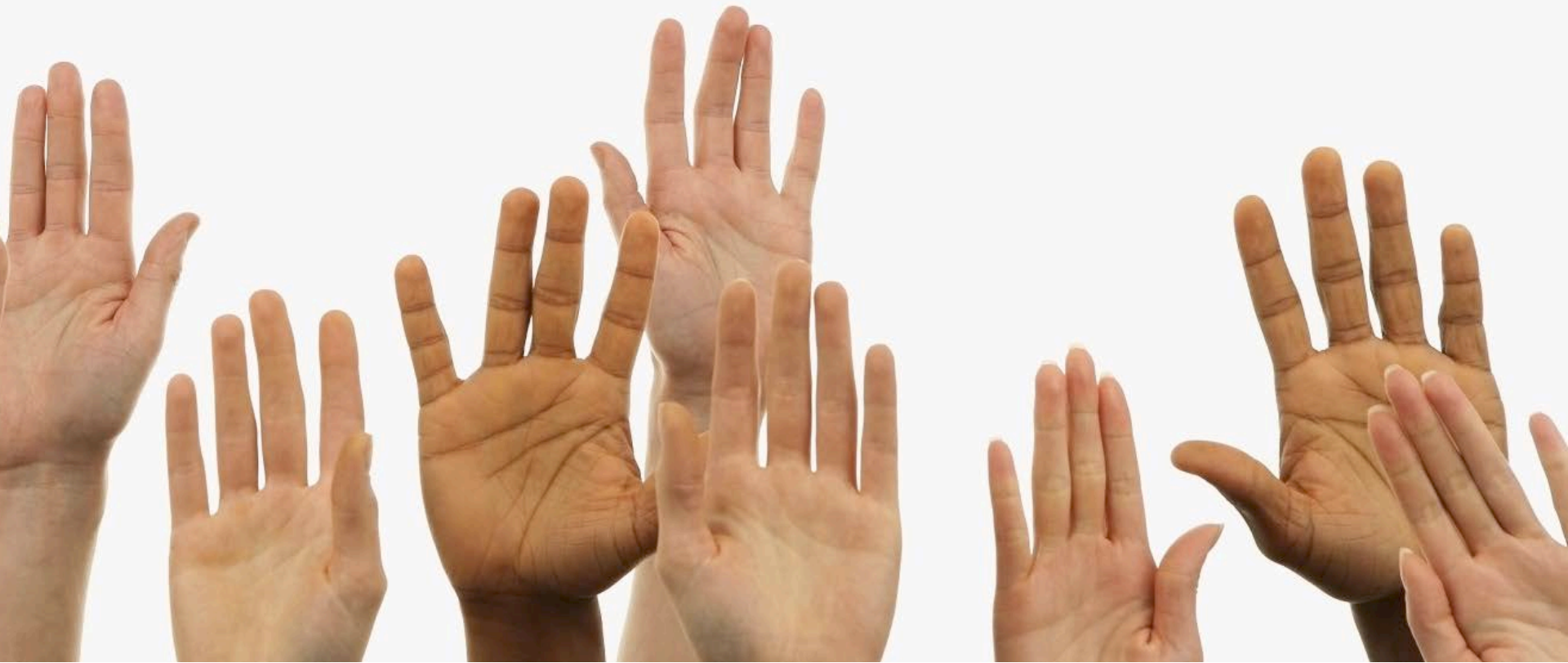
DV - Market Analytics



DA and DV - Support Selling: How to Add Value Before And During Proposal

Title		One Time Vendors per Entity				
Entity Name	Vendor ID	Payment Date				
		2010	2011	2012	2013	2014
	PROT701				\$78,229.69	
	PELI701		\$38,125.26			\$8,767.35
	E852804			\$34,198.60		
	TELK701			\$14,100.89		\$11,686.04
	MALE701		\$15,124.90			
	MARS701		\$6,046.35	\$7,766.93		
	JAYA701				\$9,701.94	
	KTBM701			\$7,259.03		
	AMEX701				\$530.11	\$5,243.37
	RAPI701					\$5,704.40
	WECO701				\$4,698.40	
	SENT701		\$1,387.93	\$1,480.46		\$1,619.25
	KAIN701					\$4,185.82
	KUNI701				\$2,480.28	
	FINA701			\$2,356.06		
	MUTI701					\$2,344.39
	HABI701				\$2,141.87	
	BEND701			\$979.14	\$1,017.92	
	GANI701			\$1,301.40	\$642.56	
	AIMA701			\$1,847.15		
	AGUN701				\$1,357.86	
	BEST701					\$1,263.29

Q & A







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To watch the full webcast, register at

<https://www.complianceweek.com/webcasts/best-practice-internal-controls-for-reducing-fraud-and-corruption-risk#.VbFBOPIViko>.