

Forensic Accounting Academy™

Sponsored by
the Financial Forensics Academy (FFA)



CONSULTANTS' TRAINING INSTITUTE

1111 Brickyard Road, Suite 200, Salt Lake City, Utah 84106

P: (801) 486-0600 www.nacva.com

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CTI

On-Site Support Evaluation Form



ON-SITE REPRESENTATIVE _____ DATE: _____

LOCATION: _____

Your assistance will allow us to continue to provide you with the highest quality learning experience and to more closely satisfy your professional needs and expectations in the future. Thank you.

	N/A	Poor	Fair	Good	Very Good	Excellent
Representative's availability (at sign-in table each morning, at breaks, at Headquarter's sponsored lunches, at class end):	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
Attitude and professionalism:	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
Ability to respond adequately to questions/concerns (including follow-up if research was required):	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
Daily introductory comments and explanations:	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
Ability of Headquarter's representative to interface with hotel personnel on room set-up/amenities/problems:	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
To what degree did the training location meet with your overall expectations:	0	1	2	3	4	5

COMMENTS: _____

	N/A	Poor	Fair	Good	Very Good	Excellent
To what degree were the software preview(s) useful:	0	1	2	3	4	5

COMMENTS: _____

May we use your comments? ☐ Yes ☐ No

If yes....Name _____ Member Number: _____

CTI INSTRUCTOR/COURSE EVALUATION FORM



COURSE TITLE: Forensic Accounting Academy – Day One LOCATION: _____

INSTRUCTOR: _____ MEMBER NUMBER: _____

Your assistance will allow us to continue to provide you with the highest quality learning experience and to more closely satisfy your professional needs and expectations in the future. Thank you.

	N/A	Poor	Fair	Good	Very Good	Excellent
How would you rate the instructor's overall presentation/teaching skills?	0	1	2	3	4	5
How would you rate the instructor's knowledge of the subject matter?	0	1	2	3	4	5
If applicable, were individual instructors effective?	0	1	2	3	4	5
Were the learning objectives clearly stated and met by the Instructor?	0	1	2	3	4	5
Were program materials accurate?	0	1	2	3	4	5
Were the program materials relevant and did they contribute to the achievement of the learning objectives?	0	1	2	3	4	5
Was the time allotted to each learning activity appropriate?	0	1	2	3	4	5
If applicable, were prerequisites appropriate?	0	1	2	3	4	5
Were facilities and/or technological equipment appropriate?	0	1	2	3	4	5
Were the handouts or advance preparation materials satisfactory?	0	1	2	3	4	5
Were the audio and video materials effective?	0	1	2	3	4	5

COMMENTS: _____

Would you recommend this course to your colleagues and/or other professionals? ____ Yes ____ No

If no, explain why? _____

In what other ways could this course be improved or made more valuable to you? _____

Which aspect(s) of this course did you enjoy / value the most? _____

Rate your experience in the field of Business Valuation. None ____ Nominal ____ Modest ____ Seasoned ____ Extensive ____

CTI

What can we do in the future to assist you in your career / professional development? _____

May we use your comments? ☐ Yes ☐ No

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CTI INSTRUCTOR/COURSE EVALUATION FORM



COURSE TITLE: Forensic Accounting Academy – Day Two LOCATION: _____

INSTRUCTOR: _____ MEMBER NUMBER: _____

Your assistance will allow us to continue to provide you with the highest quality learning experience and to more closely satisfy your professional needs and expectations in the future. Thank you.

	N/A	Poor	Fair	Good	Very Good	Excellent
How would you rate the instructor's overall presentation/teaching skills?	0	1	2	3	4	5
How would you rate the instructor's knowledge of the subject matter?	0	1	2	3	4	5
If applicable, were individual instructors effective?	0	1	2	3	4	5
Were the learning objectives clearly stated and met by the Instructor?	0	1	2	3	4	5
Were program materials accurate?	0	1	2	3	4	5
Were the program materials relevant and did they contribute to the achievement of the learning objectives?	0	1	2	3	4	5
Was the time allotted to each learning activity appropriate?	0	1	2	3	4	5
If applicable, were prerequisites appropriate?	0	1	2	3	4	5
Were facilities and/or technological equipment appropriate?	0	1	2	3	4	5
Were the handouts or advance preparation materials satisfactory?	0	1	2	3	4	5
Were the audio and video materials effective?	0	1	2	3	4	5

COMMENTS: _____

Would you recommend this course to your colleagues and/or other professionals? ____ Yes ____ No

If no, explain why? _____

In what other ways could this course be improved or made more valuable to you? _____

Which aspect(s) of this course did you enjoy / value the most? _____

Rate your experience in the field of Business Valuation. None ____ Nominal ____ Modest ____ Seasoned ____ Extensive ____

CTI

What can we do in the future to assist you in your career / professional development? _____

May we use your comments? ☐ Yes ☐ No

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CTI INSTRUCTOR/COURSE EVALUATION FORM



COURSE TITLE: Forensic Accounting Academy – Day Three LOCATION: _____

INSTRUCTOR: _____ MEMBER NUMBER: _____

Your assistance will allow us to continue to provide you with the highest quality learning experience and to more closely satisfy your professional needs and expectations in the future. Thank you.

	N/A	Poor	Fair	Good	Very Good	Excellent
How would you rate the instructor's overall presentation/teaching skills?	0	1	2	3	4	5
How would you rate the instructor's knowledge of the subject matter?	0	1	2	3	4	5
If applicable, were individual instructors effective?	0	1	2	3	4	5
Were the learning objectives clearly stated and met by the Instructor?	0	1	2	3	4	5
Were program materials accurate?	0	1	2	3	4	5
Were the program materials relevant and did they contribute to the achievement of the learning objectives?	0	1	2	3	4	5
Was the time allotted to each learning activity appropriate?	0	1	2	3	4	5
If applicable, were prerequisites appropriate?	0	1	2	3	4	5
Were facilities and/or technological equipment appropriate?	0	1	2	3	4	5
Were the handouts or advance preparation materials satisfactory?	0	1	2	3	4	5
Were the audio and video materials effective?	0	1	2	3	4	5

COMMENTS: _____

Would you recommend this course to your colleagues and/or other professionals? ____ Yes ____ No

If no, explain why? _____

In what other ways could this course be improved or made more valuable to you? _____

Which aspect(s) of this course did you enjoy / value the most? _____

Rate your experience in the field of Business Valuation. None ____ Nominal ____ Modest ____ Seasoned ____ Extensive ____

CTI

What can we do in the future to assist you in your career / professional development? _____

May we use your comments? ☐ Yes ☐ No

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CTI INSTRUCTOR/COURSE EVALUATION FORM



COURSE TITLE: Forensic Accounting Academy – Day Four LOCATION: _____

INSTRUCTOR: _____ MEMBER NUMBER: _____

Your assistance will allow us to continue to provide you with the highest quality learning experience and to more closely satisfy your professional needs and expectations in the future. Thank you.

	N/A	Poor	Fair	Good	Very Good	Excellent
How would you rate the instructor's overall presentation/teaching skills?	0	1	2	3	4	5
How would you rate the instructor's knowledge of the subject matter?	0	1	2	3	4	5
If applicable, were individual instructors effective?	0	1	2	3	4	5
Were the learning objectives clearly stated and met by the Instructor?	0	1	2	3	4	5
Were program materials accurate?	0	1	2	3	4	5
Were the program materials relevant and did they contribute to the achievement of the learning objectives?	0	1	2	3	4	5
Was the time allotted to each learning activity appropriate?	0	1	2	3	4	5
If applicable, were prerequisites appropriate?	0	1	2	3	4	5
Were facilities and/or technological equipment appropriate?	0	1	2	3	4	5
Were the handouts or advance preparation materials satisfactory?	0	1	2	3	4	5
Were the audio and video materials effective?	0	1	2	3	4	5

COMMENTS: _____

Would you recommend this course to your colleagues and/or other professionals? ____ Yes ____ No

If no, explain why? _____

In what other ways could this course be improved or made more valuable to you? _____

Which aspect(s) of this course did you enjoy / value the most? _____

Rate your experience in the field of Business Valuation. None ____ Nominal ____ Modest ____ Seasoned ____ Extensive ____

CTI

What can we do in the future to assist you in your career / professional development? _____

May we use your comments? ☐ Yes ☐ No

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Course Instructors

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I n s t r u c t o r B i o g r a p h y



Thomas F. Burrage

CPA/ABV, CVA

Burrage & Johnson, CPAs LLC

The Forensic Firm

PO Box 30067

500 Marquette NW, Suite 360

Albuquerque, New Mexico 87190

P: (505) 246-8900

F: (505) 246-2220

E: tom@theforensicfirm.com

Tom Burrage has practiced as a CPA in Albuquerque since 1973. He is a principal in Burrage & Johnson, CPAs, LLC, *The Forensic Firm*. His fields of expertise include litigation, forensic accounting and business valuation. He has been qualified as an expert witness in cases involving lost earnings, fraud, malpractice, minority shareholder suits, insider trading, damages, business valuation and family law. Tom has testified in district and federal courts throughout New Mexico. He has participated in numerous reported cases.

Tom holds the Accredited in Business Valuation (ABV) designation from the American Institute of Certified Public Accountants and is a Certified Valuation Analyst (CVA). He often speaks on the subjects of family law, economic damages, forensic accounting and business valuation. Organizations for who he has taught include:

- American Institute of Certified Public Accountants
- The Federal Judicial Center
- New Mexico Society of Certified Public Accountants
- University of New Mexico Law School
- R.O. Anderson School of Management
- National Institute for Trial Advocacy
- International Association of Financial Planners
- Association of Family and Conciliation Courts
- New Mexico State Bar
 - Corporation, Banking and Business Section
 - Family Law Section
 - Taxation Section
- Court Alternatives, 2nd Judicial District of New Mexico
- New Mexico Trial Lawyers

Tom is the coauthor of Divorce and Domestic Relations Litigation: Financial Advisor's Guide, published by John Wiley and Sons, Inc. He has been a contributing editor to the Guide to Divorce Taxation and the Guide to Tax Planning for High Income Individuals, published by Practitioners Publishing Company. Tom is an Editorial Adviser to the Journal of Accountancy, Editorial Adviser to the CPA Expert and has been published in both the Journal of Accountancy and the Family Advocate. The National Association of Certified Valuation Analysts named him a 2005, 2006 and 2007 Instructor of Exceptional Distinction.

A member of the American Institute of Certified Public Accountants, Tom serves in its Forensic and Valuation Services Executive Committee and previously chaired the organization's Forensics and Litigation Services Committee and their Family Law Task Force and has served on its Business Valuation/Forensics and Litigation Services Task Force and the Editorial Task Force. He is also a member of the National Association of Certified Valuation Analysts and the New Mexico Society of CPAs.

Tom holds a Bachelor of Business Administration degree from the University of New Mexico.

January 2009

Instructor of:

Forensics Accounting Academy™

Matrimonial Litigation Support Workshop

I n s t r u c t o r B i o g r a p h y



Darrell Dorrell

CPA/ABV, MBA, CVA, ASA, CMA, DABFA

Financial Forensics®

Kruse Woods 1

5285 SW Meadows Road, Suite 340

Lake Oswego, Oregon 97035

P: (503) 636-7999

F: (503) 639-9113

E: darrelld@financialforensics.com

Darrell Dorrell is a founding partner of **financialforensics®**, a boutique forensic accounting practice in Lake Oswego, OR. He practices in civil and criminal matters throughout the US and has served as an expert witness/consultant in 500+/- matters; additional assignments exceed 1,000+/- . They include alter ego, anti-trust, bankruptcy, breach of contract, estate/gift taxes, family law, fraud, fraudulent conveyance/transfer intellectual property, lost profits, patent, solvency/insolvency, trademark, trade dress, and trade secrets..

A nationally recognized speaker and author, Darrell has delivered more than 100 training presentations on forensic accounting-related topics during the last 5 years. His presentations span 23 states (including 12 state CPA societies), Puerto Rico and Canada. He has provided training to the Federal Bureau of Investigation (FBI), United States Department of Justice (USDOJ), Securities and Exchange Commission (SEC), American Bar Association, Bankruptcy Bar Association, Oregon Bar Association, Washington Bar Association, American Society of Appraisers (ASA), American Institute of Certified Public Accountants (AICPA), National Association of Certified Valuation Analysts (NACVA), PriceWaterhouse Coopers, Association of Certified Fraud Examiners, Association of Insolvency & Restructuring Advisors, Institute of Management Accountants, International Law Enforcement Auditors Association, SEAK, CPAA International, Inc., AGN, Inc., and Turnaround Management Association.

Darrell has published more than 70 articles in the *American Journal of Family Law*, *Business Appraisal Practice*, *CPA Journal*, *Financial Valuation and Litigation Expert*, *Sarbanes-Oxley Compliance Journal*, *Litigation Counselor*, *National Litigation Consultants Review*, *Valuation Examiner*, *RIA's Valuation Strategies*, and the *United States Attorneys' Bulletin*. Additionally, he has been cited in *Bloomberg Wealth Manager*, *Business Week*, *IR Magazine*, the *Portland Oregonian*, the *Practical Accountant* and "Drunkard's Walk: How Randomness Rules Our Lives," a New York Times best-seller, and authored the forensic accounting chapter in "Valuation for Dummies." Also he has been featured on National Public Radio (NPR) WYNC "RadioLab," the "Small Business Television" network, and the "First Business News Network Television."

His financial forensics, forensic accounting, investigative, damages, valuation, fraud, and related expertise is extensive. Most significantly, he developed the Forensic Accounting/Investigation Methodology© (FA/IM©), and he co-authored for the United States Department of Justice (USDOJ) the March 2005, Vol. 53 No. 2 issue, i.e. Financial Forensics I - **Counterterrorism: Conventional Tools for Unconventional Warfare**, and the May 2005 Vol. 53 No. 3 issue Financial Forensics II - **Forensic Accounting: Counterterrorism Tactical Weaponry**. Both issues are available via the public site: http://www.usdoj.gov/usao/eousa/foia_reading_room/foiamanuals.html. January 2011

Instructor of:

Forensic Accounting Academy™ - A 5-day training curriculum.

Forensic Accounting Clinic – A 2-day training curriculum

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I n s t r u c t o r B i o g r a p h y



John (Jay) Dunbar

CPA, CVA

John W Dunbar CPA

501 Executive Center Boulevard, Suite 210

El Paso, Texas, 79902

P: (915) 532-0566

F: (915) 532-7040

E: jay@dunbar-cpa.com

Jay Dunbar is a certified public accountant having been in practice since 1976. He was a member and partner in the firm of Dunbar, Broaddus, Gibson LLP (DBG) from 1978 until November 2007 when he formed John W. Dunbar, CPA. DBG was an independent firm of certified public accountants located in El Paso, Texas. It provided traditional accounting services such as auditing, tax compliance and consulting, compilation and review services, business consulting and business valuations. DBG clients were concentrated in West Texas and Southern New Mexico ranging from small start-ups to much larger entities.

Jay has been assisting privately held businesses in the areas of succession planning, merger and acquisition and business valuations since 1978. He has valued business interests for buyers and sellers, divorce, estate planning, buy-sell agreements, damage calculations and shareholder disputes. As part of these valuation engagements, he has appeared as an expert witness in both state and federal courts and has been engaged as the hearing arbiter in a binding arbitration hearing.

He holds a Master of Business Administration from the University of Texas at El Paso, and has received the Certified Valuation Analyst (CVA) designation from the National Association of Certified Valuation Analysts (NACVA) in 1996. Since 1996, Jay has focused his efforts in business valuation and litigation support. He was part of the beta team testing the BVMPPro and one of many who worked on the development of the report writer.

In September 2005, Governor Rick Perry appointed Jay to the Texas State Board of Public Accountancy where he served until May 2011.

Jay and his trophy wife, Dolores, spend their spare time in all manner of outdoor physical activities such as tennis, running and bicycling. June 2011

Instructor for

Forensic Accounting Academy™

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I n s t r u c t o r B i o g r a p h y



Joe Epps

CPA/CFE/ABV, CFE, CVA

Epps CPA Consulting PLLC

13880 N Northsight Boulevard, Suite 115

Scottsdale, AZ 85260

P: (480) 595-0943

F: (480) 595-8013

E: jepps@eppscpa.com

Joe Epps is a forensic accountant with over 30 years of experience in forensic accounting. His litigation support experience includes contract disputes, anti-trust, economic damages, fraud investigations, business valuation and intellectual property litigation. He has testified as an expert witness in Federal and State Courts in Arizona, New Mexico, Michigan, Indiana, Ohio, and Wisconsin. He has been a panelist and lecturer for organizations throughout the United States covering various topics in the area of Forensic Accounting.

Joe is currently President of Epps CPA Consulting PLLC. He is a Certified Public Accountant (Certified in Financial Forensics and Accredited in Business Valuation by the American Institute of Certified Public Accountants), Certified Fraud Examiner (CFE) and Certified Valuation Analyst (CVA). He has a strong interest in teaching and holds a Masters in Education from the University of Phoenix.

Joe is also a Faculty Associate in the School of Accountancy at Arizona State University, W.P. Carey School of Business. He teaches a graduate course on Forensic Accounting in the Masters of Accounting program. July 2009

Instructor for

Forensic Accounting Academy™

Forensic Accounting Clinic

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I n s t r u c t o r B i o g r a p h y



Gregory A. Gadawski

CPA/ABV, CVA, CFE

financialforensics®

5285 SW Meadows Road, Suite 340

Lake Oswego, OR 97035

P: (503) 636-7999

F: (503) 639-9113

E: gregg@financialforensics.com

Greg Gadawski is a partner of *financialforensics®*. He is a Certified Public Accountant (CPA), Accredited in Business Valuation (ABV), Certified Valuation Analyst (CVA), Certified Fraud Examiner (CFE), and Certified Insolvency and Restructuring Advisor (CIRA). He is a member of the Oregon Society of Certified Public Accountants (OSCPA), the American Institute of Certified Public Accountants (AICPA), the National Association of Certified Valuation Analysts (NACVA), the Association of Certified Fraud Examiners (ACFE), and the Association of Insolvency and Restructuring Advisors (AIRA).

Mr. Gadawski has conducted a myriad of complex fraud investigations on behalf of both victims and suspects. These investigations have ranged from small employee thefts to multi-million dollar frauds. In addition to conducting the investigations, Mr. Gadawski has assisted the victims with identification of assets and recovery of losses from fraud.

He has also served as forensic accountant to the receiver in multiple receiverships. These receiverships are typically the result of some type of securities fraud and/or ponzi scheme. As forensic accountant to the receiver, Mr. Gadawski has provided transaction analysis, asset tracing, identification and investigation of targets for third party litigation, solvency analysis, testimony in civil and criminal matters and other services for the benefit of the receivership estate.

Mr. Gadawski has served as an expert witness/consultant in a variety of complex litigation matters including; breach of contract, business valuation, alter ego, lost profits, marital dissolution, personal injury, wrongful death, intellectual property infringement, fraudulent conveyance, solvency, and others. His expertise encompasses a wide scope of industries including; professional service organizations, brokerages, financial services, construction, retail, timber, utilities, municipalities, not-for-profits, manufacturing and others.

He has authored and co-authored several forensic accounting and litigation consulting related articles. He has presented continuing education courses (both CPE and CLE) on forensic accounting, financial statement analysis, fraud investigation and litigation related topics. July 2011

Instructor of

Forensic Accounting Academy™

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I n s t r u c t o r B i o g r a p h y



Chris Hamilton

CPA, CVA, CFE, DABFA
Arxis Financial, Inc.
2468 Tapo Canyon Road
Simi Valley, California 93063
P: (805) 306-7890
F: (805) 306-7804
E: chamilton@arxisgroup.com

Chris Hamilton is a principal of Arxis Financial, Inc., Arxis Technology, Inc., and Arxis Wealth Management, LLC. These firms are involved in tax and accounting consulting, business valuation, litigation consulting, technology consulting and financial planning. The firms are located in Simi Valley, California. Chris is a Certified Public Accountant, Certified Fraud Examiner, Certified Valuation Analyst, and a Diplomate with the American Board of Forensic Accounting. He is a licensed life and disability insurance agent and a General Securities Representative. Most of his professional time is spent in the areas of business valuations, forensic accounting and litigation related engagements. He has served as an expert in civil, criminal, probate and family court matters.

Chris has presented courses at national conferences, training institutes and seminars around the country. He has presented sessions at national NACVA conferences on topics including “The Affect of Asbestos Litigation on the Valuation of a Business;” “Executive Compensation and the Value of a Closely Held Company” and other topics including the preparation of engagement letters and selecting capitalization/discount rates. Chris is part of the team teaching the Advanced Business Valuation courses around the country for NACVA as well as Fundamentals Techniques and Theory. He is also an instructor with the NACVA “Certified Training Institute” (CTI) and the “Business Valuation and Certification Training Centers.” He is regularly asked by civic and business groups to speak on a variety of topics related to his experience and expertise. Chris was named a “2004 Instructor of Exceptional Distinction” by NACVA.

Chris Hamilton has published valuation related articles in several publications including *The Forensic Examiner*; *Los Angeles Lawyer*; *The Valuation Examiner*; *Valuation Strategies* and the *Journal of Forensic Accounting*. Additionally, he wrote the course material for NACVA titled, “Capitalization/Discount Rates: Assessing the Alternatives” and “Advanced Case Law Update.” He currently serves on the editorial board and is a regular contributor to the NACVA publication, *Insights on Valuation*. He has also been asked to co-author “Financial Valuation – Application and Models, 2nd edition” published in 2006.

Chris lives in Simi Valley, California with his wife and three daughters. May 2010

Instructor for

Business Valuations: Fundamentals, Techniques & Theory
BV: Applications and Calculations of the Income and Asset Approaches

Advanced Valuation: Applications and Models

Business Valuation Workshop

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I n s t r u c t o r B i o g r a p h y



Odalys Lara

CPA, CVA, CFFA, CFD
Perzel & Lara Forensic CPAs, P.A.
2105 Drew Street, Suite 200
Clearwater, Florida 33765
P: (727) 466-0777
F: (727) 443-2600
E: olara@perzellara.com

Odalys Z. Lara, is a principal of Perzel & Lara Forensic CPA's P.A., and co-chairs the firm's litigation support department. Her extensive experience in providing a broad spectrum of professional services including forensic accounting, auditing, tax, pension and estate planning, provides the technical foundation required to excel as a certified business valuation analyst (CVA), Certified Forensic Financial Analyst (CFFA) and Certified Fraud Deterrence Analyst (CFD).

Over twenty years as a certified public accountant, with a wide variety of experience in many different industries, with differing accounting practices and methods, as well as significant tax issues, has provided the technical background needed in a professional providing business valuations, forensic and fraud prevention services, expert witness, and litigation support services. Odalys Lara's ability to communicate clearly as well as withstand cross-examination and other courtroom dynamics strengthen a case by adding an unparalleled level of credibility and expertise. Clients depend upon her business valuation recommendations in the areas of divorce, mergers and acquisitions, buy-sell agreements, partner and stockholder agreements, damage losses, and succession and estate planning.

Odalys's experience includes valuation services for medical and professional practices, service businesses, construction, manufacturing, etc. Her varied background in working in many industries as well as her thirst for up-to-date technical information keeps her on the forefront of business valuation issues.

Odalys has also earned the premier NACVA designation of Certified Forensic Financial Analyst (CFFA) and Certified Fraud Deterrence Analyst (CFD). She uses this additional training in forensic accounting to investigate and uncover financial fraud as well as construct fraud prevention programs.

Her ability to excel on the witness stand and effectively defend the sound principles utilized in her business valuations, fraud engagements and litigation testimony, qualifies her as the most desirable professional for your engagement. July 2008

Instructor of

Forensic Accounting Academy™

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I n s t r u c t o r B i o g r a p h y



Patricia A. Perzel, CPA, CVA, CFFA, CFF

Perzel & Lara Forensic, CPA's, P.A.

2105 Drew Street

Clearwater, Florida 33765

P: (727) 466-0777

F: (727) 443-2600

E: pat@perzellara.com

Patricia A. Perzel, CPA, CVA, CFFA, CFF is the founder of Perzel & Lara Forensic CPA's, P.A. and has more than twenty-eight years of experience testifying in both criminal and civil matters in state and federal courts, serving as an expert witness and/or consultant in the following types of cases.

Forensic accounting investigation	Money laundering	Business Interruption claims
Business valuations	Fraud deterrence analysis	Economic loss analysis
Hidden asset tracing	Breach of contract	Securities Fraud
Divorce litigation	Intellectual property	Expert witness testimony
Lost profit analysis	Patent, trademark, cyber piracy	Ponzi schemes
Shareholder / Partner disputes	Estate & gift taxes	Litigation support
Insurance damage claims	Mergers & acquisitions	Personal Injury
Embezzlement	Damage claims	Complex fraud schemes

Pat is credentialed as a Certified Public Accountant (CPA) Certified Business Valuation Analyst (CVA), Certified Forensic Financial Analyst in the areas of economic damages and fraud deterrence & detection (CFFA), and Certified in Financial Forensics (CFF). Types of clients, cases and subject matter in which her forensic skills were utilized are as follows:

Automobile Dealerships	Furniture Companies	Real Estate Brokers
Agricultural Organizations	Golf Courses	Real Estate Developers
Boat Distributors	Holding Companies	Retail - various types
Chiropractic Practices	Home Owner / Condo Assoc.	Schools - various types
Computer and IT Companies	Insurance Companies	Sign Companies
Construction Companies - various	Intellectual Property	Stock Portfolio Analysis
CPA Firms	Landscaping Companies	Tax-Gift & Estate
Dental Practices	Law Firms	Telecommunications
Distributors - various types	Manufacturing - various types	Trucking Companies
Employee Placement Firms	Medical Consulting Firms	National Labor Unions
Engineering Firms	Medical Equipment devices	Utility Companies
Family Law / Divorce, Alimony, etc.	Medical Practices- various types	Veterinary Practices

Pat currently teaches and was also a contributing author for the development of the following publications and educational courses for (NACVA): The Fundamentals, Techniques & Theory of Business Valuations Training Course; Forensic Accounting Investigation Methodology Training Academy; Fraud Prevention & Detection Training Course; Business Interruption & Damage Claims Training Course

Pat's lectures nationally and internationally in the areas of business valuations, forensic investigation techniques and damage quantifications. She also participates as a speaker in continuing education courses for Attorneys & CPAs. January 2009

Instructor of:

Business Valuation Training Center
 Fundamentals, Techniques and Theory
 Applications and Calculations of the Income and Asset Approaches

CFFA Candidate Workshop

Forensic Accounting Academy™

I n s t r u c t o r B i o g r a p h y



Jason Pierce

CPA, CMA, CFM, CVA, CFFA
Edelstein & Company LLP
160 Federal Street, 9th Floor
Boston, MA 02110
P: (617) 227-6161
F: (617) 589-0530
E: jpierce@edelsteincpa.com

Jason Pierce joined Edelstein & Company in 2010 to expand the firm's business valuation and litigation support department. Prior to that, he was a partner in an Anchorage, Alaska CPA firm and a valuation manager for an RSM McGladrey network firm. He is a graduate of the University of Tennessee (B.S) and the University of Alaska Anchorage (MBA). Jason has also been an adjunct professor for three universities in a variety of subjects, including business valuation.

Jason is an instructor and technical reviewer for NACVA, contributing to the Fundamentals, Techniques and Theory (FT&T) manual, the Calculations and Applications of Income and Asset Approaches manual, the Current Updates in Valuations (CUV), and the Comprehensive Checklist for Valuation Engagements. He has also been a member of NACVA's Valuation Credentialing Board, serving on the Recertification Committee. Jason also volunteers for the AICPA's 360° of Financial Literacy program and is a frequent speaker on valuation and accounting issues.

He is a member of the American Institute of Certified Public Accountants, Alaska and Massachusetts Societies of Certified Public Accountants, Institute of Management Accountants (Past President – Alaska Chapter), and the National Association of Certified Valuators and Analysts (Past President – Alaska Chapter). August 2011

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I n s t r u c t o r B i o g r a p h y



Sridahr Ramamoorti

PhD, CIA, ACA, CPA/CFF/CITP, CFE, CFSA,
CRP, CGAP, CGFM, CICA, FCPA, CFFA

Infogix

1240 E Diehl Road

Naperville, IL

P: (630) 505-5436

F: (630) 505-1812

E: sramamoorti@infogix.com

Sri Ramamoorti, leads Infogix Advisory Services, a division of Infogix, Inc., a software controls company and professional services provider for governance, risk, and compliance (GRC), continuous controls monitoring (CCM), and forensics applications. The Infogix suite of professional services spans SOX 404 implementations, formally integrating the 2009 COSO *Guidance on Monitoring Internal Control Systems* into existing systems, including continuous control monitoring, implementing enterprise risk management (ERM) architectures, conducting fraud risk assessments and monitoring, forensic accounting investigations and e-discovery assignments, and internal control remediation. All of these professional services enable organizations to adopt best practices in understanding, evaluating, and mitigating “information for decision making risk,” and thus implement GRC with Information integrity.®

Previously, Sri was a Corporate Governance partner in Grant Thornton’s National Corporate Governance Group in Chicago, Illinois. He led the firm’s thought leadership efforts in the areas of corporate governance and accountability, consulted on Sarbanes Oxley, technical matters in financial reporting and auditing, and anti-fraud programs and controls. He also assisted with global client pursuits across Grant Thornton’s practices. He was a member of the Grant Thornton team that authored the 2009 COSO *Guidance on Monitoring Internal Control Systems*, and is a co-author of the IIA-published textbook, *Internal Auditing: Assurance and Consulting Services* (2009, 2nd ed.) as well as *The Audit Committee Handbook* (forthcoming from John Wiley).

Earlier, Sri was the Sarbanes-Oxley Advisor for the National Advisory Practices of Ernst & Young in North America. He was one of the Ernst & Young’s Fraud Investigation & Dispute Services (FIDS) faculty that conducted U.S. Training on fraud awareness for over 1,000 audit partners and principals. He spearheaded the innovation team that built a simulation model for litigation risk management that attained patent-pending status with the U.S. Patents & Trademarks Office. Sri has also been a Principal with Arthur Andersen’s firmwide Professional Standards Group, where he participated in standard-setting efforts, contributed to Andersen’s thought leadership publications, and was a key liaison for the multi-million dollar Andersen-MIT research collaboration.

Sri earned a Bachelor of Commerce (BCom) degree from Bombay University, India, the MAcc, and PhD degrees from the Ohio State University, and holds numerous professional certifications. After finishing his PhD, Sri was a member of the University of Illinois’ Department of Accountancy Faculty. He has published extensively in journals such as *Management Science*, *European Management Journal*, *International Journal of Accounting*, *Journal of Information Systems*, *Issues in Accounting Education*, *Internal Auditor*, *Journal of Government Financial Management*, *Financial Executive*, etc. He has won several research grants and teaching excellence awards.

Active in the profession, Sri has been the inaugural Chairman of the Academy for Government Accountability (2005-2008), a member of the IIA Research Foundation Board of Trustees (2002-2008) and continues to serve on the Board of Governors of the Chicago IIA Chapter. Over the last decade, Sri has made professional presentations in the USA, Brazil, Canada, France, India, Japan, the Netherlands, Qatar, South Africa, Spain, Turkey and the United Arab Emirates.

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I n s t r u c t o r B i o g r a p h y



Francisco “Frank” Rosillo, Sr.

CPA, ABV, CBA, CVA, CFE, BVAL, ABAR, CFF
The Valuations & Forensics Advisory, LLC
7950 NW 53rd Street, Suite 233
Miami, FL 33166
P: (305) 477-5652
F: (305) 477-5310
E: frosillo@valfor.net

Francisco “Frank” Rosillo, CPA, ABV, CFE, CBA, BVAL, CVA, ABAR, is the managing director of The Valuations and Forensics Advisory, LLC, serving an international clientele, located in Doral, a suburb of Miami, Florida.

Frank was selected by a poll of south Florida attorneys, published in the 2010 *10th Anniversary South Florida Legal Guide*, one of the top CPAs and accounting professionals in Business Valuations and Litigation Support. He was also selected by the Florida Bar Association to sit as a lay member of the Miami-Dade County Florida Bar Association Grievance Committee.

He is a licensed certified public accountant in California, Florida, Indiana, Michigan and North Carolina. In 1979, he was awarded a direct appointment to the United States Army, Finance Branch, to the rank of Captain. His financial expert witness experiences include cases in federal and state courts. In addition to traditional valuation and appraisal services, he has successfully assisted clients in numerous mergers and acquisitions transactions.

Frank is a frequent national lecturer, author and trainer in valuation and forensic accounting topics. He has been a member of the Institute of Business Appraisers (IBA) since 1996. He was named IBA's '2008 Instructor of the Year' and '2009 Distinguished Instructor'. He is the Chairman of IBA's ABAR Qualifications Review Committee and author of the IBA's practice aid entitled 'Business Appraisal Review,' he has been instrumental in assisting IBA in reformulating the 'ABAR,' an advanced valuation credential. Frank presented as a member of an Experts Panel at the 2009 NACVA/IBA Symposium, where he also served as the IBA Symposium program chair. He will be presenting at the 2010 NACVA/IBA Annual Consultants' Conference. Along with Howard Lewis, IBA's executive director, Frank co-authored the course content for IBA's Business Appraisal Review curriculum. Frank also authored IBA's Report Writing and Analysis course manual and he served as a contributing author/editor of the AICPA's 2007-2008 ABV Review course. November 2010

Instructor for:

Accredited in Business Appraisal Review (ABAR) Workshop

Forensic Accounting Academy™

Report Writing, Review and Analysis

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I n s t r u c t o r B i o g r a p h y



Mark S. Warshavsky

CPA/ABV/CFF, MBA, CVA, CBA, CFE, DABFA, CFFA

Gettry, Marcus, Stern & Lehrer, CPA, P.C.

20 Crossways Park North

Woodbury, New York 11797

P: (516) 364-3390

F: (516) 496-0417

E: mwarshavsky@gmslny.com

Mark S. Warshavsky, CPA/ABV/CFF, MBA, CVA, CBA, CFE, DABFA, CFFA is Partner-in-Charge of the firm's Business Valuation and Litigation Support Group, one of the largest in the New York metropolitan area with eight credentialed business valuation professionals and a team of forensic accountants. Mr. Warshavsky is also a member of the firm's executive committee. He is a Certified Public Accountant, Accredited in Business Valuation and Certified in Financial Forensics, with certifications as a Certified Valuation Analyst, Certified Business Appraiser, Certified Fraud Examiner, Diplomat of the American Board of Forensic Accountants and Certified Forensic Financial Analyst.

He has been a consultant to businesses, law firms, financial institutions and insurance companies providing services in varied areas of forensic accounting and business valuations. Mr. Warshavsky has been called upon to serve as an expert witness and consultant, as well as a court appointed expert and arbitrator because of his knowledge, experience and reputation within the industry.

Some of his engagements have covered lost profits and commercial damage modeling; shareholder dispute resolutions; contract disputes; marital dissolutions; wrongful termination; fraud investigations; business bankruptcy; and gift and estate tax filings. Mr. Warshavsky also represents high net worth individuals and was a featured guest on WNYW-TV Fox 5's Good Day New York discussing "Tips on Uncovering Hidden Assets During a Divorce."

Mr. Warshavsky is a member of numerous professional organizations within his discipline, including serving as the immediate past Chairman of the Business Valuation Committee for New York State. He also serves on the editorial advisory board of several national magazines for which he peer reviews articles submitted for publication in the areas of business valuation, forensic accounting and litigation support.

He has lectured to a variety of groups, including CPAs, business valuers, forensic accountants and attorneys. In addition, he is a national instructor for the National Association for Certified Valuation Analysts (NACVA) and has lectured to its Consultants' Training Institute and various state CPA societies, covering business valuation and forensic accounting topics. Mr. Warshavsky has been presented with the Instructor of Exceptional Distinction Award by NACVA for the past several years. He has also been a contributing author for courses in the areas of business valuation and forensic accounting for NACVA's accreditation curriculums. He serves on the NACVA Exam and Grading Committee, critiquing business valuation reports of candidates for the Certified Valuation Analysts designation.

Mr. Warshavsky donates his time to his profession and community through his participation in various organizations. He is the past President of the NYSSCPA's Nassau County Chapter with over 5,000 members. He is a member of Adelphi University's School of Business Administration Advisory Board, and is a past member of the Board of Directors of the American Heart Association, Long Island Region, and the Professional Experience & Placement Advisory Board for Long Island University, C.W. Post College. August 2011

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Forensic Accounting/ Investigation Methodology[©] (FA/IM[©])

I. Background

A. FORENSIC ACCOUNTING

Forensic accounting is now a household term thanks to extensive media coverage of several high profile corporate collapses. Consequently, nearly every accounting periodical devotes space to forensic accounting and related subjects. Further, most CPE providers offer various courses on the subject. Finally, accounting graduates are increasingly attracted to firms offering such services.

Paradoxically, the accounting profession has yet to embrace (or even offer) a cogent, comprehensive, *forensic accounting methodology* by which accountants can guide and refine their forensic accounting craft. Likewise, defending one's expert testimony in forensic accounting matters grows more challenging without independently codified benchmarks.

Thus the purpose of this chapter: to offer a starting point for the seminal development and continuous refinement of the accounting profession's forensic accounting methodology.

B. DEFINITION OF FORENSIC ACCOUNTING

For the purposes of this Methodology, forensic accounting and its related techniques are defined as:

*"The art and science of applying financial techniques to matters of law."*¹

Note that the preceding definition of forensic accounting applies financial techniques to all matters of law, regardless of whether or not they are financial matters. Also, both "art and science" are necessary when applying the methods, thus the forensic accountant's experience becomes a crucial component of the analysis.

Other, more recent definitions of forensic accounting follow:

¹ **financialforensics**® Newsletter, September, 1993.

- ❑ **Forensic Accounting**—*The application of accounting principles, theories, and discipline to facts or hypotheses at issue in a legal dispute is called forensic accounting. It includes every branch of accounting knowledge.*²
- ❑ **Forensic Accountant** – *The term “forensic accountant” refers to an accountant who performs an orderly analysis, investigation, inquiry, test, inspection or examination in an attempt to obtain the truth and develop an expert opinion.*³
- ❑ **Forensic Accounting** – Forensic accounting applies accounting, statistical, research and economic concepts and techniques to legal problems or potential legal problems.⁴
- ❑ **Forensic Accounting** – “While many definitions exist for the general term forensic, the AICPA’s Forensic and Litigation Services Committee (FLS) believes that forensic accounting consists of two major components: litigation services that recognize the role of the CPA as an expert, consultant, or other role; and investigative services that make use of the CPA’s skills that may or may not lead to courtroom testimony. Forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, certain areas of the law, and research, and investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings.”⁵

C. CURRENT STATE OF FORENSIC ACCOUNTING

The absence of a comprehensive methodology does not necessarily suggest that today’s accountants lack forensic accounting qualifications. Indeed, many forensic accountants have imported techniques from various other disciplines such as anthropology, auditing, computer analysis, criminal investigation, economics, sociology, psychology, statistics and related fields.

1. Organizations Focused on Forensic Accounting

Several domestic and international organizations are positioning as sources of forensic accounting training and education, including the following alphabetized listing:

- ❑ **ACFE** – Association of Certified Fraud Examiners: www.cfenet.com;
- ❑ **ACFE** – American College of Forensic Examiners: www.acfei.com;
- ❑ **AICPA** – American Institute of Certified Public Accountants: www.aicpa.com;
- ❑ **CICA** – Canadian Institute of Chartered Accountants: www.cica.ca;
- ❑
- ❑ **IIA** – Institute of Internal Auditors: www.theiia.org;
- ❑
- ❑ **IMA** – Institute of Management Accounting: www.imanet.org; and
- ❑

² *Providing Litigation Services – Technical Consulting*, Consulting Services Practice Aid 93-4, Management Consulting Services Division, American Institute of Certified Public Accountants, (New York, New York – 1993), page 70/100-2.05.

³ *Forensic Examiner*, Volume 10, Numbers 5 & 6, May/June 2001, American College of Forensic Examiners, (Springfield, MO – 2001), page 9.

⁴ *Forensic Accounting and Financial Fraud*, American Institute of Certified Public Accountants, (New York, New York – 1995), page 2.

⁵ AICPA’s “Forensic and Litigation Services (FLS) Committee, July 30, 2004, (www.aicpa.org/members/div/mcs/exc_summ_forensic_svcs.htm).

- ❑ NACVA – National Association of Certified Valuation Analysts: www.nacva.com.

2. Forensic Accounting's Legacy

Forensic accounting's status today is similar to the audit profession in the early part of this century: formative. In September 1904 an international Congress of Accountants took place in St. Louis. An unofficial agenda item of the Congress was to organize the profession nationally. This first "world congress" drew representatives from throughout the United States and England, Scotland, Holland and Canada.

The *profession* of auditing did not emerge until accountants collectively defined and codified the methods by which audits were to be performed. Note the observation from the *Journal of Accountancy*:

*One year after the congress, the movement toward a single national organization was strengthened by a merger of two early national bodies, the Federation of Societies of Public Accountants and the American Association of Public Accountants, based on discussions that had begun at the congress.*⁶

Ironically, the issues that propelled our profession 100 years ago have emerged as today's catalysts for a forensic accounting methodology. Note the following comments from the *Journal of Accountancy* article, bearing in mind that it refers to the past:

The rise of large corporations in the decades before the congress—and some spectacular panics and stock market crashes—underscored the importance of proper accounting procedures and financial reporting. This gathering of accountants at the dawn of the new century was intended as an event at which the attendees could consider what kinds of services and procedures businesses required and what the profession must do to meet those needs.

Fittingly, this proposed Methodology's publication during 2004 marks the 100th anniversary of the first International Congress of Accountants in St. Louis. Likewise, the topics covered at the Congress were strikingly similar to the issues confronting accountants today, and included many references to fraud, valuation, investigation, methods and procedures, etc.

A superb reference containing many of the Congress' original presentations is available in Word format at: <http://accounting.rutgers.edu/raw/aah/worldcongress/highlights.htm>.

D. THE NEED FOR A GENERALLY ACCEPTED FORENSIC ACCOUNTING METHODOLOGY

The metamorphosis of forensic accounting into its own distinct discipline will enable forensic accounting professionals to establish their own specific technical guidance and references.

Concomitantly, the establishment of a forensic accounting methodology will accelerate the profession's refinement of approaches, techniques and methods. That is, by defining the *profession* of forensic accounting, accountants will have a common source that captures and codifies methods that defines the body of knowledge.

⁶ "Taking Account of History," *Journal of Accountancy*, (American Institute of Certified Public Accountants – New York), May 2004.

E. THE FUNDAMENTAL CHALLENGE INHERENT IN FORENSIC ACCOUNTING

The fundamental challenge in forensic accounting stems from the sheer *breadth and depth* of the disparate technical disciplines that often apply in forensic matters. For example, even a simple forensic accounting investigation may require expertise⁷ from several disciplines illustrated in the following non-inclusive list:

- ❑ **Accounting** – Particularly when tracing flows from financial statements through the general ledger, subsidiary ledgers, source documents, etc.;
- ❑ **Adult-Learning Theories** – Particularly when tailoring opinion delivery to disparate triers of fact, e.g. Kolb's Experiential Learning⁸;
- ❑ **Banking** – Particularly with regard to flow of funds and traceability, e.g. tracing of illicit funds;
- ❑ **Bankruptcy** – Particularly when conducting certain analysis such as solvency, fraudulent conveyance (constructive or actual), etc.;
- ❑ **Board and Management Responsibilities** – Particularly when assessing directors' and/or management's responsibilities regarding disclosure, financial reporting and related issues;
- ❑ **Computer Forensics** – Particularly in recovering data from destroyed or seized electronic sources, e.g. deleted files tests applied 90 days pre- and post-triggering event;
- ❑ **Corporate Governance** – Particularly when assessing appropriateness of transaction reporting;
- ❑ **Criminal Prosecution** – Particularly when assisting federal, state, local or international law enforcement in forensic accounting matters;
- ❑ **Document Management and Handling** – Particularly when faced with organizing large document productions and/or maintaining chain of custody for documents;
- ❑ **Economics** – Particularly when comparing financial reporting to independent industry drivers⁹;
- ❑ **Federal, State and Local Laws** – Particularly with regard to procedural matters such as chain of evidence, or even the Patriot Act¹⁰, Bank Secrecy Act¹¹ and Sarbanes-Oxley¹²;

⁷ This does not necessarily suggest that forensic accountants must be skilled in each discipline, but does suggest that a working familiarity with such disciplines is required so that available techniques are accessed and applied as required.

⁸ Kolb, David A., Experiential Learning, (Prentice-Hall, Englewood Cliffs, NJ – 1984).

⁹ Those features of a business which enable it to grow; or more generally, any feature of a business which causes another feature to change.

¹⁰ Public Law 107-56 enacted October 26, 2001: USA Patriot Act is an acronym for “Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001.”

¹¹ Guidance on both the Bank Secrecy Act and USA Patriot Act can be found at the Financial Crimes Enforcement Network's website, www.fincen.gov.

¹² “Sarbanes-Oxley Act of 2002.”

- ❑ **Finance** – Particularly when evaluating capital structure in comparison to reported results, and/or transactionally determining fair market value;
- ❑ **Financial Analysis** – Particularly when employed to identify key aberrations, e.g. when operating cash flow trends differently from reported revenues, net income, etc.
- ❑ **Financial Reporting** – Particularly when comparing and contrasting reported results against apparent results;
- ❑ **Government Agency Interaction** – Particularly when interfacing with multiple agencies, say at a state and federal level;
- ❑ **Industry** - Particularly when comparing financial indicators against independent drivers;
- ❑ **Marketing** – Particularly when analyzing channels and/or product trend and inventory characteristics for a subject entity;
- ❑ **Money Laundering**^{13, 14} – Particularly when applying techniques in the comparison of entity-specific flows;
- ❑ **Proxemics** - According to its founder, Edward T. Hall¹⁵, proxemics is the study of humankind's "perception and use of space;"
- ❑ **Psychology** – Particularly during face-to-face interviews, review of deposition transcripts, etc.;
- ❑ **Purchasing** – Particularly when investigating alleged 3rd-party payoffs and favors provided to procurement personnel;
- ❑ **Research** – Particularly when conducting background checks on parties, and obtaining comparative financial data via the Internet;
- ❑ **Sociology and Anthropology** – Particularly during surveillance (overt and covert) to identify patterns of behavior;
- ❑ **Stages of Growth**¹⁶ – Particularly when evaluating an entity in unusual stages of growth, i.e. start-up or wind-down.
- ❑ **Statistics** – Particularly when analyzing and interpreting large amounts of data, such as when executing broad-level techniques such as data mining¹⁷, or applying specific techniques such as Benford's Law, ratio estimation, attribute sampling and related techniques;

¹³ Primary US statutes: Title 18 U.S.C. § 1956, and Title 18 U.S.C. § 1957.

¹⁴ "Money laundering is the process by which criminals conceal or disguise the proceeds of their crimes or convert those proceeds into goods and services. It allows criminals to infuse their illegal money into the stream of commerce, thus corrupting financial institutions and the money supply and giving criminals unwarranted economic power." – U.S. Department of Justice.

¹⁵ Hall, Edward T., *The Silent Language*, (Anchor Books – 1959, 1973, 1990), page 83.

¹⁶ Churchill, Neil C., and Lewis, Virginia L., "The Five Stages of Small Business Growth," Harvard Business Review, May-June 1983, Harvard Business School Publishing – Boston, MA.

¹⁷ "Data mining" - Analysis of data in a database using tools which look for trends or anomalies without knowledge of the meaning of the data. Data mining was invented by IBM who holds some related patents.

- ❑ **Teaching Skills** – Particularly when attempting to convey complex topics to parties (e.g., triers of fact) that may lack commensurate technical knowledge;
- ❑ **Testimony Skills** – Particularly when ALL of one’s exhaustive analysis is for naught if poorly conveyed during trial;
- ❑ **Visual Aid Skills** – Particularly when attempting to translate large volumes of complex data into simple, cogent “packages” for triers of fact;
- ❑ **Writing Skills** – Particularly when striving to succinctly write findings and opinions in support of analysis;
- ❑ **Etc., etc.** – There is quite literally “no end” to the subject matter that may apply in a forensic accounting assignment. Consequently, a forensic accountant must be a “general practitioner” with one or two “specializations.”¹⁸

In summary, many aspects of the forensic accounting profession are far more complex and dynamic than auditing, financial reporting and accounting. By comparison, an audit (albeit containing its own challenges) begins with prepared financial statements, assessment of in-place internal controls, reliance upon prior years for reference, and is guided by codified definitions, e.g. FASB, GAAP, GAAS etc. That is, it has certain “known facts” and “bright line borders” available by which to construct analysis.

Conversely, forensic accounting often lacks *any* available data or may have the converse situation – “boxcars” of paper that require cataloging, prioritizing, investigation, analysis, interpretation, validation, etc. Further, the parties in a forensic accounting assignment often have personal self-interests in contravention to the independence required for a practitioner.

F. WHERE DOES “FRAUD” FIT IN?

Note that forensic accounting as defined by this Methodology is not the same as “fraud”^{19 20}. Forensic accounting and fraud are, indeed related. However, the Methodology’s definition of forensic accounting is much broader than fraud and considers fraud as a sub-set of forensic accounting.

For example, fraud is typically investigated via forensic accounting techniques, but forensic accounting has far wider application beyond fraud. Consequently, fraud as currently viewed by the accounting profession has a rather narrow application often limited to embezzlement and other single-party applications.

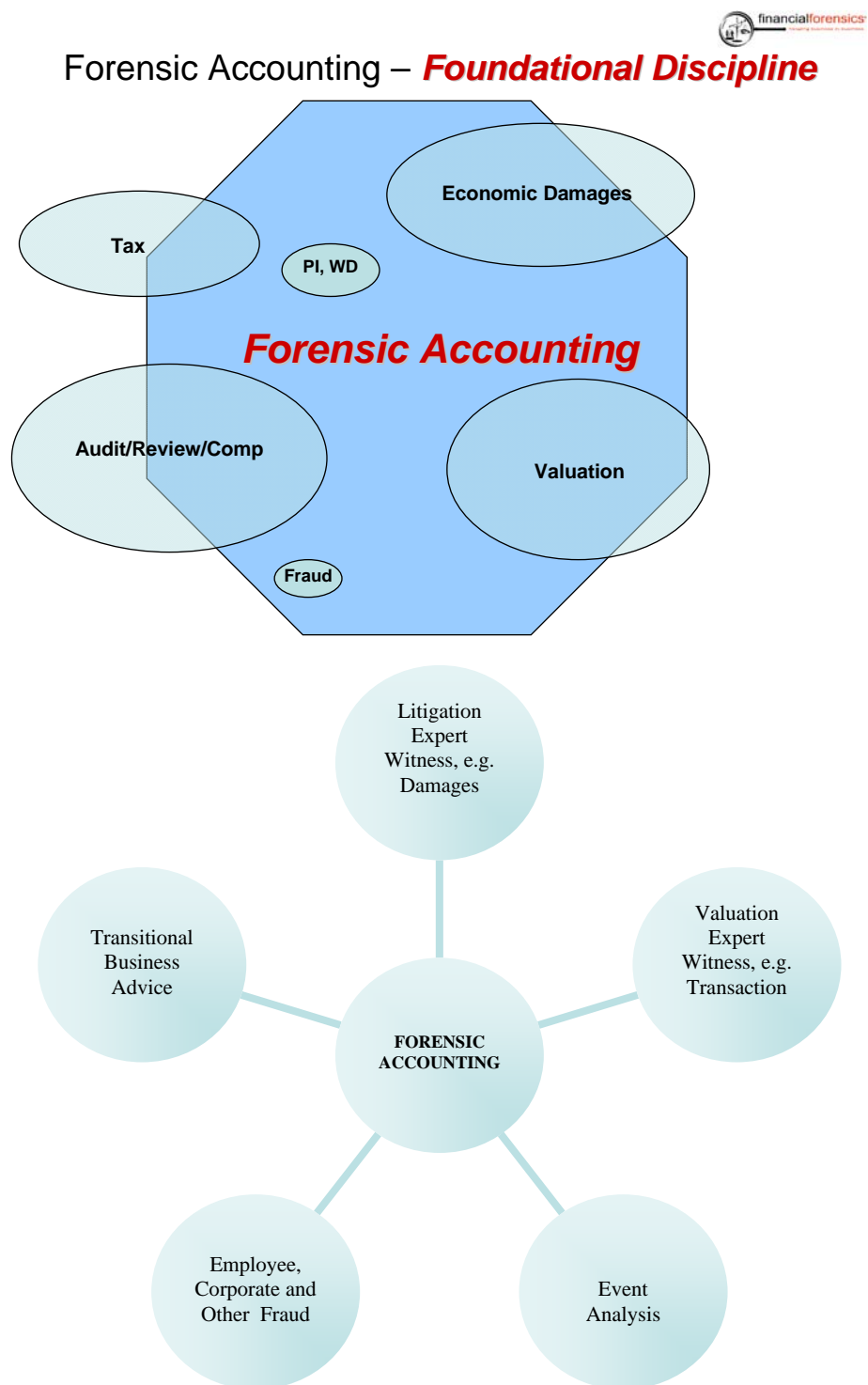
Forensic accounting must be considered the “core” expertise that is *foundational* to all other activities, including but not limited to expert witness testimony for damages, business valuation

¹⁸ Note that “specialization” requires considerable time and effort, thus it would be unusual for a person to qualify in more than 1 or perhaps 2 legitimate specialties. For example, a full-time tax practitioner or auditor would be challenged to be commensurately capable in business valuation.

¹⁹ *fraud* – “An intentional perversion of truth for the purpose of inducing another in reliance upon it or to part with some valuable thing belonging to him or to surrender a legal right.” Black’s Law Dictionary, (West Publishing Co., St. Paul, MN – 1990), page 660.

²⁰ *criminal fraud* – “In taxation, the attempt to evade the payment of lawfully due taxes by willfully filing a false or fraudulent tax return. IRC §§ 7201, 7207. In other contexts, the crime of larceny by false pretenses or larceny by trick.” Black’s Law Dictionary, (West Publishing Co., St. Paul, MN – 1990), page 373.

(whether transactional or dispute-related), event analysis, fraud, etc. The following diagrams illustrate forensic accounting's core foundation:



Further, forensic accounting, however applies to a far wider range of application. For example, forensic accounting analysis is crucial to the following non-inclusive assignment types:

- ❑ *alter ego*, corporate disregard, ignoring the corporate fiction, piercing the veil, etc.;
- ❑ Anti-trust;
- ❑ Bankruptcy;
- ❑ Breach of fiduciary duty;
- ❑ Conversion;
- ❑ Counter-terrorism;
- ❑ Damages – Breach of contract
- ❑ Financial Misrepresentation;
- ❑ Fraudulent Conveyance (constructive or actual);
- ❑ Intangible Assets;
- ❑ Intellectual Property;
- ❑ Lost Profits;
- ❑ Marital Dissolution;
- ❑ Personal Injury;
- ❑ Reasonable Royalty;
- ❑ Valuation;
- ❑ Wrongful Death;
- ❑ Wrongful Termination.

Clearly, the examples listed above require forensic accounting expertise. And, although some of them may have fraud implications, they are typically evaluated distinct from fraud.

II. DEFINITION AND OBJECTIVES OF THIS METHODOLOGY

A. OBJECTIVES OF THIS METHODOLOGY

There are 7 primary objectives intended for this Methodology:

- ❑ First to provide a “starting point” for the accounting profession to establish forensic accounting as its own discipline, i.e. a codified body of knowledge;
- ❑ Second, to serve as generalized and/or specific guidance to forensic accountants, thus insuring that ancillary disciplines are appropriately considered;
- ❑ Third, to provide a framework through which forensic accounting techniques and methods can continually be refined;
- ❑ Fourth to serve as a technical reference to those performing forensic accounting services on a part-time basis;
- ❑ Fifth, to insure consistency of forensic accounting delivery, thus enhancing the quality of services provided;
- ❑ Sixth, to serve as a training tool for those entering the forensic accounting profession.
- ❑ Seventh, to enhance expert witness testimony credibility before triers of fact.

B. DESCRIPTION OF THE FORENSIC ACCOUNTING METHODOLOGY

This chapter describes the proposed forensic accounting methodology and thus enables practitioners to immediately apply its concepts. In recognition of the investigatory nature of forensic accounting, the Methodology is built upon an integrated dual-foundation of forensic accounting and criminal investigation as follows.

- ❑ **Forensic Accounting** – Many aspects of forensic accounting and related disciplines are referenced in the Methodology. Most of the techniques will be familiar to practitioners, but where practitioners lack familiarity the Methodology “links” relevant technical aspects.

The Methodology’s imbedded “hyperlinks” enable practitioners to readily access supporting documents, e.g. Deposition Matrix²¹ to facilitate consistency and promote efficiency. Also, hyperlinks to explanatory text further support a forensic accountant’s need to apply methods beyond one’s immediate skill set.

Unfortunately, the hard-copy nature of this chapter precludes hyperlink capability, but the basic Microsoft® Power Point® framework will be emailed to those requesting a copy. Then, they can customize the Methodology and construct their own hyperlinks as required.

²¹ Dorrell, Darrell D., “Deposition Matrix,” *National Litigation Consultants’ Review*, (Litigation Consultants, LLC – Vol. 2 Issue 9, 2002).

- ❑ **Criminal Investigation** - The traditional “7 Steps of Criminal Investigation” is a process commonly taught and applied by federal, state and local law enforcement authorities. Note that many variations of the 7-Step method, i.e. the 4-Step method, etc. are used by law enforcement authorities. The Methodology applies to virtually any process employed by law enforcement authorities. However, the 7-Step method²² was applied due to its comprehensive detail. Practitioners can readily modify the Methodology to match the various processes employed.

This “customization” capability enables forensic accounting practitioners to closely interface with respective law enforcement agencies, thus “matching” their approach when applying forensic accounting.

The Methodology is detailed below and consists of numerous components of criminal investigation processes, forensic accounting techniques, statistical methods, interviewing schema, socio-psychological constructs and adult-learning theories. Consequently, the Methodology offers a comprehensive and dynamic tool for analysis and evidentiary delivery.

C. THE METHODOLOGY IN ACTION

The following description details how the Methodology works and its interface between the foundational elements of criminal investigation and forensic accounting. The Methodology has many more elements, but space limitations prohibit inclusion of all possible data items. Further, the Methodology will undoubtedly grow over time thus it will be continually updated and refined.

D. PROCESS MAP

The Methodology is constructed as a “Process Map” that visually guides the practitioner through the logical actions of a forensic accounting assignment. The Methodology starts at the earliest stage of an assignment and progresses through the final stage, typically testimony delivery.

The Process Map flows left-to-right, top-to-bottom within the four (4) Phases and (5) Actions. Therefore, a practitioner merely begins with the “Foundational” (1st) Phase and progresses through the 5 Actions where he then begins with the “Interpersonal” (2nd) Phase and again progresses through the 5 Actions. Continuing in a like manner the practitioner can address virtually every aspect of a forensic accounting assignment, whether complex or simple. Note the “dotted line” flow indicating that the Methodology is not merely static, but reflects the dynamic nature of forensic accounting that often requires “looping” back through tasks as new data surfaces.

Although the Process Map is visually self-explanatory certain items require clarification:

- ❑ The *language* of forensic accounting can be applied to all types of investigative activities to clarify one’s actions and findings, thus enhancing credibility during analysis, testimony and prosecution, as required;

²² Nossen, Richard A. and Norvell, Joan W. “The Detection, Investigation and Prosecution of Financial Crimes, 2nd” “Thoth Books, Richmond VA, 1993.

- ❑ Forensic accounting techniques are readily applicable to *non*-financial data. In fact, most readers of this chapter have probably applied forensic accounting techniques to non-financial data without realizing it. An example would be comparing salesmen's reported call logs with customer sales;
- ❑ The actual Methodology, contained in Microsoft® Power Point® includes hyperlinked forms (e.g., Microsoft® Word®, Microsoft® Excel®, etc.) so that a user can immediately access and apply the tools to the assignment at hand. However, the limitations of a textual reference preclude this feature;
- ❑ Due to size limitations not all the contents have been included, but the Methodology is sufficiently populated to illustrate the intent and capabilities of the Methodology;
- ❑ Due to the 2-dimensional nature of the written word, the Process Map appears sequential. However, the Methodology is intended to be flexible, dynamic, integrated and simultaneous/iterative, thus mirroring how information and conclusions develop.

E. METHODOLOGY AND LINKAGE TO CRIMINAL INVESTIGATION

The Methodology was constructed using a forensic accounting/investigation linkage to the “**7-Step Criminal Investigation**” methodology. The 7-Step methodology is summarized below, and the respective identifiers are provided which link to the detailed matrix.

<u>Investigatory Steps</u>	<u>Matrix Identifier</u>
1. Interviews and Interrogation	I&I
2. Background Research	BR
3. Electronic and Physical Surveillance	EP
4. Confidential Informants	CI
5. Undercover	UC
6. Laboratory Analysis	LA
7. Analysis of Transactions	AT

The Investigatory Steps, above are summarized below; generic descriptions are provided since the focus of this chapter is forensic accounting and not criminology.

(NOTE: When interfacing with law enforcement it is *crucial* to determine guidelines for *admissibility* of evidence. For example, privacy concerns could preclude a forensic accountant from using data obtained via surveillance unless duly authorized. A court ruling of evidentiary inadmissibility could have devastating effects on a matter's outcome. For example, Rule 6(e)²³ applies in certain Federal forensic investigations.)

- ❑ **I&I - Interviews and Interrogation** – This is the “personal” aspect of data-gathering, obtained through personal interviews and interrogation when under law enforcement authority. It is generally considered a source of primary data.

²³ 157 Rule 6(e)(3)(C)(iv) of the Federal Rules of Criminal Procedure Permitting Certain Disclosure of Grand Jury Material to State and Local Law Enforcement Officials, Criminal Resource Manual 157, US Department of Justice.

- ❑ **BR - Background Research** – This is comprised of two broad categories: primary data and secondary data. Primary data (see “Interviews,” above) is acquired by the practitioner’s efforts collecting data otherwise unavailable through secondary sources. Examples include:
 - ◇ Performing an Internet inquiry, e.g. www.KnowX.com into a subject’s asset holdings;
 - ◇ Performing an Internet inquiry, e.g. www.onesource.com into an entity’s corporate affiliations;
 - ◇ Applying information obtained through a law enforcement authority’s access to NCIC (National Crime Information Center.)
- ❑ **EP - Electronic and Physical Surveillance** – This covert step is used to obtain evidentiary data. (See “NOTE” above for caveat regarding evidence.)
- ❑ **CI - Confidential Informants** – This step is considered primary data and could include paid or voluntary informants. (See “NOTE” above for caveat regarding evidence.)
- ❑ **UC – Undercover** – This covert step is used to obtain first-hand subject data. (See “NOTE” above for caveat regarding evidence.)
- ❑ **LA - Laboratory Analysis** – This analytical step can range from statistical analysis, e.g. duplicate-numbers test to scientific analysis, e.g. ink composition to a wide range of investigatory procedures.
- ❑ **AT - Analysis of Transaction** – This step compares/contrasts transactional and pattern-sensitive data measures to provide a record for forensic analysis.

F. HOW DO YOU USE THE METHODOLOGY?

Structure of the Methodology – 4 Phases, 13 Stages, 5 Actions

The Methodology is structured within a “Process Map” organized into 4 logically flowing Phases covering 13 Stages, with each Action comprising 5 Actions. The 13 Stages are executed throughout the process and containing many distinct techniques that closely track the 7-Step Criminal Investigation methodology described above. The Phases, Stages and Actions mirror the activities ordinarily encountered in the forensic accounting investigation process and are indicated below:

1. Structure of the “Process Map” Methodology - 4 Phases

The Methodology is organized into 4 logically flowing Phases within the 7-Step Criminal Investigation methodology described above. The Phases mirror the activities ordinarily encountered in the investigation process and are indicated below:

- ❑ **Foundational Phase:** This Phase consists of assembling and preparing baseline data that will support and drive the investigation. The output must be continuously updated to provide a current record and status of the progress of investigation.

For example, identification of all the bank accounts that may contain large wire transfers to offshore accounts would fall within this phase. They would have been identified within the “Full and False Inclusion” task.

The 2 Stages in this Phase include “Assignment Development” and “Scoping.”

- ❑ **Interpersonal Communications Phase:** This Phase consists of Interviews & Interrogation, Surveillance, Undercover and the related activities necessary to extract pertinent information from/about the entity(s)/party(s).

For example, the typical activities conducted by field officers would fall within this phase. A reasonably strong experience base is necessary in order to identify the individual traits, habits and characteristics that betray a subject’s deceptions.

The 2 Stages in this Phase include “Interviews & Interrogations” and “Background Research.”

- ❑ **Data Collection and Analysis Phase:** This Phase consists of applying the various Indirect quantitative and qualitative data obtained during the earlier phases and developing output supporting observations, thus arriving at an appropriate conclusion(s). If such efforts prove inconclusive, the next phase – Direct Analytical and Conclusion Phase will provide additional evidence. Therefore, this Phase consists of two sub-Phases, i.e. Indirect (executed first as a diagnostic/exploratory tool), and then Direct so that the labor-intensive efforts are most effectively applied.

For example, by comparing the year-to-year change in Equity to the year-to-year difference between revenues (i.e., receipts) and expenses the “articulation” of the financial statements can be tested. Any difference is investigated to determine whether it is merely an equity transaction, e.g. capital infusion or is determined to be unaccounted for revenue or expense. This technique is known as the Net Worth Method.²⁴

Direct quantitative and qualitative analysis can follow the preceding indirect activities, or be executed either jointly with, or independent of them. The evidence provided by this Phase is, by definition the most comprehensive, but is not necessary in every case. Also, since it is usually quite labor-intensive it can require the highest resource usage.

The 6 Stages in this Phase include “Data Collection,” “Surveillance – Electronic and Physical,” “Confidential Informants,” “Undercover,” “Laboratory Analysis,” and “Analysis of Transactions.”

- ❑ **Trial Phase:** This Phase consists of delivering the results of the forensic accounting analysis. The “typical” delivery target is comprised of a trier of fact, i.e. a judge and/or jury that deliberates the evidence within the context of the law and other evidence. Also, this Phase includes a post-assignment activity that is intended to capture benefits of the experiential process achieved from each assignment.

²⁴ The Net Worth Method gained notoriety with the case, *Capone v. United States* (51 F.2d 609 [1931])

The 3 Stages in this Phase include “Trial Preparation,” “Testimony & Exhibits,” and “Post-Assignment.”

The conceptual framework of the Phases and Stages is reflected in the following table. Then, each Action is described. Next, each Stage is outlined. Finally, the “Process Map” Methodology is contained so that the reader can follow the step-by-step process of the Methodology.

Conceptual Framework: 4 Phases, 13 Stages and 5 Actions

FORENSIC ACCOUNTING METHODOLOGY – A PROPOSED FRAMEWORK												
PHASES - 4												
Foundational		Interpersonal Communications		Data Collection and Analysis (Direct and Indirect)					Trial			
STAGES – 13												
Assignment Development	Scoping	Interviews & Interrogation	Background Research	Data Collection	Surveillance – Electronic & Physical	Confidential Informants	Undercover	Laboratory Analysis	Analysis of Transactions	Trial Preparation	Testimony & Exhibits	Post-Assignment
ACTIONS – 5												
Purpose of Stage												
References												
Tasks to Be Performed												
Potential Issues												
Deliverables												

2. Structure of the “Process Map” Methodology - 13 Stages

The Methodology is organized into 13 logically flowing Stages comprising numerous distinct techniques that closely track the 7-Step Criminal Investigation methodology

described above. The Stages mirror the activities ordinarily encountered in the investigation process and are indicated below:

- ❑ **Assignment Development** – This Action is the “front end” of a forensic assignment that shapes the context and defines the framework of the assignment.
- ❑ **Scoping** – This Action secures formal commitments and defines responsibilities among the parties with (and against) whom the forensic accountant is deployed.
- ❑ **Interviews & Interrogation** – This Action consists of the face-to-face contact with key parties. These activities often comprise the most compelling, but non-quantitative evidence and can derive from actions ranging from conversations through depositions. This action can also be a “re-entry” point in the process such as an admission-seeking interview conducted towards the end of an investigation.
- ❑ **Background Research** – This Action permits independent verification against the oral claims made by the respective parties.
- ❑ **Data Collection** – This Action is the “entry point” for several other Stages, and likewise reflects the “re-entry” when necessary.
- ❑ **Surveillance: Electronic & Physical** – This Action collects and categorizes data ranging from objective indicators such as the number of phone calls, through more subjective indicators such as behavioral symptoms.
- ❑ **Confidential Informants** – This Action accesses parties willing to divulge data for their own reasons and which often opens doors to other evidence.
- ❑ **Undercover** – This Action is a form of ruse used to gain confidences in order to obtain data otherwise unavailable. It is sometimes irreplaceable, such as in drug cases.
- ❑ **Laboratory Analysis** – This Action can range from statistical to chemical techniques that determine whether or not data converts to evidence.
- ❑ **Analysis of Transactions** – This Action contains obvious actions, such as tracing the evidence back to a source. However, it can also include less obvious actions, such as establishing behavioral patterns demonstrating trends.
- ❑ **Trial Preparation** – This Action is comprised of pre-deployment preparation, thus simulating the trial testimony and insuring accuracy of content.
- ❑ **Testimony and Exhibits** – This Action is the “crucible” within forensic accounting, and perhaps carries more weight than all the other Stages combined. That is, even with superb foundational analysis it may all be for naught if direct testimony is poorly delivered, or if withering cross-examination succeeds in diminishing the forensic accountant’s opinions.
- ❑ **Post-Assignment** – This Action recommends that each assignment should have a post-mortem “Lessons Learned” review to capitalize on the experiences, whether favorable or disastrous.

3. Structure of the “Process Map” Methodology – 5 Actions

The Methodology is organized into 5 foundational Actions supporting the 7-Step Criminal Investigation methodology described above. The Actions mirror the activities ordinarily encountered in the investigation process and are indicated below:

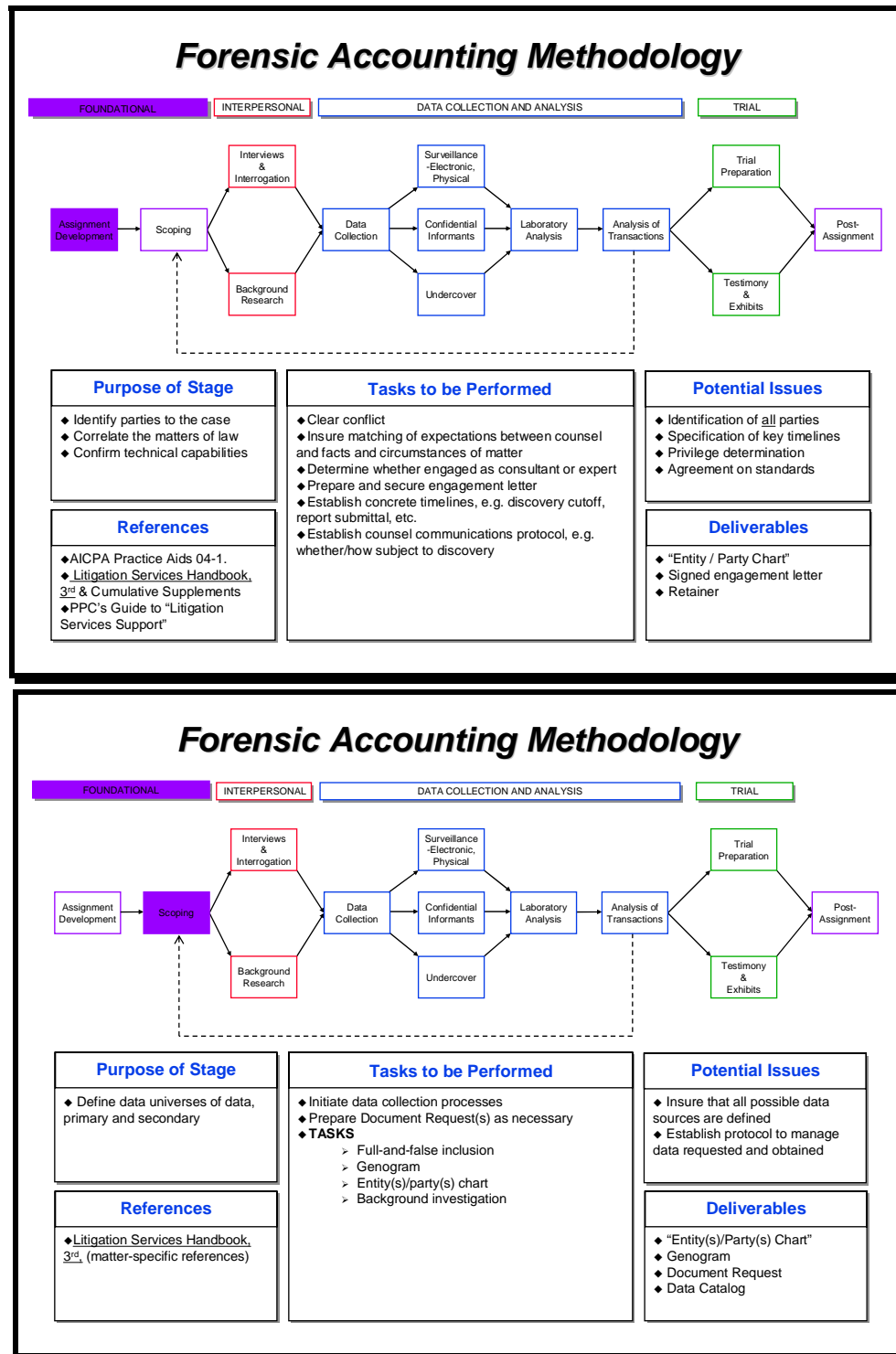
- ❑ **Purpose of the Stage** – This Stage sets the tone for the “reasoning” behind the necessity of the Phase and its respective Actions. Put another way, it shapes the context and defines the framework to insure that the Actions are properly focused.
- ❑ **References** – This Stage lists key technical references for the pertinent Phase and its respective Actions. Naturally, the reference sources will vary. For example, an excellent starting point for any forensic accounting matter is the Litigation Services Handbook and its Cumulative Supplements. However, forensic accountants often need detail beyond the capabilities of the Handbook. Therefore, references should be considered as matter-specific. In its electronic form the Methodology is hyperlinked to specific references and Internet URLs for further investigation.
- ❑ **Tasks to Be Performed** – This Stage identifies key tasks that pertain within the context of the Phase and its respective Actions. Many tasks are linked to the narrative matrix following the “Process Map” in order to define and describe a generic set of activities. In its electronic form the Methodology is hyperlinked to the narrative matrix for facile reference to the pertinent activities.
- ❑ **Potential Issues** – This Stage alerts the forensic accountant to the “land mines” of the respective matter. For example, during the “Interviews & Interrogation” Action the veracity of the respective party(s) can never be taken for granted.
- ❑ **Deliverables** – This Stage suggests likely outputs that document the results throughout the Methodology’s “Process Map.” Such outputs can be merely documentary, but are likely to be eventually applied as exhibits in support of testimony. Several examples are included in the Appendix of this chapter in order to provide forensic accountants with immediately applicable tools that have a proven track record. In its electronic form the Methodology is hyperlinked to the respective documents immediate application to the pertinent activities. The Deliverables are incorporated into the Testimony & Exhibits Action since they are typically applied during trial.

III. THE FORENSIC ACCOUNTING METHODOLOGY

The Forensic Accounting Methodology is presented in all 4 Phases, 13 Stages and 5 Actions, below. Recall that the Methodology is illustrative due to the hard-copy constraints of this publication and readily accommodates customization.

After the entire Forensic Accounting Methodology “Process Map” is displayed, the selected textual narrative (hyperlinked in the Power Point version) provides specific aspects of the proposed forensic accounting techniques, e.g. full-and-false inclusion. In lieu of hyperlinks in this written version, the respective definitions and/or example output follows each respective Process Map.

The Forensic Accounting Methodology



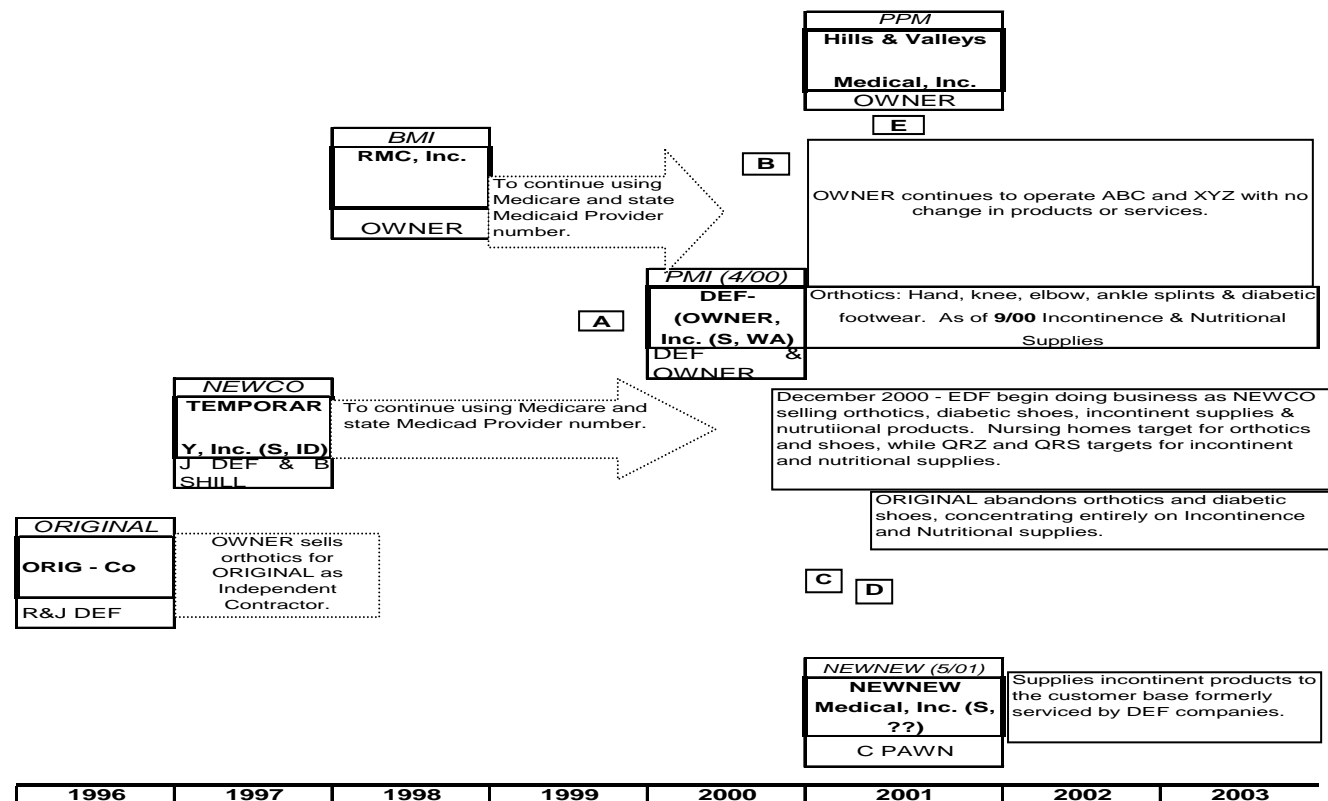
Full-and-false inclusion- *Full-and-false Inclusion* tests are used to determine the appropriate "universe" of data under investigation. This ensures that no extraneous data is included, and that no appropriate data is excluded.

These types of tests are particularly useful for finding unreported assets. Also, this technique can/should be used throughout the various stages.

Genogram- A *Genogram* is a visual representation of the myriad of information gathered during Background Research, Interviews and Surveillance. It is often prepared in conjunction with *Events Analysis* output.

It provides a common perspective for the forensic investigator to demonstrate patterns of behavior and identify other entities and parties meriting further investigation. Also, it can point to key indicators of the subject's behavior, leading to additional points of investigation.

An example of a genogram combined with an entity chart follows.



Note: Entity legend is "Type" and "State," e.g. (S, WA) refers to "S" corporation in Washington.

PLAINTIFF, Inc. is "dba" Hills & Valleys Rehab.

AFH - Adult Family Homes.

ALH - Assisted Living Homes.

A - October 1999 - DEFENDANTS approach PLAINTIFF about joining; see Business Plan.

B - November 2000 - PLAINTIFF advises DEFENDANTS that he intends to separate. Suggests they take customer base they developed and continue doing business as NEWCO.

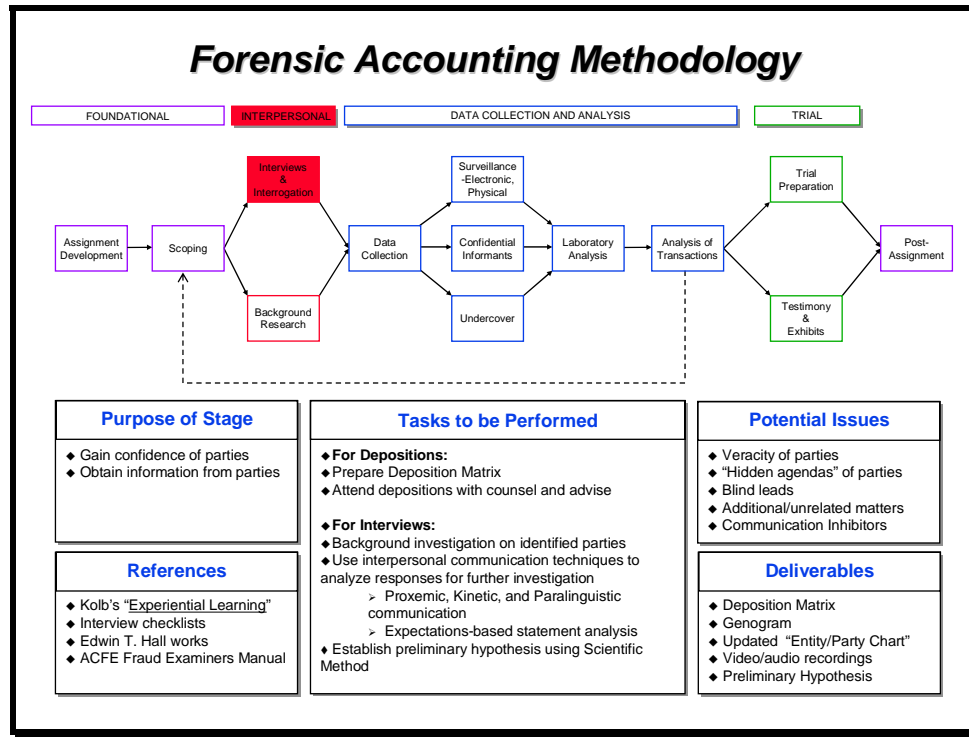
C - February 2001 - DEFENDANTS raided by the FBI and shortly lose their Medicare Provider Number under NEWNEW, Inc.

D - April 2001 - DEFENDANTS begin doing business (again) under the OLDSCO name. Did not notify State of Washington. Operated until September 2001 when they closed it.

E - PLAINTIFF incorporates NEWOLD and OLDNEW, Inc., purchases inventory of SSS and absorbs outstanding obligations.

Entity(s)/Party(s) chart- An Entity(s)/Party(s) Chart is a visual representation depicting entity(s) or party(s) identification, and the associations among them. It is often prepared in conjunction with Events Analysis output. (See above.)

Entity(s)/Party(s) charts can be useful predictors of funds diversion. For example, identifying the formation date of an off-shore entity may be compared to funds decline, thus substantiating diversion. Also, identifying seemingly unrelated parties can indicate where further investigation is potentially warranted.



Proxemic Communication- Distance Communication (or Proxemic Communication) consists of comparing and contrasting the interpersonal distance involved in query responses.

It has been suggested that (even subtle) movements away from an interviewer indicate avoidance, and thus merit additional investigation. Movements toward an interviewer can suggest a desire to be believed and/or a desire for assistance, such as a request for the interviewer to delve further into the matter.

Note that cultural differences have a significant impact on interpersonal distance. For example, the "socially acceptable" distance in the US when 2 adults are communicating (while standing) is 18 to 24 inches. European norms are much closer.

Kinetic Communication- Kinetic Communication consists of observing bodily reactions to determine where additional investigation is warranted.

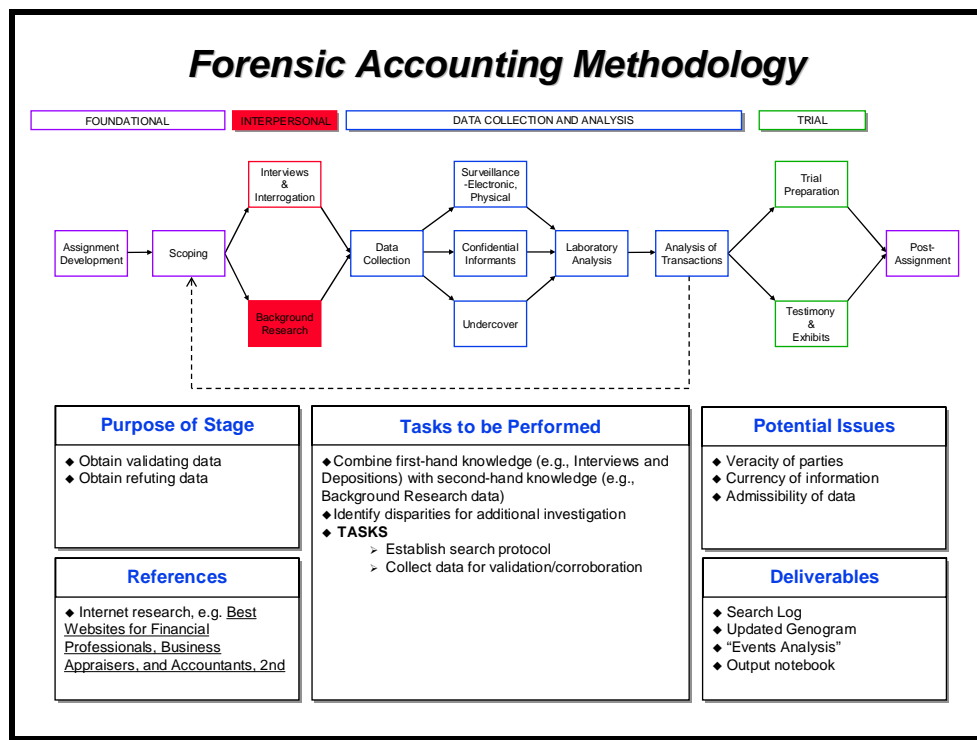
It has been suggested that a person who averts his/her eyes to the right prior to responding may be lying. Alternatively, it has been suggested that averts his/her eyes to the left prior to responding may be recalling a memory. For example, it is well documented that when lying (and when passionate

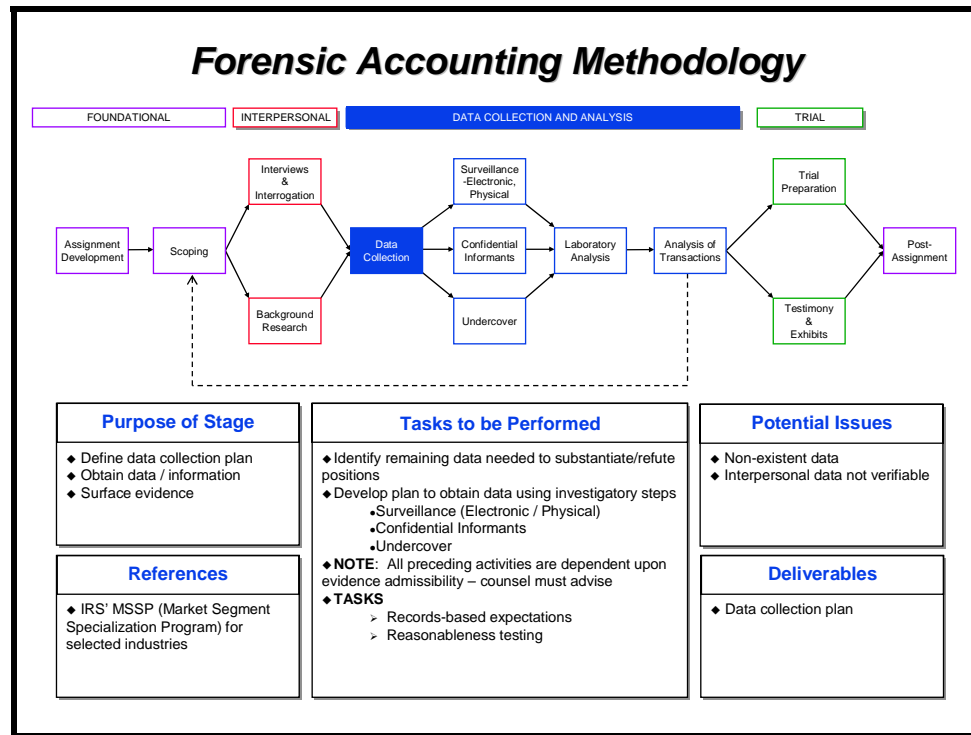
about a subject), blood flow increases to the subject's head and neck area, thus providing a "flush" that may warrant further investigation.

Paralinguistic Communication- *Paralinguistic Communication* consists of analyzing the volume, pitch and voice quality during verbal communication.

Oral communication provides for a range of nonverbal accompaniment that can be used to convey certain emotions which may not be as easily discerned in written communication.

Deposition Matrix- A Deposition Matrix description document has been provided at the end of this section due to its large size.



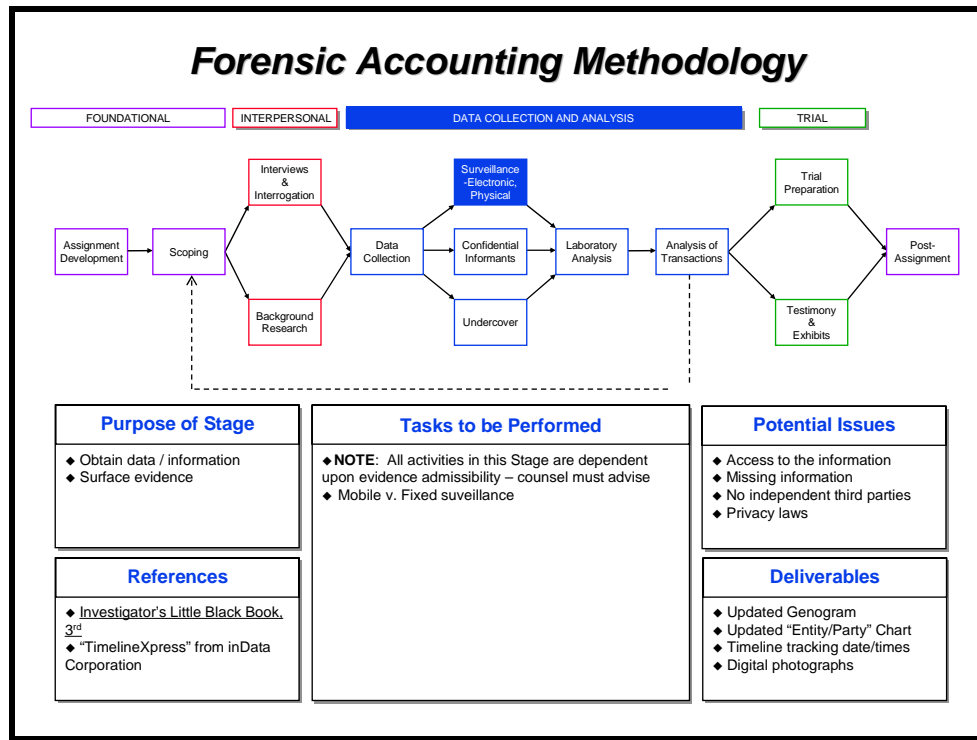


Records-Based Expectations- *Records-Based Expectations* consists of identifying the nature, form, extent, veracity, availability and related elements of record keeping in order to set expectations about the entity(s)/party(s).

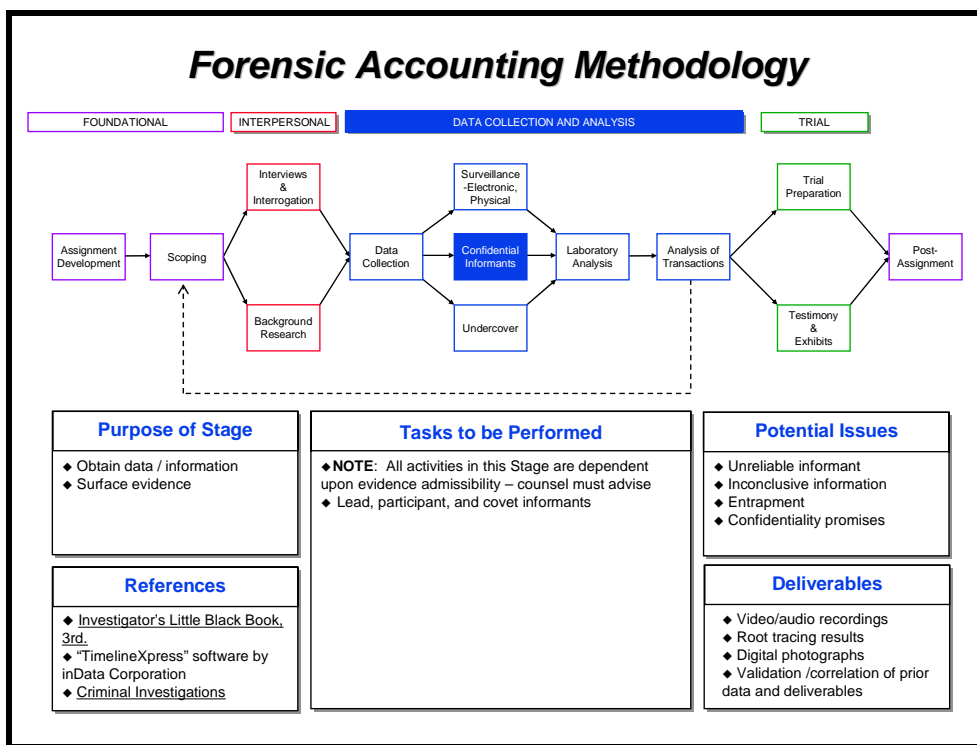
For example, an entity handling a large sum of money from numerous investors would be expected, at a minimum to have in place very sound management and internal controls that provide solid foundation to the representative financial statements. Examples of the minimum types of records in such a case include the general ledger, receipts ledger, cost and expense ledgers, detailed shareholder records, comprehensive financial statements, current income tax returns, and related elements.

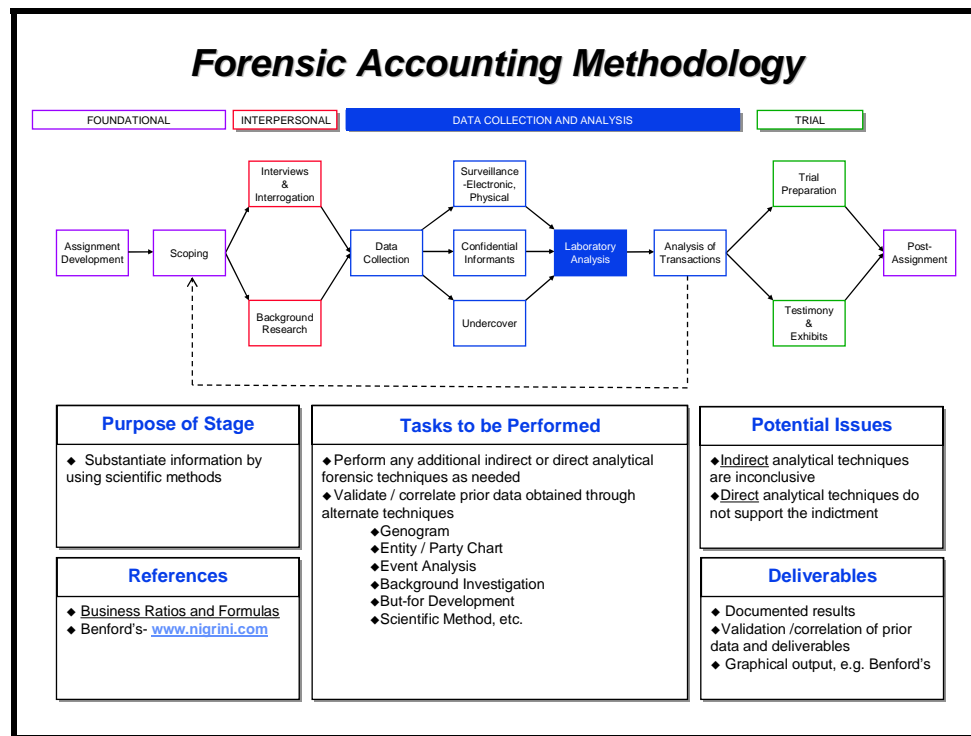
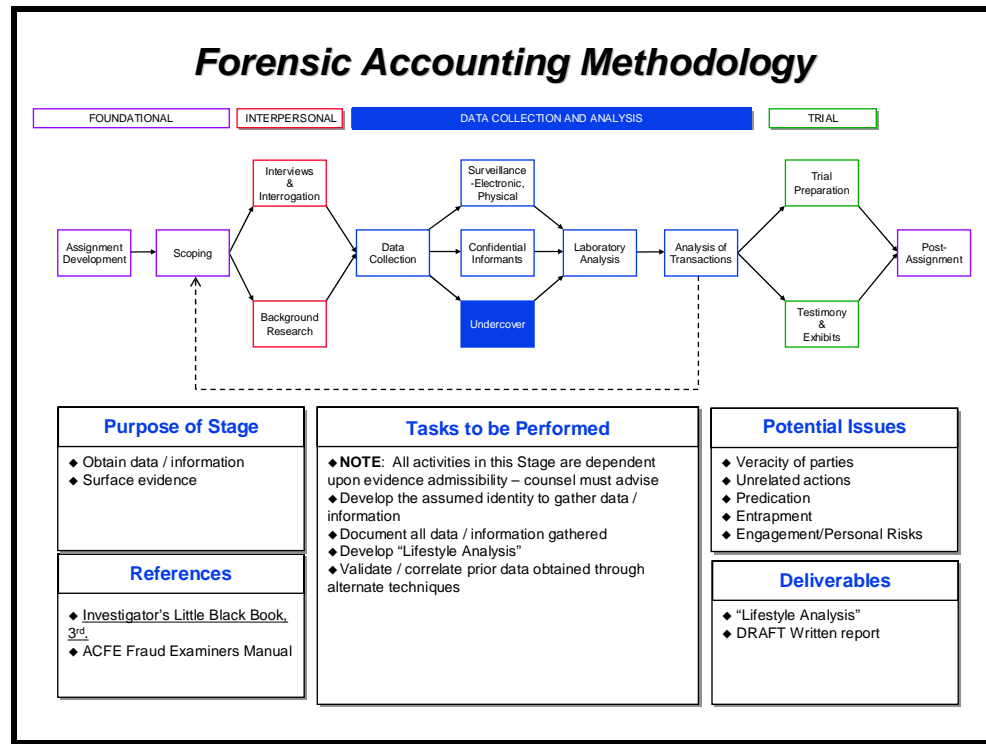
Reasonableness Testing- In *Reasonableness Testing*, the forensic investigator formulates an expectation, (i.e. estimate) of an account balance based upon understanding and assumptions driving the account balance.

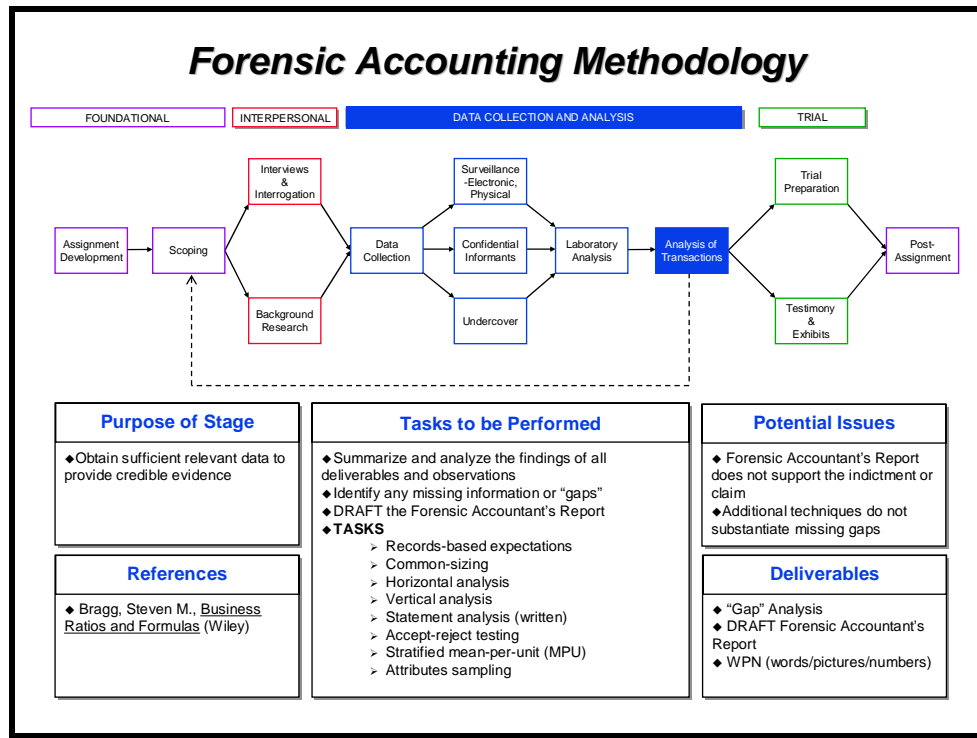
For example, a reasonableness test of deposits could measure the actual deposits against the expected deposits could identify where further investigation is warranted.



Digital Photographs- No example provided since they are self-explanatory.







Records-based expectations- *Records-Based Expectations* consists of identifying the nature, form, extent, veracity, availability and related elements of record keeping in order to set expectations about the entity(s)/party(s).

For example, an entity handling a large sum of money from numerous investors would be expected, at a minimum to have in place very sound management and internal controls that provide solid foundation to the representative financial statements. Examples of the minimum types of records in such a case include the general ledger, receipts ledger, cost and expense ledgers, detailed shareholder records, comprehensive financial statements, current income tax returns, and related elements.

Common-sizing- *Common-Sizing* consists of converting all financial statement items to a percentage of revenue and assets, and then comparing the results within and among one another over a multi-period time horizon.

This method also accommodates a comparison to similar businesses that may be a much different size. Bar graphs and line charts are useful to identify key variations warranting further investigation.

Horizontal analysis- *Horizontal Analysis* consists of comparing key account categories, such as officer compensation, travel and entertainment, etc. over a multi-period (e.g., year, quarter, month, day) time horizon to identify changes meriting further investigation.

The technique typically includes percentage changes, dollar changes, comparison changes, etc. Also, bar graphs and line charts are useful to identify key variations warranting further investigation.

Vertical analysis- *Vertical analysis* consists of dividing each expense item in the income statement (or line item in the balance sheet by total assets, et al) of a given year by net sales to identify expense items that rise more quickly or more slowly than a change in sales.

Statement analysis (written) - In *Statement Analysis (Written)* investigators examine written documents in a manner similar to the Statement Analysis (Verbal) as described above. However, analyzing written documents focus on the words and the nature of the document, including the age, condition, and related physical document factors.

Accept-reject testing- *Accept-Reject Testing* is similar to sampling, but differs since sampling involves the projection of a misstatement amount and accept-reject testing does not. For example, “accepts” that the testing criteria have been met, or “rejects” that the testing criteria have not been met. If a “reject” occurs, additional testing may be carried out depending upon materiality and other considerations.

Following are some examples of accept-reject applications when the projection of a misstatement amount is not practicable:

Stratified mean-per-unit (MPU) - A *Stratified Mean-Per-Unit (MPU)* technique can improve the precision of the mean-per-unit technique without increasing the sample size. The technique uses stratification of the population and samples each stratum separately.

By stratification, the forensic investigator segments the population into groups of items exhibiting similar value amounts.

Once mean and standard error in each stratum are calculated, the results are combined for the individual strata to create an overall estimate. The first few strata reduce the necessary sample size, but diminishing returns and certain other factors result in from 3 to 10 strata as sufficient in many cases.

Attributes sampling- *Attributes Sampling* is used to specifically identify occurrences that fall within and/or outside of previously established norms. It can be applied either globally and/or statistically using sampling techniques.

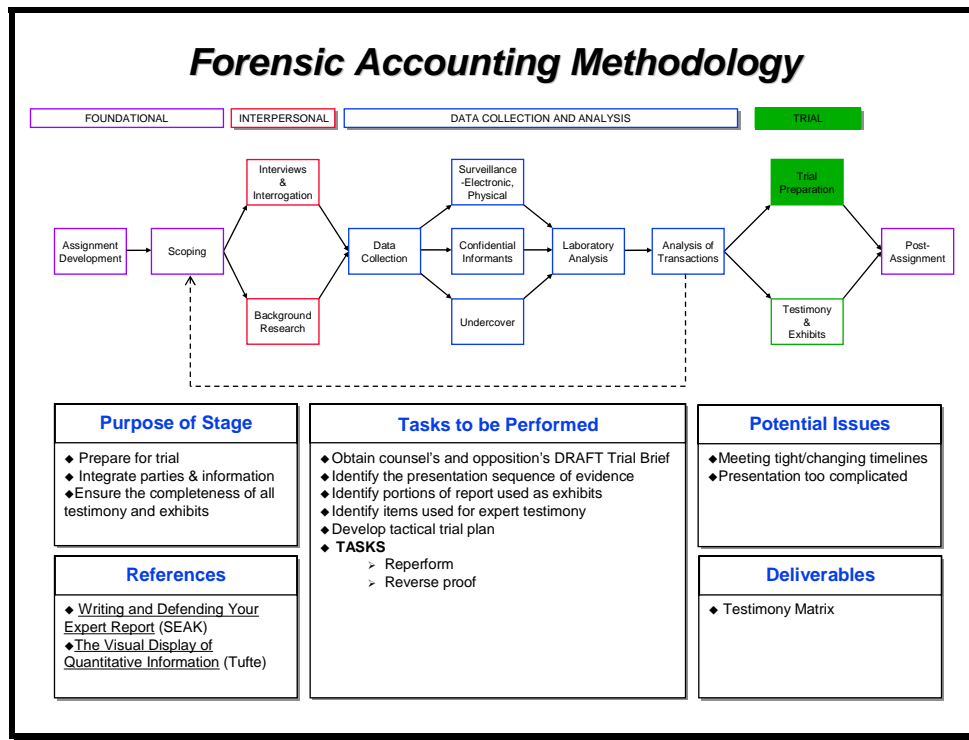
Its most common use in forensic investigation is to test the rate of deviation from a prescribed (or expected) control perspective to support the forensic investigator's assessed level of assurance.

In attributes sampling each occurrence of, or deviation from, a prescribed control perspective is given equal weight in the sample evaluation, regardless of the dollar amount of the transactions.

In addition to tests of controls, attributes sampling may be used for substantive procedures, such as tests for under-recording inter-bank cash transfers or demand deposit accounts. However, if the audit objective is to obtain evidence directly about a monetary amount being examined, the forensic investigator generally designs a variables sampling application, described below.

Substantive tests consist of tests of details of account balances and related transactions, and analytical procedures. They are intended to gather evidence regarding the validity/appropriateness of the treatment of transactions. Generally, such tests are performed in combination during investigation.

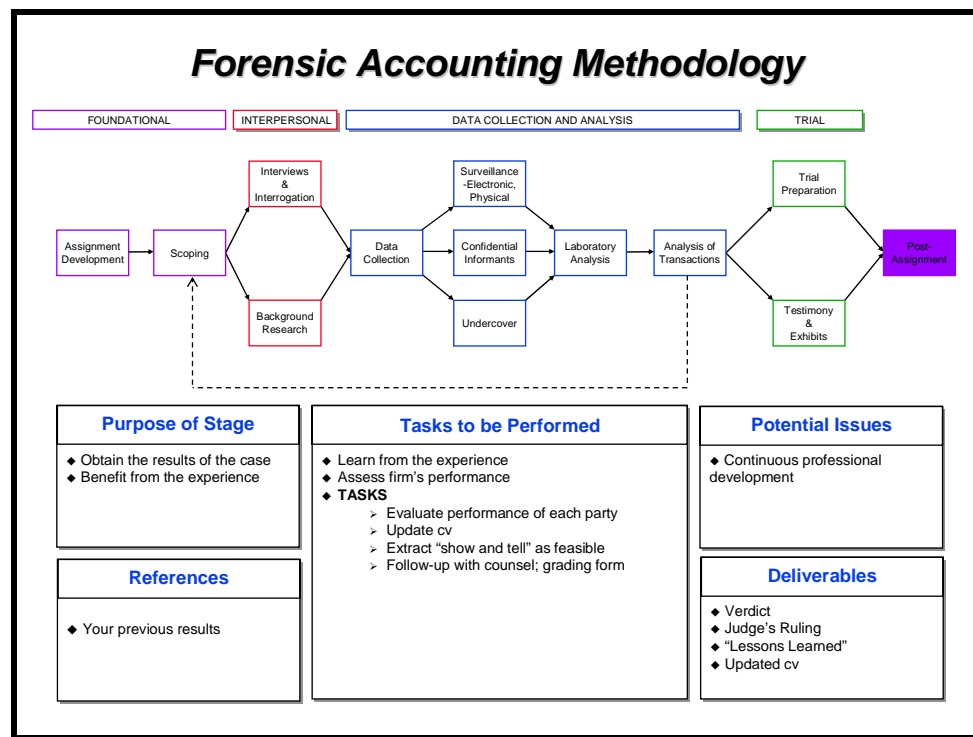
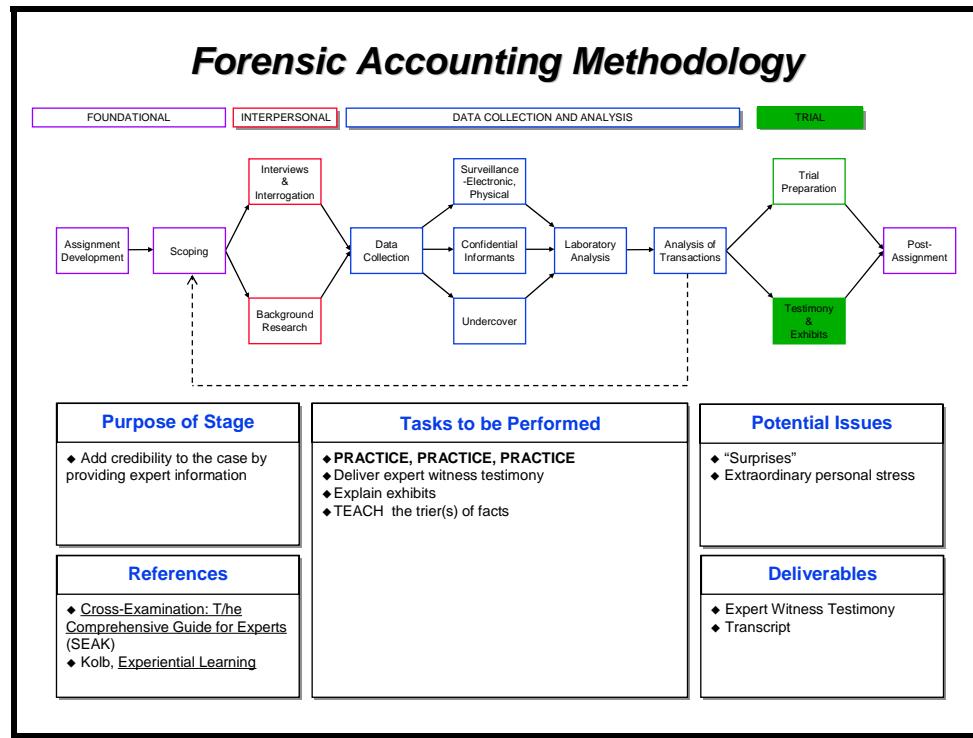
“Gap” Analysis- No example provided; see strategic planning references.



Reperform- The forensic investigator may *reperform*, sometimes on a test basis, procedures performed by employees, primarily to determine that a transaction was accurately recorded. Reperformance of computations, such as a bank reconciliation, also provides some assurance about the existence of the account balance, and solidifies a reference point for further investigation. If judgment drives the basis of a computation, such as in the valuation of accounts receivable, the forensic investigator reperforming the computation also should understand, evaluate and apply the reasoning process underlying the judgment.

Reverse Proof- Reverse Proof. The examination of forensic investigation matters is approached from two perspectives: (1) that a fraud (or other deceit) has occurred, the proof must include attempts to prove it has not occurred; (2) that a fraud has not occurred, that proof must also attempt to prove it has occurred.

The reason for reverse proof is that both sides of fraud must be examined. Under the law, proof of fraud must preclude any explanation other than guilt.



FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
Foundational Phase: <i>This phase consists of assembling and preparing baseline output that will support and drive the investigation. The output will be continuously updated to provide a current record and status of the progress of investigation.</i>								
Full-and-false inclusion	<p><i>Full-and-false Inclusion</i> tests are used to determine the appropriate “universe” of data under investigation. This ensures that no extraneous data is included, and that no appropriate data is excluded.</p> <p>These types of tests are particularly useful for finding unreported assets. Also, this technique can/should be <u>used throughout</u> the various stages.</p>	X				X	X	X
Genogram	<p>A <i>Genogram</i> is a visual representation of the myriad of information gathered during Background Research, Interviews and Surveillance. It is often prepared in conjunction with <i>Events Analysis</i> output.</p> <p>It provides a common perspective for the forensic investigator to demonstrate patterns of behavior and identify other entities and parties meriting further investigation. Also, it can point to key indicators of the subject’s behavior, leading to additional points of investigation.</p>	X	X	X	X	X		
Entity(s)/Party(s) chart	<p>An <i>Entity(s)/Party(s) Chart</i> is a visual representation depicting entity(s) or party(s) identification, and the associations among them. It is often prepared in conjunction with <i>Events Analysis</i> output.</p> <p>Entity(s)/Party(s) charts can be useful predictors of funds diversion. For example, identifying the formation date of an off-shore entity may be compared to funds decline, thus substantiating diversion. Also, identifying seemingly unrelated parties can indicate where further investigation is potentially warranted.</p>	X	X	X	X	X		

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (KEY INCREMENTAL FINDINGS IN BLUE)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
Background investigation	<i>Background Investigation</i> first involves research (typically electronic, but also surveillance) into a party's identity to identify other assets that may have been "forgotten" about. The results are continuously updated to provide a comprehensive record of information about the target.	X	X	X	X	X		
Interpersonal Communications Phase: <i>This phase consists of Interviews, Interrogation, Surveillance, Undercover and the related activities necessary to extract pertinent information from/about the entity(s)/party(s).</i>								
Distance communication	<p><i>Distance Communication (or Proxemic Communication)</i> consists of comparing and contrasting the interpersonal distance involved in query responses.</p> <p>It has been suggested that (even subtle) movements away from an interviewer indicate avoidance, and thus merit additional investigation. Movements toward an interviewer can suggest a desire to be believed and/or a desire for assistance, such as a request for the interviewer to delve further into the matter.</p> <p>Note that cultural differences have a significant impact on interpersonal distance. For example, the "socially acceptable" distance in the US when 2 adults are communicating (while standing) is 18 to 24 inches. European norms are much closer.</p>	X					X	X
Kinetic Communication	<p><i>Kinetic Communication</i> consists of observing bodily reactions to determine where additional investigation is warranted.</p> <p>It has been suggested that a person who averts his/her eyes to the right prior to responding may be lying. Alternatively, it has been suggested that averts his/her eyes to the left prior to responding may be recalling a memory. For example, it is well documented that when lying (and when</p>	X					X	X

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (KEY INCREMENTAL FINDINGS IN BLUE)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
	passionate about a subject), blood flow increases to the subject's head and neck area, thus providing a "flush" that may warrant further investigation.							
Paralinguistic Communication	<i>Paralinguistic Communication</i> consists of analyzing the volume, pitch and voice quality during verbal communication. Oral communication provides for a range of nonverbal accompaniment that can be used to convey certain emotions which may not be as easily discerned in written communication.	X					X	X
Expectations-based statement analysis	<i>Expectations-Based Statement Analysis</i> consists of analyzing the language used by subject during interviews to assess his/her truthfulness. For example, the reply "I don't remember" may require further investigation while the reply "I don't know" may indicate that no further inquiry is necessary.				X	X	X	
Data Collection and Analysis (Indirect) Phase: <i>This phase consists of applying the various indirect quantitative and qualitative data obtained during the earlier phases and developing output supporting observations, thus arriving at an appropriate conclusion(s). If such efforts prove inconclusive, the next phase – Direct Analytical and Conclusion Phase will provide additional evidence.</i>								
Records-based expectations	<i>Records-Based Expectations</i> consists of identifying the nature, form, extent, veracity, availability and related elements of record keeping in order to set expectations about the entity(s)/party(s). For example, an entity handling a large sum of money from numerous investors would be expected, at a minimum to have in place very sound management and internal controls that provide solid foundation to the representative financial statements. Examples of the minimum types of records in such a case include the general ledger, receipts ledger, cost and		X	X			X	X

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
	expense ledgers, detailed shareholder records, comprehensive financial statements, current income tax returns, and related elements.							
Common-sizing	<p><i>Common-Sizing</i> consists of converting all financial statement items to a percentage of revenue and assets, and then comparing the results within and among one another over a multi-period time horizon.</p> <p>This method also accommodates a comparison to similar businesses that may be a much different size. Bar graphs and line charts are useful to identify key variations warranting further investigation.</p>		X				X	X
Horizontal analysis	<p><i>Horizontal Analysis</i> consists of comparing key account categories, such as officer compensation, travel and entertainment, etc. over a multi-period (e.g., year, quarter, month, day) time horizon to identify changes meriting further investigation.</p> <p>The technique typically includes percentage changes, dollar changes, comparison changes, etc. Also, bar graphs and line charts are useful to identify key variations warranting further investigation.</p>		X				X	X
<i>Reasonableness testing</i>	<p>In <i>Reasonableness Testing</i>, the forensic investigator formulates an expectation, (i.e. estimate) of an account balance based upon understanding and assumptions driving the account balance.</p> <p>For example, a reasonableness test of deposits could measure the actual deposits against the expected deposits could identify where further investigation is warranted.</p>				X		X	X
Data Collection and Analysis (Direct) Phase: <i>This phase can follow the Indirect Phase, or be executed either jointly with, or independent of the Indirect Phase. The evidence provided by this Phase is, by definition the most comprehensive, but is not necessary in every case.</i>								

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
Benford’s Law	<p><i>Benford’s Law</i> is a financial “DNA-equivalent” technique developed during the 1920s by Frank Benford, a physicist at General Electric research laboratories. He noted that the first few pages of logarithm table books were more worn than the later pages. In those days, logarithm table books were used to accelerate the process of multiplying 2 large numbers by summing the log of each number and then referring to the table for the requisite integer.</p> <p>Benford’s Law states that digits and digit sequences in a dataset follow a predictable pattern. The technique applies a data analysis method that identifies possible errors, potential fraud or other irregularities. For example, if artificial values are present in a dataset the distribution of the digits in the dataset will likely exhibit a different shape (when viewed graphically), than the shape predicted by Benford’s Law.</p>						X	X
Statement Analysis (Written)	In <i>Statement Analysis (Written)</i> investigators examine written documents in a manner similar to the Statement Analysis (Verbal) as described above. However, analyzing written documents focus on the words <u>and</u> the nature of the document, including the age, condition, and related physical document factors.							
Accept-reject testing	<p><i>Accept-Reject Testing</i> is similar to sampling, but differs since sampling involves the projection of a misstatement amount and accept-reject testing does not.</p> <p>For example, “accepts” that the testing criteria have been met, or “rejects” that the testing criteria have not been met. If a “reject” occurs, additional testing may be carried out depending upon materiality and other considerations.</p>						X	K

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
	Following are some examples of accept-reject applications when the projection of a misstatement amount is not practicable:							
Stratified Mean per unit (MPU)	<p>A <i>Stratified Mean-Per-Unit (MPU)</i> technique can improve the precision of the mean-per-unit technique without increasing the sample size. The technique uses stratification of the population and samples each stratum separately.</p> <p>By stratification, the forensic investigator segments the population into groups of items exhibiting similar value amounts.</p> <p>Once mean and standard error in each stratum are calculated, the results are combined for the individual strata to create an overall estimate. The first few strata reduce the necessary sample size, but diminishing returns and certain other factors result in from 3 to 10 strata as sufficient in many cases.</p>						X	X
Attributes Sampling	<p><i>Attributes Sampling</i> is used to specifically identify occurrences that fall within and/or outside of previously established norms. It can be applied either globally and/or statistically using sampling techniques.</p> <p>Its most common use in forensic investigation is to test the rate of deviation from a prescribed (or expected) control perspective to support the forensic investigator's assessed level of assurance.</p> <p>In attributes sampling <u>each</u> occurrence of, or deviation from, a prescribed control perspective is given equal weight in the sample evaluation, regardless of the dollar amount of the transactions.</p> <p>In addition to tests of controls, attributes sampling may be used for substantive procedures, such as tests for under-recording inter-bank cash</p>						X	X

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
	<p>transfers or demand deposit accounts. However, if the audit objective is to obtain evidence directly about a monetary amount being examined, the forensic investigator generally designs a variables sampling application, described below.</p> <p>Substantive tests consist of tests of details of account balances and related transactions, and analytical procedures. They are intended to gather evidence regarding the validity/appropriateness of the treatment of transactions. Generally, such tests are performed in combination during investigation.</p>							
Ratio estimation; or extrapolation	<i>Ratio Estimation (sometimes Extrapolation)</i> is often used in connection with <i>Variables Sampling</i> , and can estimate (on a statistically significant basis) the projected results based upon analytical sampling via "Probability-Proportional-to-Size Sampling."						X	X
Reperform	<p>The forensic investigator may <i>reperform</i>, sometimes on a test basis, procedures performed by employees, primarily to determine that a transaction was accurately recorded. Reperformance of computations, such as a bank reconciliation, also provides some assurance about the existence of the account balance, and solidifies a reference point for further investigation.</p> <p>If judgment drives the basis of a computation, such as in the valuation of accounts receivable, the forensic investigator reperforming the computation also should understand, evaluate and apply the reasoning process underlying the judgment.</p>						X	X
Reverse proof	<i>Reverse Proof.</i> The examination of forensic investigation matters is approached from <u>two</u> perspectives: (1) that a fraud (or other deceit) has occurred, the proof must include attempts to prove it has not occurred; (2) that a fraud has not occurred, that proof must also attempt to prove it has						X	X

FORENSIC TECHNIQUE	DEFINITION/DESCRIPTION (<i>KEY INCREMENTAL FINDINGS IN BLUE</i>)	DATA COLLECTION					DATA ANALYSIS	
		I&I	BR	EP	CI	UC	LA	AT
	<p>occurred.</p> <p>The reason for reverse proof is that both sides of fraud must be examined. Under the law, proof of fraud must preclude any explanation other than guilt.</p>							
<p>Trial Phase: <i>This Phase is perhaps the most critical and is highly experience dependent. Selected examples of actual (blinded and redacted) trial exhibits follow in order to provide the practitioner with illustrations of exhibits that have proven successful.</i></p>								
	<p>The following example Deliverables have all been successfully used in a wide variety of civil and criminal matters, and are offered to the reader as immediately applicable tools.</p>							

I. APPENDIX

The following Deliverables are actual examples of trial exhibits. They include:

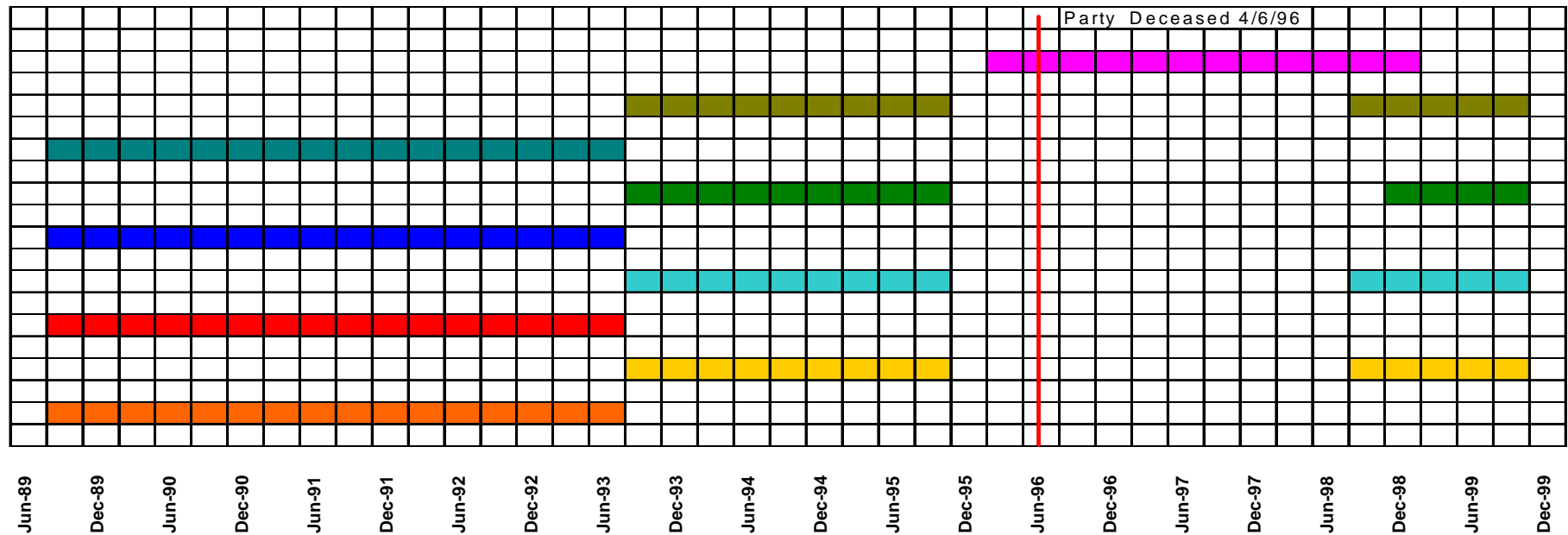
- ❑ **Deposition Matrix** – A tool developed by forensic accountants and provided to their attorney-clients as they depose respective parties.
- ❑ **Missing Documents Chart** – This “Document Gaps” tool was used to illustrate the opposition’s lack of compliance with discovery requests.
- ❑ **Damages Risk Assessment** – This document was used to illustrate the Low, Medium and High-risk elements of damages in litigation.
- ❑ **Empirical Results** – This narrative was used in a securities fraud matter to demonstrate the application of statistical methods, including Benford’s Law.
- ❑ ***alter ego* “Scorecard”²⁵** – This tool represents a facile means of conveying *alter ego* concepts to triers of fact.
- ❑ **Fraudulent Conveyance Accounting** – This tool illustrates a method of illustrating the accounting flows of a fraudulent conveyance transaction.
- ❑ **Entity Chart** – This tool indicates a method of demonstrating the complexities of a multi-entity company.
- ❑ **Time Series** – This tool demonstrates a simple means of illustrating declining financial results.
- ❑ **Objective Correlative/Dialectic Environment** – This tool illustrates a facile means by which to compare your superior analysis to the opposition.

²⁵ Dorrell, Darrell D., and Kosydar, Christine A., *Alter Ego Diagnosis to Find Potentially Hidden Assets in Divorce Cases*, The American Journal of Family Law, (Vol. 18. No.4, 2004).

DEPOSITION MATRIX		
CATEGORY OF INQUIRY	SPECIFIC QUESTIONS	COMMENTS/CLARIFICATIONS
Educational and Professional Background	<p>What is your formal education?</p> <p>Professional affiliations and certifications?</p> <p>Employment history, etc?</p> <p>What type of services do you (and your firm) provide?</p> <p>Do you practice in a particular area such as corporate taxation, individual taxation, assurance services (i.e. audits and reviews), etc.?</p>	<p>Obtain accountant's educational and experiential background.</p> <p>Also determine what type of services Mr. Deponent and/or his firm provide.</p> <p>This should help us assess the reliability of the accounting data.</p>
Identification of Client and Services Provided	<p>Who is client? Entities? Individual shareholders/members (Defendants and/or Defendants)? Both?</p> <p>Have you prepared income tax returns?</p> <p>Have you prepared audits, reviews or compilations?</p> <p>Do you provide bookkeeping services on a periodic basis?</p> <p>Do you provide advisory services?</p> <p>Do you assist in preparation of payroll and related filings?</p> <p>Do you keep engagement letters for all of your clients? If so, do you have an engagement letter for Entity #3, Entity #4, Entity #1, and/or the Defendants? If not, why?</p>	<p>Determine whom Mr. Deponent is serving and establish baseline for questions to be asked. If Deponent merely prepared tax returns for the entities, then he may not be as intimate with the corporate accounting.</p> <p>If Deponent prepared audits or provided periodic bookkeeping services, then he should be very familiar with the accounting and reporting for each entity. There appears to be evidence that he, at a minimum, provided some form of bookkeeping services to Entity #1.</p> <p>If Mr. Deponent provided any type of advisory or consulting services, he may be familiar with the incorporation of each entity. He may have even provided advice regarding the incorporation of Entity #1, etc.</p>

DEPOSITION MATRIX		
CATEGORY OF INQUIRY	SPECIFIC QUESTIONS	COMMENTS/CLARIFICATIONS
Accounting Adjustments	<p>Do you make year-end adjustments to client's accounting records?</p> <p>What are some of the major reoccurring adjusting entries?</p> <p>What is your opinion of the internal accounting records as prepared by the client?</p> <p>Are there expenditures that are personal in nature? If so, how are these handled for income tax purposes?</p>	<p>These questions apply to all entities (Entity #4, Entity #6 and Entity #1).</p> <p>Determine reliability of internal accounting records.</p> <p>It is evident from the source documents that the Defendants and Defendants have consistently used corporate assets for personal purposes. These expenditures would be non-deductible in nature and should be treated as shareholder distributions or compensation.</p>

Example Corporation
Document GAPS

**Cancelled Checks**

Bank of Willamette
First Security

**Check Stubs**

Bank of Willamette
First Security

**Bank Statements**

Bank of Willamette
First Security

**Deposit Slips**

Bank of Willamette
First Security

**Tax Returns**

Multi-Family Units v. City in OR
Analysis of Retrofit Costs
Recalculation

Item	Comments	Original	Restated		Risk Assessment			Proposed Amount
		Total	Direct	Indirect	Low	Medium	High	
Re-Engineering and Inspection:								
Engineering inspection and transportation -								
Merrit & Harris through 8/15/97	see note 1	23,261.02	13,697.88		13,697.88			13,697.88
Carlson Testing		500.00	500.00		500.00			500.00
Louis Construction - consulting	no support	270.00	-		-			-
ESS Engineering		13,105.00	13,105.00		13,105.00			13,105.00
Subtotal		37,136.02	27,302.88	-	27,302.88	-	-	27,302.88
Hard Construction Costs:								
Louis Construction		95,814.00	95,814.00		95,814.00			95,814.00
Louis Construction - hold down installation	see note 2	22,875.00	22,875.00			22,875.00		22,875.00
Louis Construction - generator rental		381.45	381.45		381.45			381.45
Van's Concrete		70,810.00	70,810.00		70,810.00			70,810.00
Big Al's Construction - shear walls		37,560.83	37,560.83		37,560.83			37,560.83
Big Al's Construction - epoxy paint strips		8,475.00	8,475.00		8,475.00			8,475.00
Wilcott Landscape Co. - irrigation/landscape		8,880.00	8,880.00		8,880.00			8,880.00
Northwest Door - minor replacement		2,396.08	2,396.08		2,396.08			2,396.08
Partners by Design - clubhouse blinds	see note 3	460.00	460.00			460.00		460.00
Alpine Windows		336.58	336.58		336.58			336.58
Refuse disposal/dumpsters	no support	5,167.60	-		-			-
Pressure washing - cleaning		787.50	787.50		787.50			787.50
Transportation and mileage		79.70	79.70		79.70			79.70
Portable toilets for workmen		488.30	488.30		488.30			488.30
Repair/repaint - various/miscellaneous		1,535.45	1,535.45		1,535.45			1,535.45
Moving cost of furniture		1,795.50	1,795.50		1,795.50			1,795.50
Cleaning service - carpets/apartments		3,660.00	3,660.00		3,660.00			3,660.00
Interior decorator services - Alice Boczkaj	see note 4	1,717.77	1,717.77			1,717.77		1,717.77
Hardware/structural materials/lumber/tools		16,566.23	16,566.23		16,566.23			16,566.23
Office expenses - film/developing/etc.		238.16	238.16		238.16			238.16
Off-site supervision/administration	see note 5	34,850.18		31,459.86		31,459.86		31,459.86
Onsite supervisor (see attached)	see note 6	25,498.22	23,686.47			23,686.47		23,686.47
Contractors profit & overhead - 15% on								
above (X \$330,003.88)	see note 7	51,056.03	49,500.58				49,500.58	49,500.58
Subtotal		391,429.58	348,044.60	31,459.86	249,804.78	80,199.10	49,500.58	379,504.46

Financing Costs:

Delay in closing of permanent loan of \$9,750,000

(A) Delay in issuing structural engineering report (14 days)

(B) Delay in closing (25 days)

Total of 39 days delay at 10% interest

10% - 7.75% = 2.25%

see note 8

23,440.07

23,440.07

23,440.07

23,440.07

Interest loss on escrowed funds for structural

defects (\$100K X 8% X 224/365, from

12/27/96 thru 8/27/97 and still counting

@ \$27.40/day)

see note 9

6,684.94

4,909.59

4,909.59

4,909.59

Interest on cost of retrofit (12/27/96 - 3/31/98)

Engineering cost \$37,136.02

Hard cost of construction 391,429.58

Rent/management fee/loss ~~172,789.60~~

Total \$602,400.45

Interest rate of funds borrowed 10%

see note 10

15,756.70

-

-

-

Subtotal

45,881.71

-

28,349.66

-

23,440.07

4,909.59

28,349.66

Rental Loss/Concession Granted: (through 10/24/97)

Itemized list (see attached)

74,905.00

74,905.00

74,905.00

74,905.00

12 garages used for storage X \$75 for 3.5 months

3,150.00

3,150.00

3,150.00

3,150.00

Wasted bonuses paid to Rental Reps

4,045.24

-

-

Rent Increase Postponement

see note 11

3,760.00

3,760.00

3,760.00

3,760.00

Slow Down in Rent Up

3 leases per week for 4 months - 52 apts at avg.

no support

rent of \$756 avg. rent loss of 2 months

see note 12

78,624.00

-

-

-

Advertising Loss

Jan - May (5mos); \$21,654/5 = \$4,331/mo avg.

X 4 months = \$17,324 X 30%

see note 13

5,197.20

-

-

-

Lost Management Fees

4% on all lost rent above

see note 14

7,153.40

3,272.60

3,272.60

3,272.60

Subtotal

176,834.84

78,055.00

7,032.60

74,905.00

3,150.00

7,032.60

85,087.60

Lost Profits from failure to achieve rent-up

193,852.00

-

-

-

Grand Total Retrofit/Re-Engineering Loss

845,134.15

453,402.48

66,842.12

352,012.66

106,789.17

61,442.77

520,244.60

L. EMPIRICAL RESULTS

The following Findings and Observations derived from empirical analysis that provided objective conclusions. They do not necessarily comprise the universe of findings, but are sufficiently illustrative for the Court's consideration in order to reach conclusions consistent with the Party.

- ❑ **Benford's Law** – The results of Benford's Law is explained in this section of the Report. Benford's Law is the DNA-equivalent technique for financial analysis of financial datasets. The results of the Benford's Law analysis clearly indicate that a significant portion of XYZ's financial dataset contains artificial numbers. The artificial, or contrived, numbers are evidenced by the vast amount of duplicative and rounded entries.
- ❑ **Numeric Tests** – The Numeric Duplication Test and the Rounded Numbers Test are two additional tests that can be performed on numeric data sets. The Numeric Duplication Test is designed to identify abnormal duplications of certain numbers. The Rounding Test is designed to identify abnormal occurrences of rounded numbers and multiples. Due to the crossover apparent during the initial testing, the two tests were performed simultaneously. The results of these numeric tests are detailed in this section of the Report.
- ❑ **Velocity of Funds** – The velocity of funds through XYZ was very high, thus funds received by XYZ, e.g. from Investors was rapidly used, e.g. expenses and thus flowed out of XYZ very quickly. Such observation is further supported by related findings, including:
 - ❑
 - Interest Income was very low relative to the funds flowing through XYZ. Specifically, XYZ recorded only \$3,910 in Interest Income for the 6 years of its existence, despite handling more than \$100,000,000 in cash inflows from all sources.
 - ❑
 - Hundreds of NSF Checks – XYZ paid hundreds of NSF overcharges through its numerous bank accounts during the 6 years of existence, despite handling more than \$100,000,000 in cash inflows from all sources. This indicates that insufficient time and attention was devoted to basic financial record keeping that could have avoided such charges.

1. Benford's Law

Benford's Law is an analytical technique identified in the late 1800s and developed during the 1920s by Frank Benford, a physicist at General Electric research laboratories. He noted that the first few pages of logarithm table books were more worn than the later pages. In those days, logarithm table books were used to accelerate the process of multiplying 2 large numbers by summing the log of each number and then referring to the table for the requisite integer.

Benford's Law states that digits and digit sequences in a dataset follow a predictable pattern. The technique applies a data analysis method that identifies possible errors, potential fraud or other irregularities. For example, if artificial values are present in a dataset the distribution of the digits in the dataset will likely exhibit a different shape

(when viewed graphically), than the shape predicted by Benford's Law. Benford proved his theory by using 20 lists containing 20,229 numbers, and produced the statistical array that is still applied today.

The technique counts digit sequences of values in the dataset (21,238 payment records) and compares the totals to the predicted result according to Benford's Law. Non-zero digits are counted from left to right.

Despite its origin in the 1920s, Benford's Law was not recognized as an effective tool for audit and fraud analysis until the late-1990s. Based upon our analysis of XYZ's financial dataset it matches the data conformity necessary to apply Benford's Law as summarized below:

- ❑ The data set represents the sizes of similar phenomena.
- ❑ The data set must preclude built-in minimum or maximum values.
- ❑ The data set does not represent assigned numbers.

The analysis of the output is based upon 4 Major Digital Tests. The output of the tests and resultant conclusions using XYZ's financial dataset are presented below.

a) Results of Applying Benford's Law

Based upon the analysis of Benford's Law applied against 100% of the foundational transaction entries within XYZ it is clear that the transactions failed all 4 tests: First Digit, Second Digit, First Two Digits and First Three Digits. The implications of the failures lead to the following observations:

- (1) A significant proportion of XYZ's foundational transaction data appears to be contrived.
- (2) A significant proportion of XYZ's transactions containing "rounded" numbers appears to be excessive.

b) Major Digital Tests

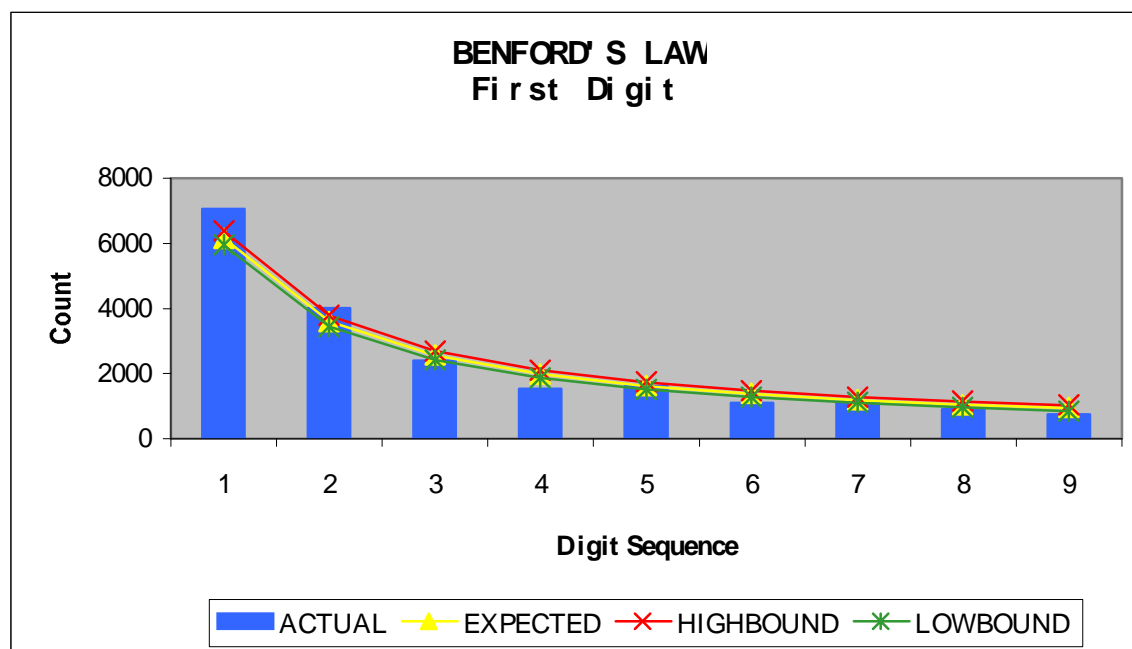
The digital analytical tests applied through Benford's Law are comprised of the following:

- ❑ **First Digits Test** - The first Major Digital Test is a test of the first digit proportions, a test for reasonableness. The first digit of a number is the leftmost digit with the understanding that the first digit can never be a zero. For example, the first digit of 7,380 is "7."
- ❑ **Second Digits Test** - The second Major Digital Test is a test of the second digit proportions, also a test for reasonableness. The second digit of a number is likewise determined by its placement within the number, thus the second digit of 7,380 is "3."

- ❑ **First 2 Digits Test** – This test is more focused than the 2 preceding tests and uses the first 2 leading digits, again excluding zeros. For example, the first 2 digits of 7,380 are “73” and the first 2 digits of 0.07380 are also “73.” There are 90 possible first-two digit combinations: 10 to 99 inclusive. This test finds anomalies in the data that are not readily apparent from either the first or second digits seen on their own.
- ❑ **First 3 Digits Test** – This test focuses on the 900 possible first 3 digit combinations: 100 to 999 inclusive. This highly focused test indicates abnormal duplications.

2. First Digits Test

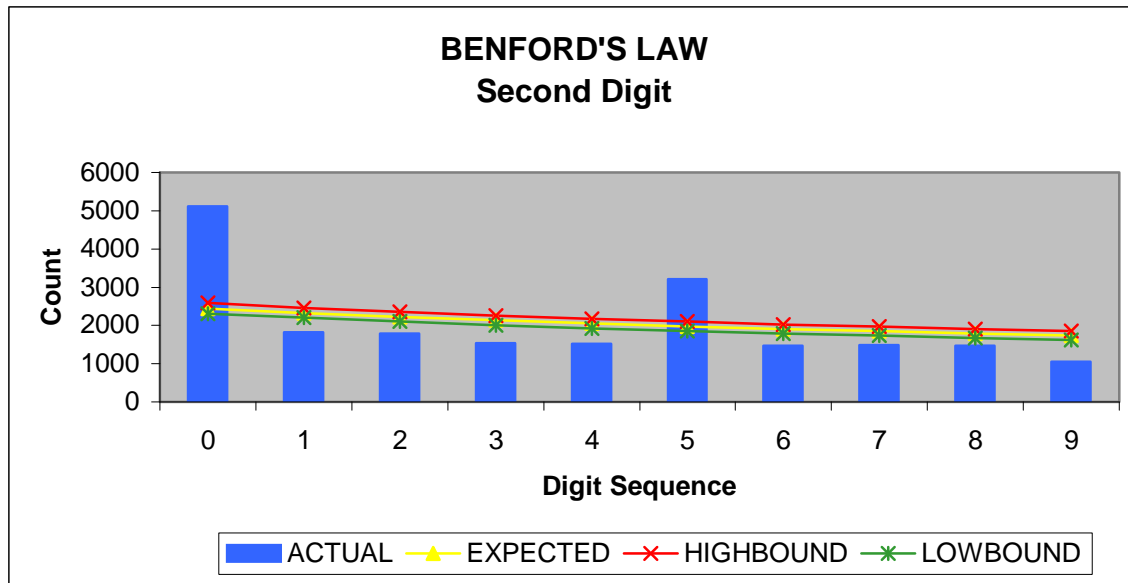
The results of the First Digit Test are indicated by the graph below. Applying the testing criteria indicates that the variations from the predicted norm suggest that anomalies exist throughout XYZ’s financial dataset



The preceding graph indicates (among other observations) that the numbers “1” and “2” both exceed the expected counts by 14% and 11%, respectively. Additionally, the numbers “4” and “6” fall below the predicted limit, thus suggesting that anomalies exist within XYZ’s financial dataset.

3. Second Digits Test

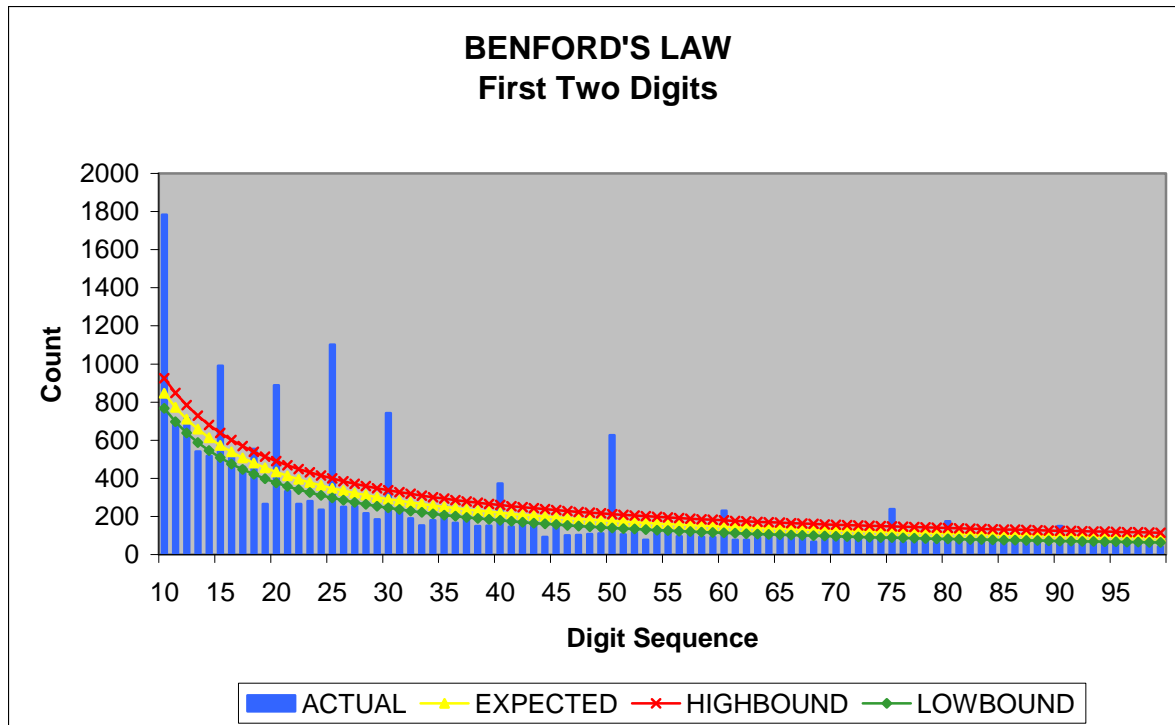
The results of the Second Digit Test are indicated by the graph below. Applying the testing criteria indicates that the variations from the predicted norm suggest that anomalies exist throughout XYZ’s financial dataset



The preceding graph indicates (among other observations) that the numbers “0” and “5” both exceed the expected counts by 110% and 61%, respectively, thus suggesting that anomalies exist within XYZ’s financial dataset. For example, an inordinately large amount of payments contained “0” or “5” as a second digit such as 10,000 or 15,000.

4. First 2 Digits Test

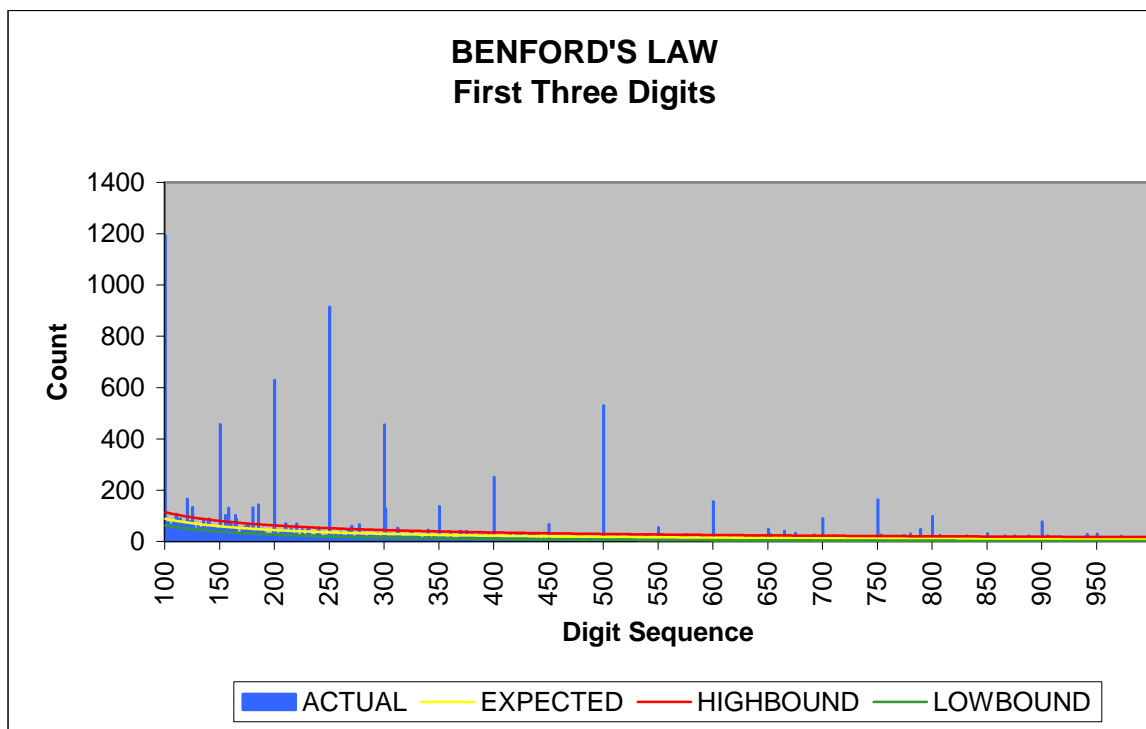
The results of the First 2 Digits Test are indicated by the graph below. Applying the testing criteria indicates that the several significant variations from the predicted norm suggest that anomalies exist throughout XYZ’s financial dataset.



The preceding graph indicates (among other observations) that the numbers “10”, “15”, “20”, “25”, “40” and “50” all exceed the predicted limit, thus suggesting that anomalies exist within XYZ’s financial dataset.

5. First 3 Digits Test

The results of the First 3 Digits Test are indicated by the graph below. Applying the testing criteria indicates that the several variations from the predicted norm suggest that anomalies could occur throughout XYZ’s financial dataset.



The preceding graph indicates (among other observations) that the numbers “100”, “200”, “150”, “250” and “500” all exceed the predicted limit, thus suggesting that anomalies exist within XYZ’s financial dataset.

6. Numeric Tests

The Numeric Tests are comprised of 2 key examinations, e.g. a Numeric Duplication Test and a Rounded Numbers Test. Once any significant duplication has been identified, meaningful inferences can be drawn through further investigation.

The Numeric Duplication Test is used to identify abnormal recurrences of specific numbers. The objective is to draw attention to small groups of numbers that appear to be unusual.

The Rounded Numbers Test operates on the same premises as the Numeric Duplication Test. However, the objective is to identify abnormal recurrences of *rounded* numbers. Abnormal recurrences of rounded numbers are good indicia of estimation since people tend to estimate when they create contrived numbers.

a) Results of Applying Numeric Tests

The Numeric Tests were both applied against 100% of XYZ’s foundational transaction entries. The implications of the results lead to the following observations:

- (1) There appears to be significant duplication of numbers.
- (2) There appears to be significant use of rounded numbers.

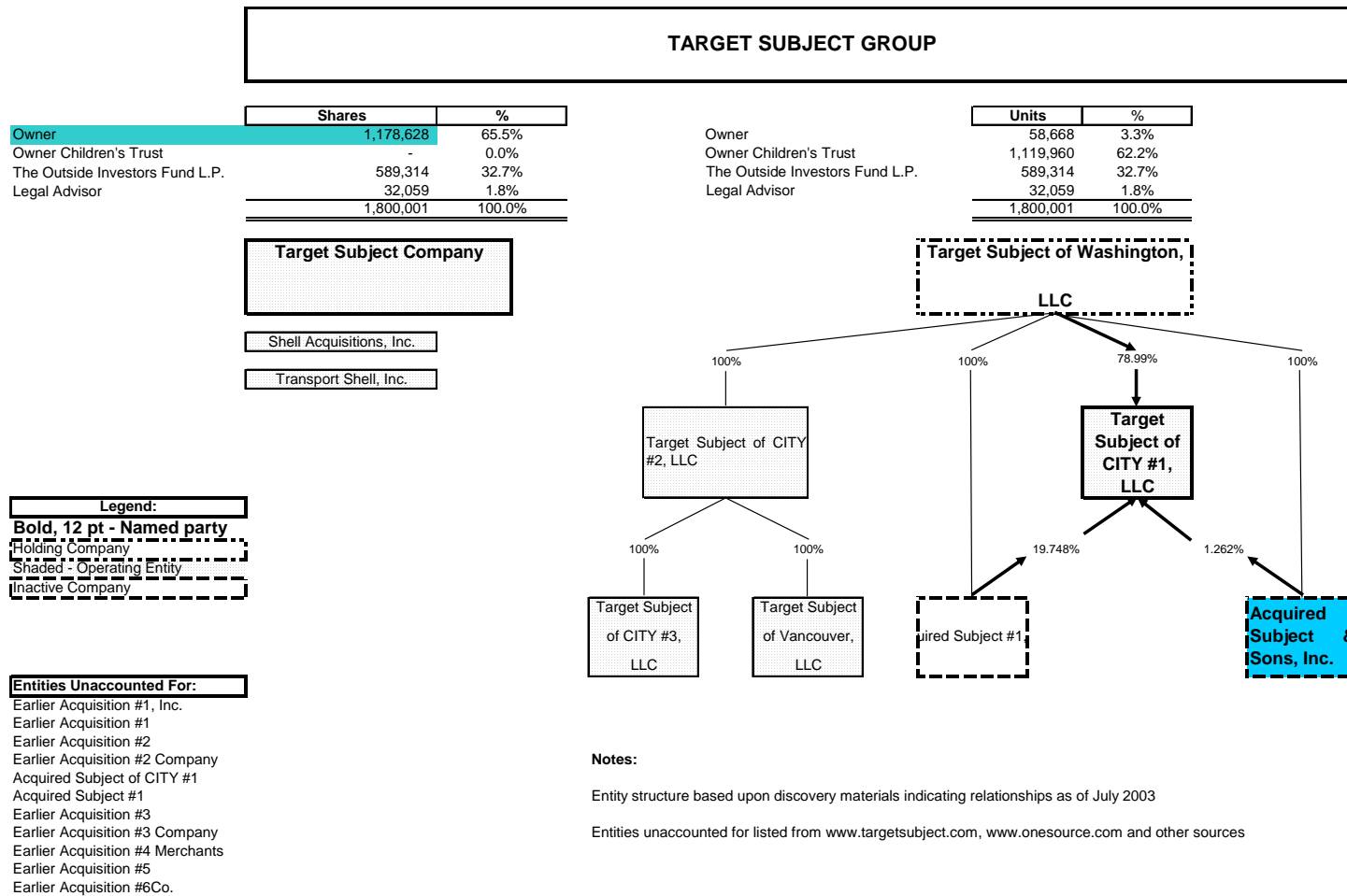
The results for both tests have been presented in a combined format on the following page. Only the numeric duplications deemed significant have been presented.

Presented below are some of the findings and observations resulting from the numeric tests and further investigation into the same.

- ❑ Many of the debits for \$10, \$15, \$20, \$25, \$30, \$40 and \$50 are bank charges. A large sum of these bank charges are NSF fees, wire transfer fees and cashier check fees. From this we can derive that XYZ lacked the capability to manage its cash flows, as illustrated by the amount of NSF fees, and that XYZ transacted numerous wire transfers and cashiers checks.
- ❑ Upon further analysis, it was determined that many of the rounded transactions were cash withdrawals. In some cases, the withdrawals included the bank transaction fee. For example, there are 111 transactions for \$301.50. The composite of most of these transactions are a \$300 withdrawal with a \$1.50 ATM fee. Note that \$300 had been the ATM withdrawal limit established by many financial institutions.
- ❑ Many of the larger rounded numbers are actually inter-company bank transfers. It was commonplace for the individuals in charge to transfer large sums of money between the various corporate accounts.
- ❑ Such transactions are not necessarily unusual, but upon closer examination of these transactions, it is apparent that there was a lack of planning and accountability pertaining to these transfers. Further, since there were never any check registers kept for any of the entities, the corporate finances were coordinated through the balances in the bank.
- ❑ In some instances, the number of duplicate transactions for an amount may not be deemed significant. However, the aggregate value of these transactions has made them noteworthy. For example, there are only two transactions for \$700,000 totaling \$1,400,000. The aggregate value of these transactions is slightly less than one percent of all debit transactions for the company.
- ❑ There were four transactions for \$1,000,000. Three of these transactions were payments in accordance with the UNNAMED acquisition. The remaining transaction was a wire transfer to a former Defendant employee. The Party is currently investigating the underlying purpose of this and other related wire transfers.

[illegible]

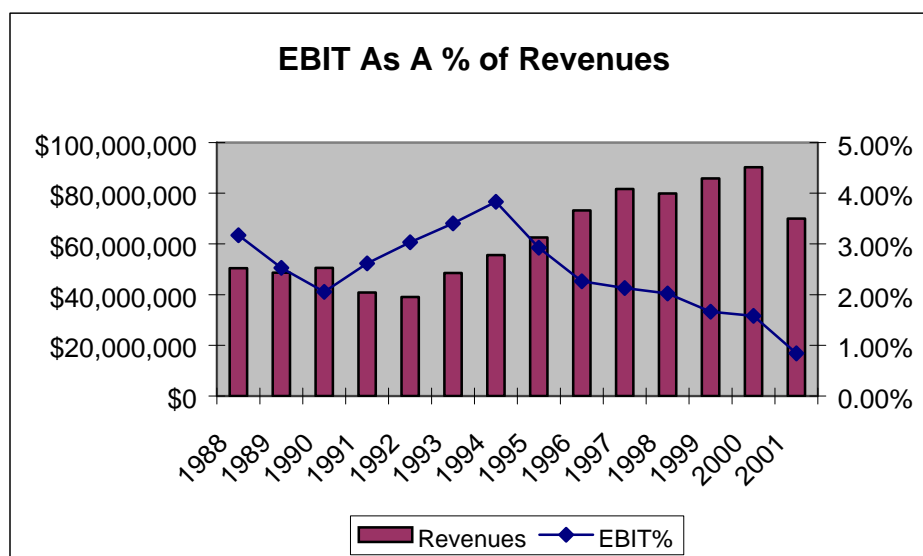
2011 - 2007 financialforensics®
2011.v1

**Notes:**

Entity structure based upon discovery materials indicating relationships as of July 2003

Entities unaccounted for listed from www.targetsubject.com, www.onesource.com and other sources

M. TIME SERIES



(i) OBJECTIVE CORRELATIVE/DIALECTIC ENVIRONMENT

EOY (majority) Board members and ESOP Trustees adopted a revised valuation conclusion that failed to consider readily available empirical data, and did not apply accepted valuation methodology (in addition to opining on the incorrect “as of” date).

Specifically, an abundance of empirical (and comparable) market data²⁶ that was readily available for consideration (as of October 29, 1998) would have significantly increased confidence in the valuation approach and result. For example, contrast the highlights of EOY’s revised valuation report to this report for a summarized comparison of the key differences:

Category	Considered		Applied	
	EOY	This Report	EOY	This Report
Guideline Transactions	6	214	3	66
Total Methods	2	19	2	10
Sources Utilized	1?	17	1?	15
Income Methods	2	3	1	2

Obviously, the foregoing point does not infer that the sheer abundance of data and techniques should prevail when a valuation decision is required. However, it is indicative of the extent of due diligence that should and could be exercised and applied, which is essential in any valuation, but perhaps more so in an ESOP valuation due to the fiduciary responsibility of the Board and Trustees.

²⁶ e.g. public stock prices, public mergers/acquisitions, private sale indicators, published sources of engineering firm sales, etc. from Internet, print media and published databases widely available to appraisers.

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Forensic Accounting Academy™

PPTs

Day One



CONSULTANTS' TRAINING INSTITUTE

1111 Brickyard Road, Suite 200, Salt Lake City, Utah 84106
P: (801) 486-0600 www.nacva.com

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"What Your Clients Think You Know About Forensic Accounting®"

Forensic Accounting/Investigation Methodology FA/IM®
Version 812.08SD

The "Combat CPA®" Series...

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Contributing Authors and/or Instructors

- **Thomas F. Burrage** CPA/ABV, CVA, DABFA
Burrage & Johnson, CPA's, LLC – Albuquerque, NM
- **Darrell D. Dorrell**, CPA/ABV, MBA, CVA, ASA, CMA, DABFA
financialforensics* – Lake Oswego, OR
- **Gregory A. Gadawski**, CPA/ABV, CVA, CFE, CIRA
financialforensics* – Lake Oswego, OR
- **Miles Mason, Sr.** JD, CPA
Crone & Mason, PLC – Memphis, TN
- **Dr. Diane A. Matthews**, CPA, CFE
Carlow University – Pittsburgh, PA
- **Patricia A. Perzel**, CPA, CVA, CFFA, CFD
Perzel & Lara Forensic CPA's, P.A. – Clearwater, FL
- **Gabriel H. Shurek**, Manager
Gettry Marcus Stern & Lehrer, CPA, P.C. – Woodbury, NY
- **Mark S. Warshavsky**, CPA/ABV, MBA, CVA, CBA, CFE, DABFA, CFFA
Gettry Marcus Stern & Lehrer, CPA, P.C. – Woodbury, NY
- **Paul E. Zikmund** – MBA, MA, CFE, CFFA
Amper, Politziner, and Mattia, LLP– Philadelphia, PA

Do You Want 25 New Forensic Techniques?

✓ That apply to attest, compilation, valuation, tax
compliance/planning, bankruptcy, et al?

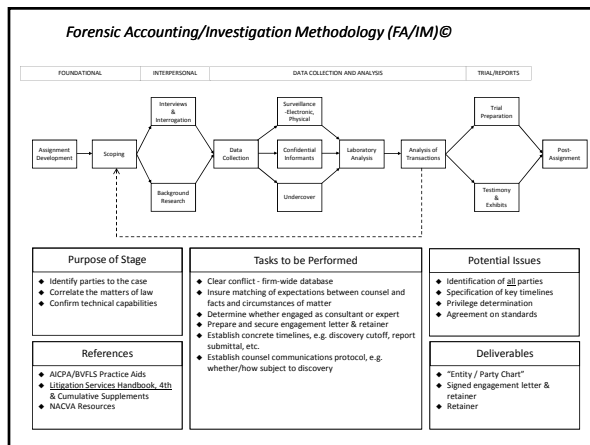
Do you want **250-300+** new forensic techniques?

25+ “New” forensic accounting techniques...

- ✓ Full-and-False Inclusion
- ✓ Genogram
- ✓ TATA/TARTA/TITA/TDTA/TAPTA
- ✓ AQI
- ✓ Behavior Detection
 - ✓ FACS
- ✓ Styleometry
- ✓ ICE©/SCORE©
 - ✓ Link Analysis
- ✓ Articulated Cash Flow
- ✓ Dechow-Dichev Techniques
- ✓ Timeline Analysis
- ✓ IRS Formal Indirect Methods A(5)
 - ✓ “Cash-T”
 - ✓ (Modified) Net Worth
 - ✓ Bank Deposits & Cash Expenditures
 - ✓ Markup
 - ✓ Unit & Volume
- ✓ Expectations Attributes
- ✓ Gap Detection
- ✓ www.BlackBookOnLine.Info
- ✓ Proof-of-Cash
- ✓ Deposition Matrix
- ✓ Entity(s) Chart
- ✓ Lev-Thiagarajan Techniques
- ✓ Damages Report Card
- ✓ Digital Analysis
- ✓ CATA/CRO
- ✓ MSSP

The 300+/- techniques require a **methodology**

7



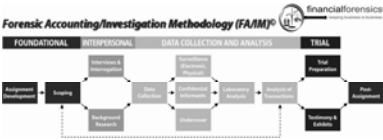
A friendly "reminder..."

- The intellectual property and supporting material, i.e. **Forensic Accounting/Investigation Methodology (FA/IM)®** is proprietary, copyrighted®, trademarked™ and aggressively guarded to protect the thousands of hours invested in its development...
- Your participation permits you to:
 - Use it for your professional reference;
 - Reference the intellectual property on your cv;
 - Demonstrate its capabilities in presentations;
 - Demonstrate its capabilities in court;
 - "Show and tell" for your staff's training – they cannot use it;
 - Selected** materials update;
 - Any/all other applications require explicit permission.

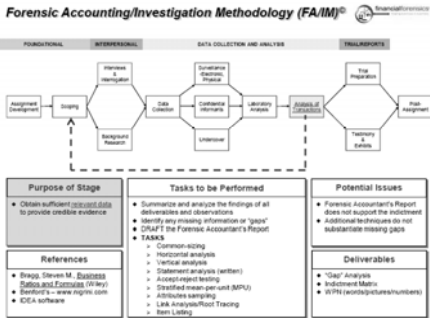
Proper FA/IM[®] footnote citation:

– Dorrell, Darrell D., and Gadawski, Gregory A., *Counterterrorism: Using Conventional Tools for Unconventional Warfare*, (March 2005, Vol. 53 No. 2), and *Forensic Accounting: Counterterrorism Weaponry* (May 2005, Vol. 53 No. 3), 2-Part Series, United States Attorneys' Bulletin, United States Department of Justice, Executive Office for United States Attorneys, Office of Legal Education.

Logo for your use...



Logo for your use...





- (financialforensics® October 2002)

- (financialforensics® Newsletter, September 1993)

Our offices...



16

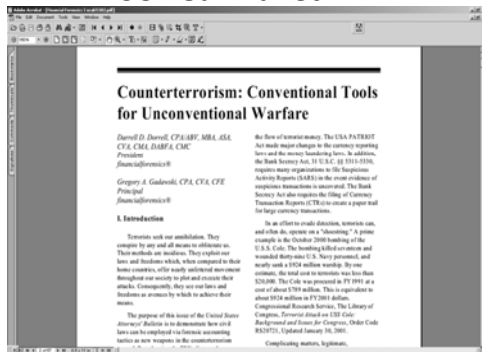
Some of our recent work using these techniques...

- US Department of Justice (USDOJ)
 - **USA Bulletin:** Forensic accounting - counter-terrorism
- Federal Bureau of Investigation (FBI)
 - Forensic accounting - *money laundering/white-collar crime*
- Oregon Department of Justice (ORDOJ)
- HMC/Znetix, Inc. for SEC/Receiver - \$106 million
 - 2nd largest Washington securities fraud
 - More than 12 executives; serving 910 months in aggregate
- \$400 mm for-profit: alter-ego/fraudulent conveyance - \$20 million
- \$100 mm for-profit: purchasing agent embezzlement
- \$14 mm for-profit: controller embezzlement - \$5.5 million
- \$10 mm city: Finance Director embezzlement - \$1.4 million
- \$7 mm for-profit: CFO embezzlement
- \$2 mm non-profit: controller embezzlement - \$140,000
- \$1 mm for-profit: office manager embezzlement
- Dental practice: wife embezzlement - \$70,000
- Auto repair shop: owner embezzlement - \$1,500
- Law & Order** TV series – technical advice
- Portland Police Bureau – Financial Crimes



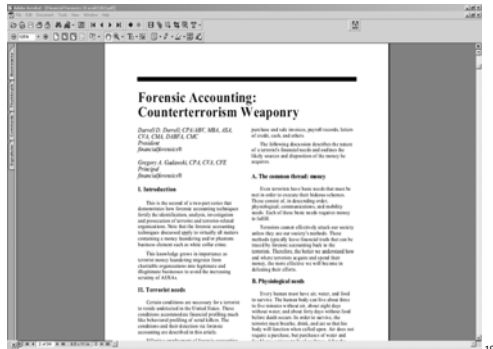
17

USDOJ “Bulletin-I”



18

USDOJ “Bulletin-II”



19



20

Program Focus

Your clients' expectations reach beyond your core expertise whether auditing, tax, valuation or litigation. Such expectations are no surprise since *forensic accounting* is now a household term.

Thanks to extensive media coverage of several high profile corporate collapses and showcasing of forensic accounting specialists the public "thinks" that all CPAs have such expertise. Consequently, the public, i.e. your clients "think" that you deliver professional services from a foundation of forensic accounting.

The accounting profession has reinforced such perceptions despite failing to provide guidance. Specifically, virtually every accounting periodical devotes space to forensic accounting and related subjects. Further, all CPE providers offer various courses on the subject or some derivative. Finally, accounting graduates are increasingly attracted to firms offering such services.

Paradoxically, the accounting profession has yet to embrace (or even offer) a cogent, comprehensive, *forensic accounting methodology* by which accountants can guide and refine their forensic accounting craft. Likewise, defending one's core expertise continues to be more challenging without independently codified benchmarks.

This intensive five-day program is *the only program of its kind in the United States*. It takes participants from concept to detail and delivers specific forensic accounting tools and techniques that are immediately applicable to virtually all aspects of the accounting profession. The techniques are applicable to auditing, tax, valuation, litigation and fraud. By contrast, other programs purporting to provide training are too narrowly focused, e.g. fraud or cover only concepts and lack real-life methods.

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“Context”

- For ease of illustration:
 - A court, i.e. “dispute” environment is *assumed*
 - Fraud examples are facile indicators
- Regardless, the techniques universally apply to audit/review/compilation/OCBOA, tax, damages, lost profits, internal audit, business valuation, general client assistance, et al

22

This session...

- Does **NOT** include:
 - Internal controls
 - SOX
 - “Fraud Triangle”
 - Risk assessment
 - “Brainstorming”
 - ONLY fraud
 - Prevention/detection
 - PCAOB
 - “Fraud risk factors”
- **DOES** include:
 - Practical tools (300+/-)
 - Full-and-false inclusion
 - Genogram
 - OCP/NI correlation
 - Process Map
 - Reverse proof
 - AQI, TATA, LI
 - Proxemics
 - Digital Analysis

23

What Can You Expect This Week?

- *Uncertainty...*



- *Vocabulary – a common language...*
- *VERY hard work... possible growth...*
- *Leave your ego at the door...*

24

Oath for Swearing-In

- “I do solemnly swear (or affirm) that I will faithfully uphold the public trust as a Certified Public Accountant (or forensic accountant), and will to the best of my ability, preserve, protect and defend the Constitution and laws of the United States against all enemies foreign and domestic; that I will bear true faith and allegiance to the same; that I take this obligation freely; and without any mental reservation or purpose of evasion; that I will well and faithfully discharge the duties of my professional responsibilities. On my honor, I will never betray my independence, my integrity, my character or the public trust. I will always have the courage to hold myself and others accountable for our actions. So help me God.”
- * NOTE: If the individual taking the oath objects to the term "swear," which is a declaration that implies an appeal to God, that individual may substitute the word "affirm."

25



- **Everything** that you see/hear today is:
 - Public record
 - And/or
 - Disguised

26

Pre-Reading Assignments

- What did you glean from:
 - USDOJ Materials
 - “Moneyed Spouse” article
 - Other?

27

The definition of forensic accounting is:

***The art & science of investigating
people & money.®***

(Forensic Accounting Academy™ April 2007)

28

Questions...

- Are you a forensic accountant?
- Define forensic accounting.
- Who is the primary authoritative body in forensic accounting?
- What is the difference between fraud and forensic accounting?
- What is the first step in any forensic accounting assignment?
- What is the first place to look in audited financial statements when conducting a forensic assignment?
- What is proxemics?
- What is a proof-of-cash?

29

A hurdle regarding ***forensic accounting***...

- ***It is poorly defined:***
 - The AICPA has it wrong, e.g. “BVFLS,” “FVS”
 - Business Valuation, Forensic & Litigation Services
 - Forensic & Valuation Services
 - Akin to:
 - ***Fred’s Grocery, Auto Repair & Hospital, LLC***
 - SAS99:
 - ***An embarrassment to the profession***
 - However, refer to “***Forensic Procedures***” Practice Aid

30

Exam Question #1

- What is the first task that you should perform to initiate **forensic accounting** analysis of a company experiencing financial “challenges?”

31

Exam Question #1 - Answer

- What is the first task that you should perform to initiate **forensic accounting** analysis of a company experiencing financial “challenges?”
 - Full-and-false inclusion

32

Exam Question #1-A

- What is the first task that you should perform to initiate **forensic accounting** analysis of a company experiencing financial “challenges?”
 - Full-and-false inclusion
- What is the **simultaneous** task triggered by full-and-false inclusion?

33

Exam Question #1-A - Answer

- What is the first task that you should perform to initiate **forensic accounting** analysis of a company experiencing financial “challenges?”
 - Full-and-false inclusion
- What is the **simultaneous** task triggered by full-and-false inclusion?
 - Chain of custody (evidence/data)

34

Exam Question #2

- Where should you look first in order to perform **forensic accounting** analysis of a company experiencing financial “challenges?”

35

Exam Question #2 - Answer

- Where should you look first in order to perform **forensic accounting** analysis of a company experiencing financial “challenges?”
 - The people outside the company

36

Exam Question #3

'94-'04

- When was the following quote published:
 - *The rise of large corporations in the decades before the [C]ongress... and some spectacular panics and stock market crashes—underscored the importance of proper accounting procedures and financial reporting. This gathering of accountants at the dawn of the new century was intended as an event at which the attendees could consider what kinds of services and procedures businesses required and what the profession must do to meet those needs.*

37

Exam Question #3 - Answer

'94-'04

- When was the following quote published:
 - *The rise of large corporations in the decades before the [C]ongress... and some spectacular panics and stock market crashes—underscored the importance of proper accounting procedures and financial reporting. This gathering of accountants at the dawn of the new century was intended as an event at which the attendees could consider what kinds of services and procedures businesses required and what the profession must do to meet those needs.*
 - Congress of Accountants – St. Louis World's Fair – September 26-28, **1904**

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Exam Question #4

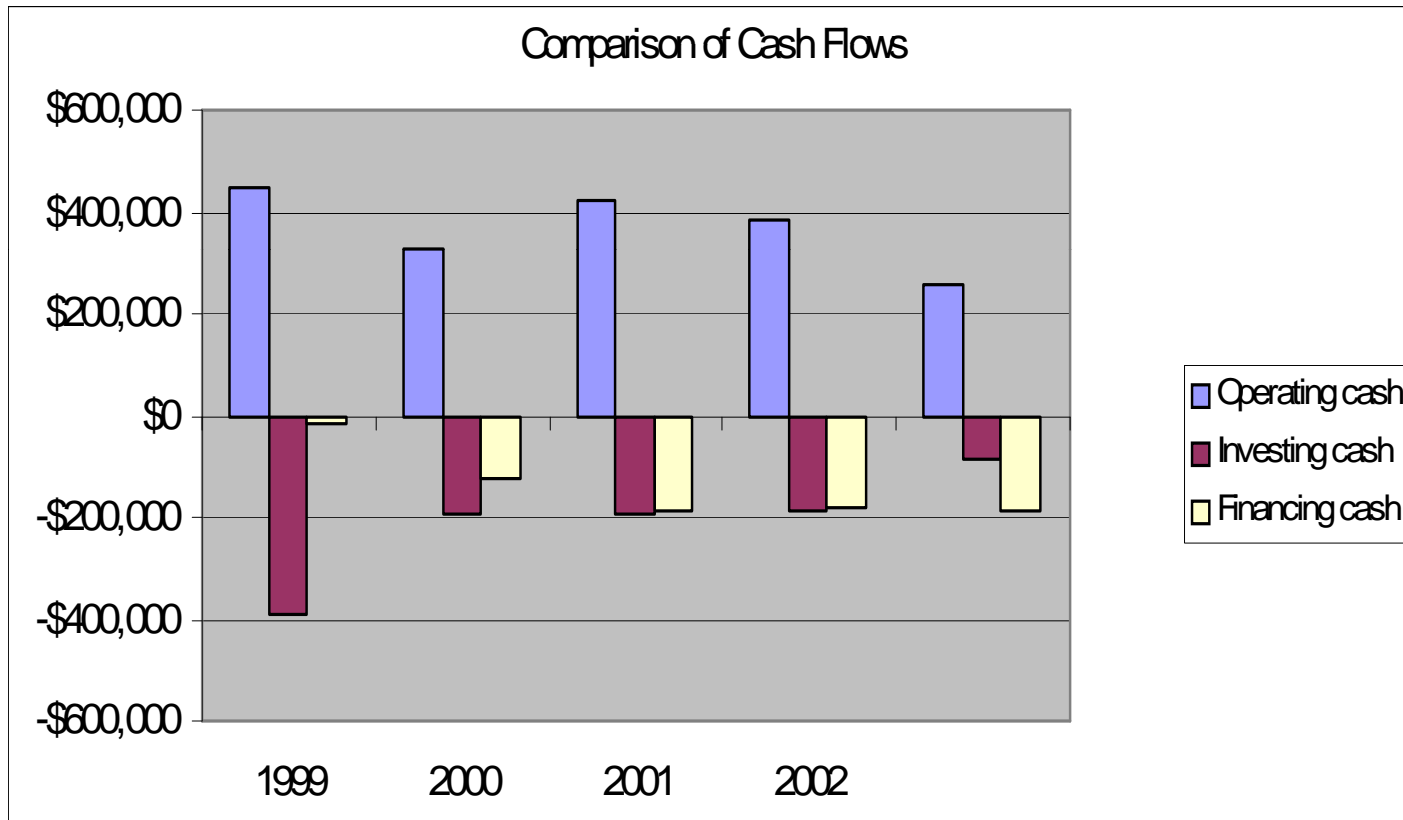
- When analyzing audited, reviewed, other financial statements, what is the primary test of validity?

39

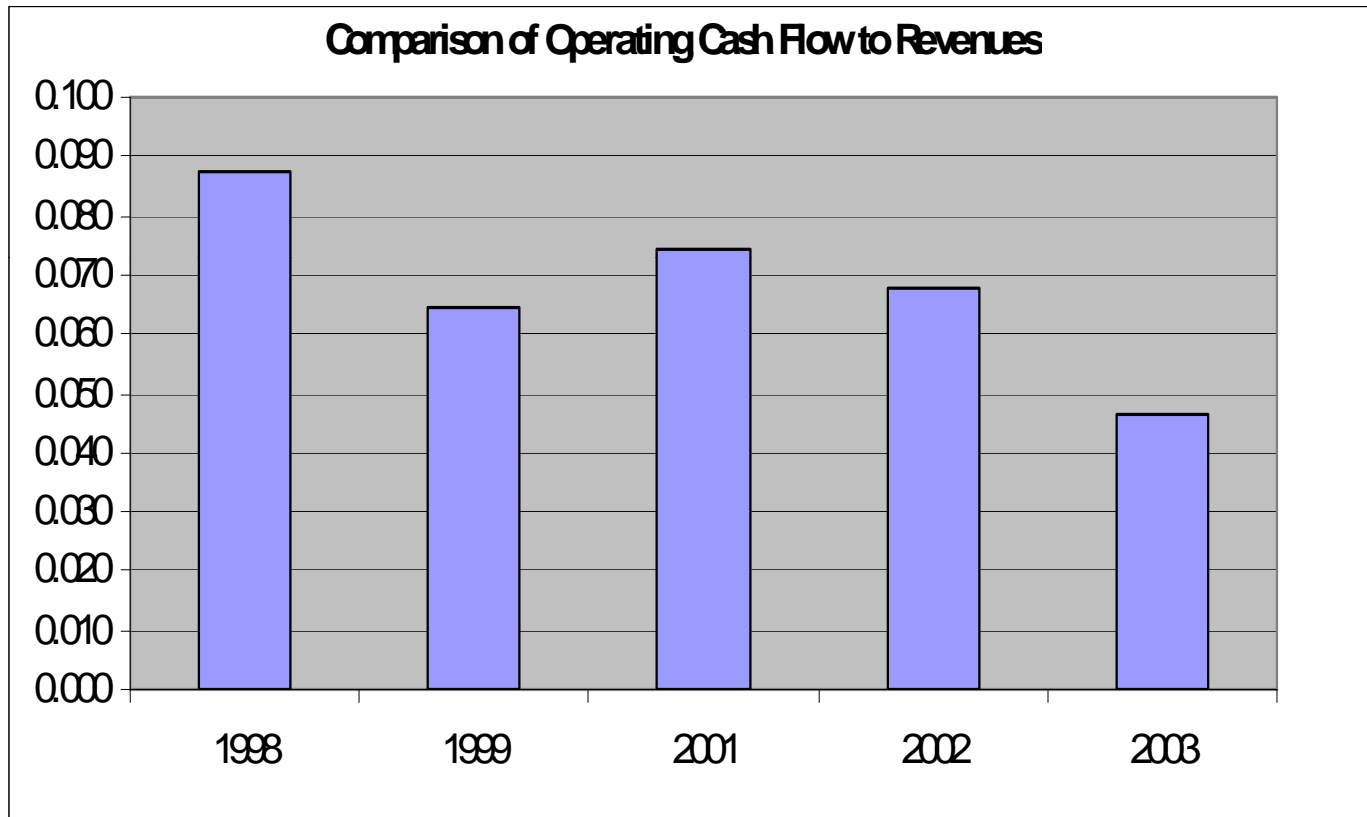
Exam Question #4 - Answer

- When analyzing audited, reviewed, or other financial statements, what is the primary test of validity?
 - **Correlation** of Cash Flows to Reported Net Income

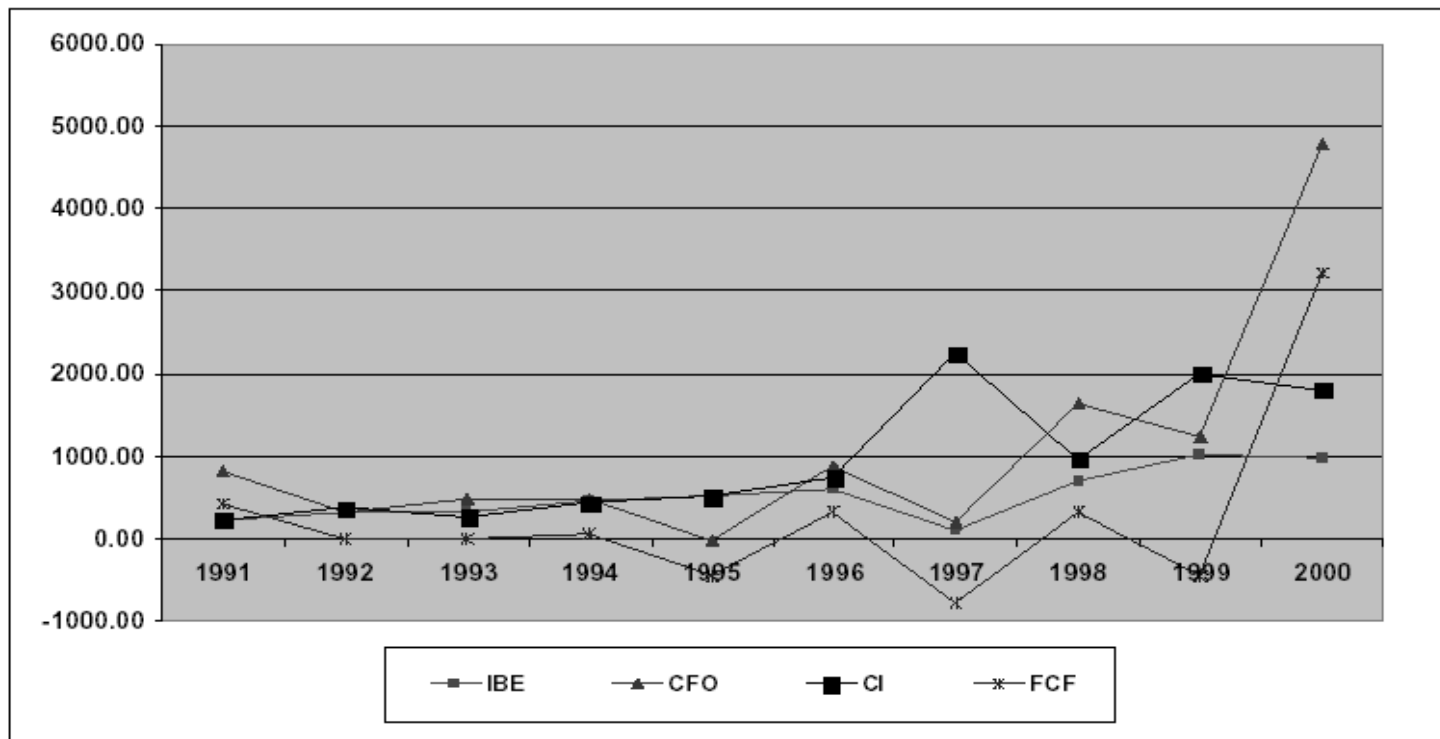
Decompose the Cash Flows



Is Correlated Cash Flow Improving?



Cash Flow Correlation



IBE - Income before extraordinary items and discontinued operations.

CFO - Cash flow from operations.

CI - Comprehensive income defined as the change in owners' equity plus dividends net of capital contributions.

FCF - Free cash flow is measured by cash flow from operations (CFO) minus net capital expenditures plus net interest payments.

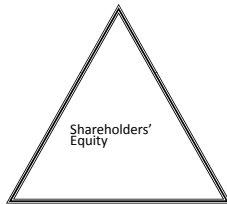
Exam Question #4-A

- When analyzing audited, reviewed, compiled or other financial statements, what is the aggregate test of validity?
 - ***Time-Sensitive Interdependences*** of the Financial Statements to one another

44

“BIC®”

I – Income Statement



B – Balance Sheet

C – Cash Flow

45

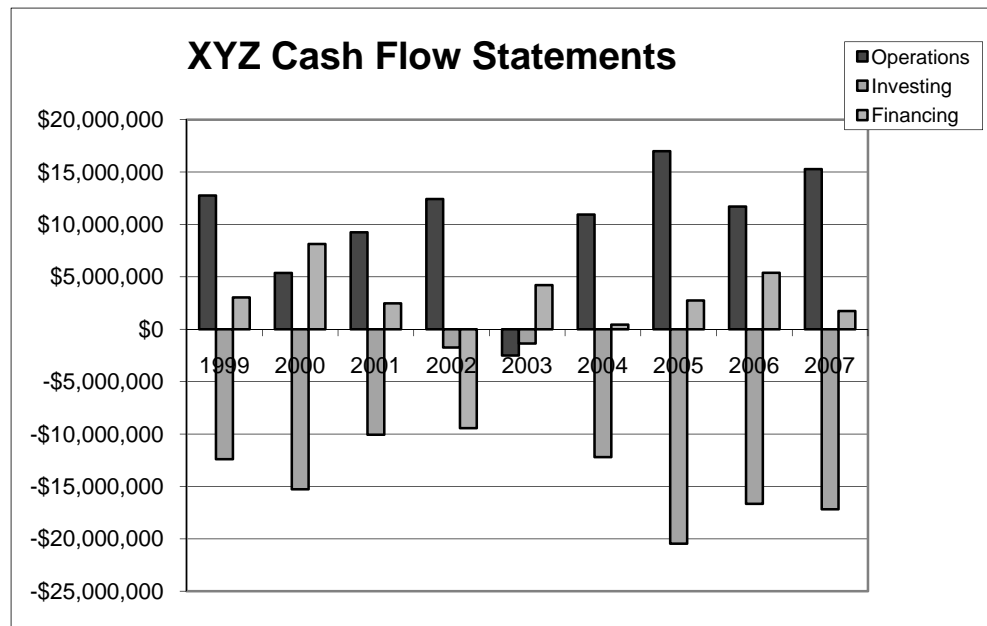
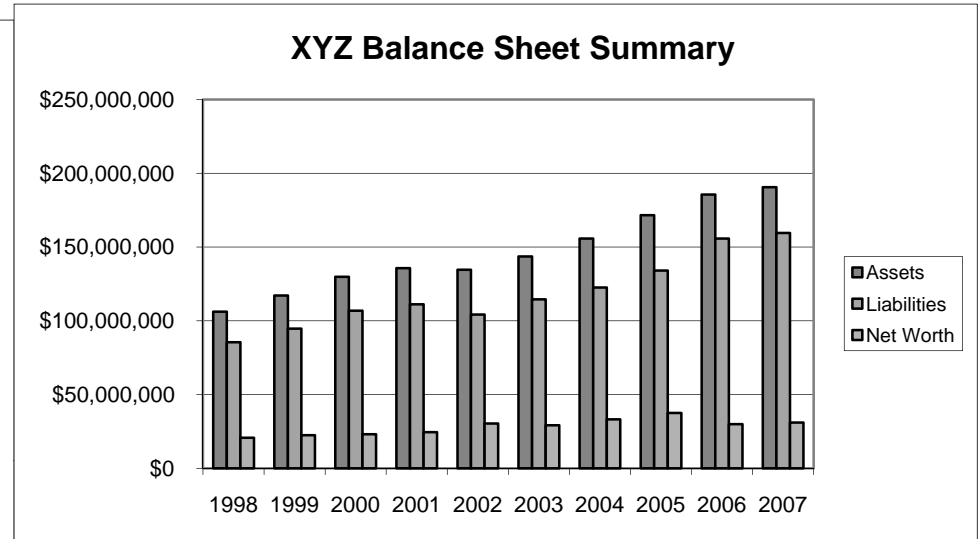
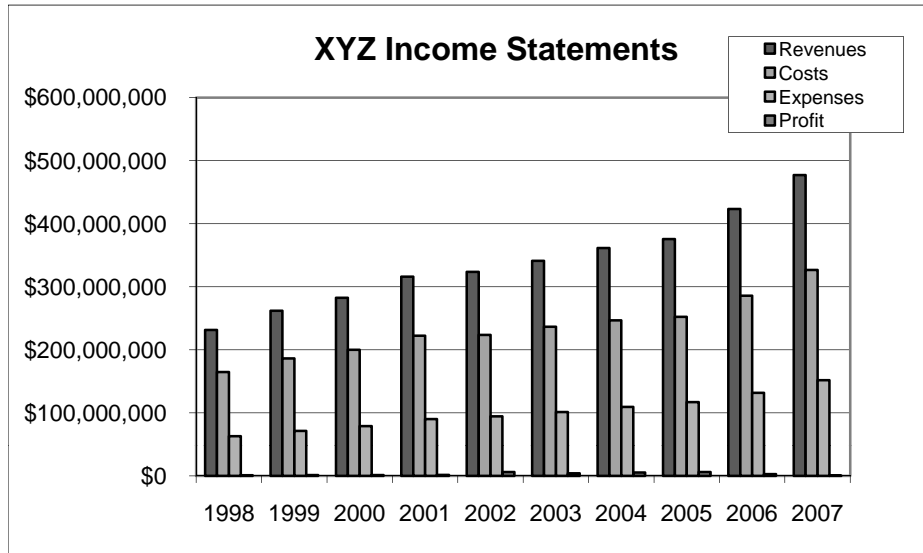
Can You *Really* Think ***Clinically***?

Dialectic Environment

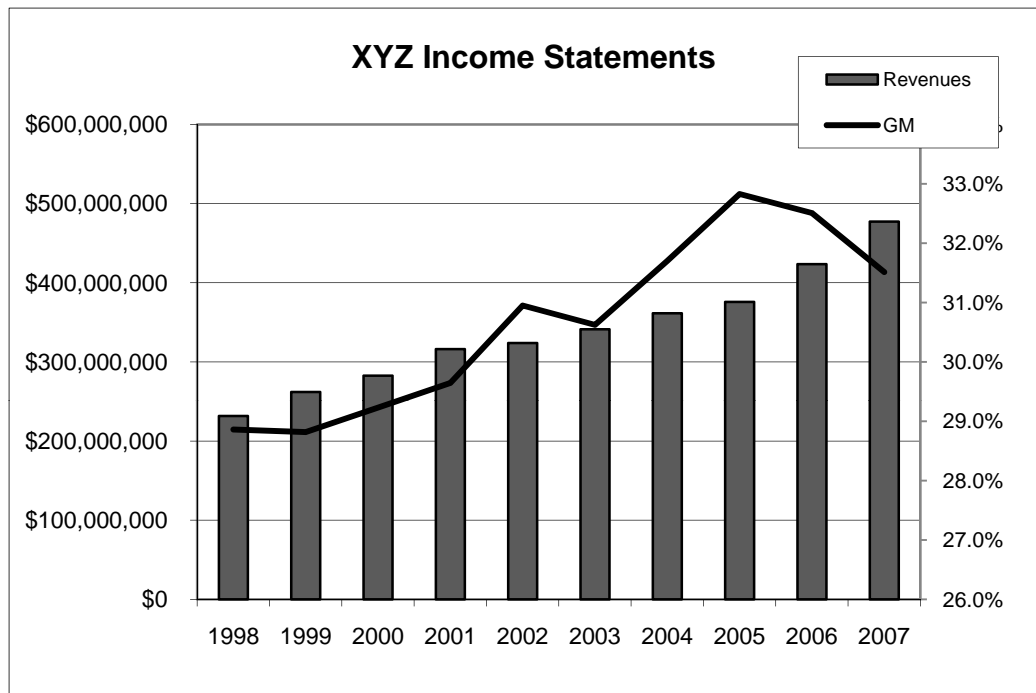
- We need to get your attention...
 - Abortion
 - Bowling
 - Global Warming
 - Gun Control
 - Liberal or Secular Progressive?
 - Republican or Conservative?
 - “Schools Need More Funding...”
 - “Separation of Church and (_ ? _)”

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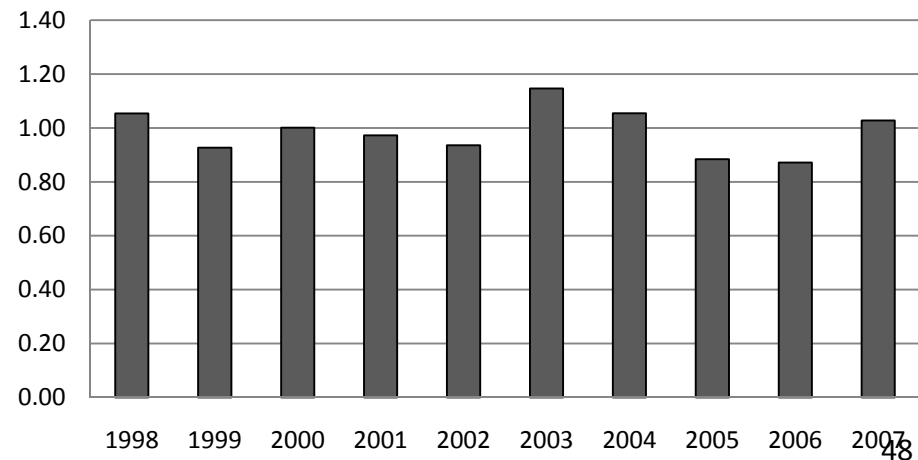
Baseline Financials



“Traditional Ratios” Financials Reliable?

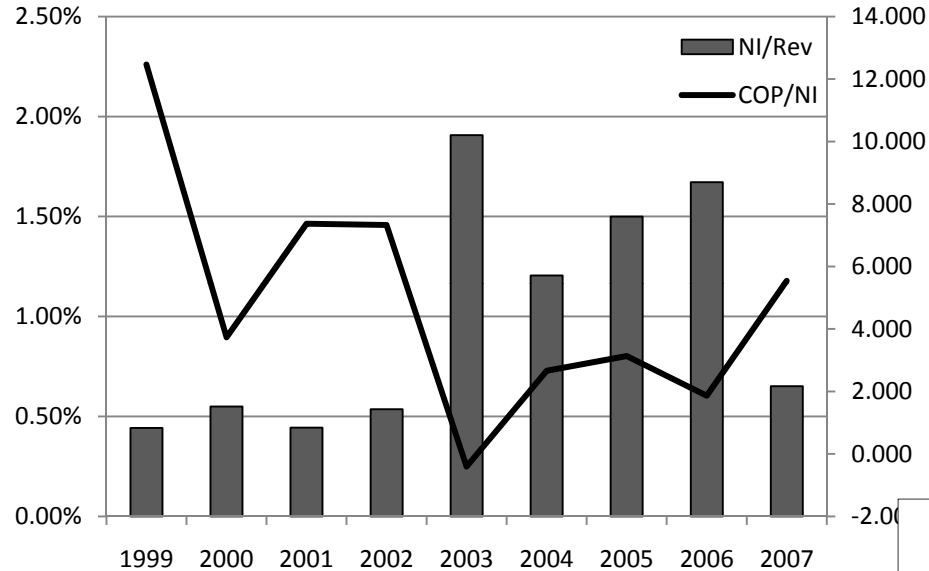


XYZ Current Ratio

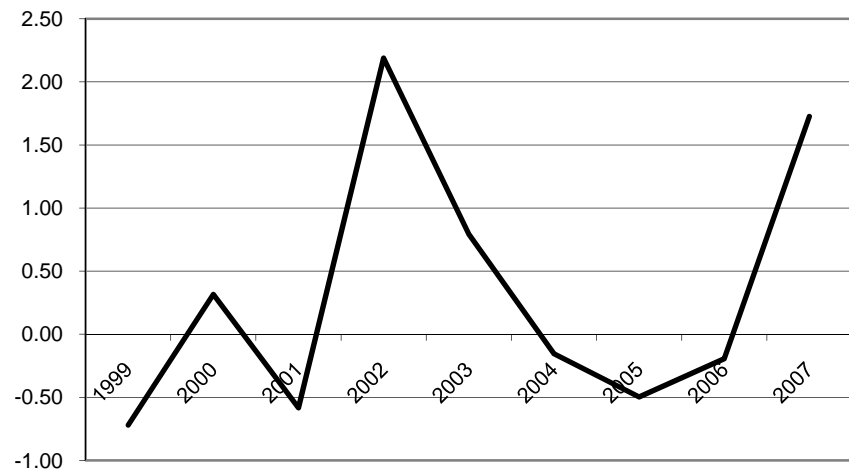


Forensic Tests - Simple

Cash Ops vs. Net Income



TATA - Accruals to Assets Ratio



When taken? Which photo is older?



50

What day/time was this taken in Bargersville, IN?
What had the subject been doing in recent years?



51

When was this taken? Where? How many children did this couple have?



52

How many men are absent?

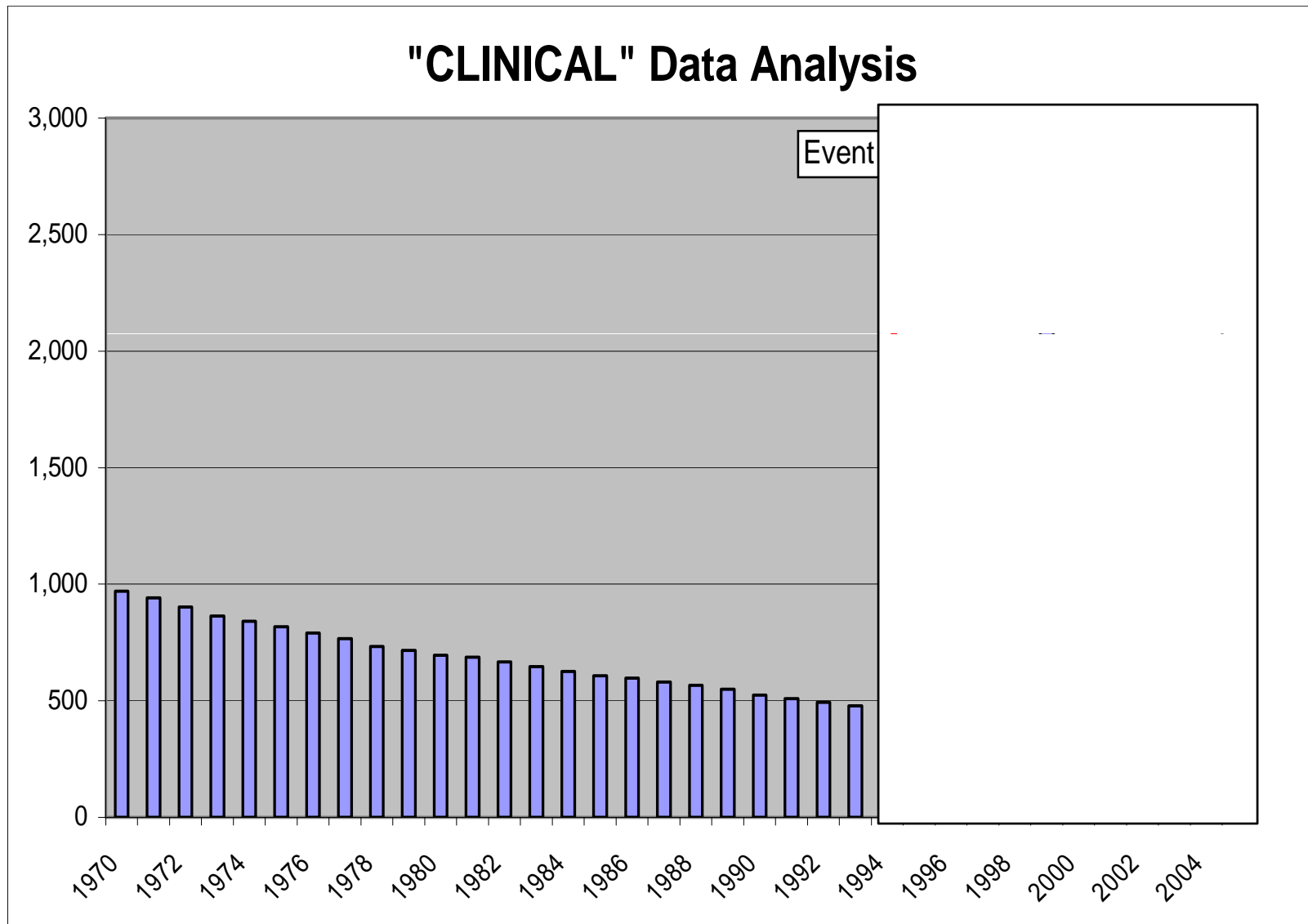


53

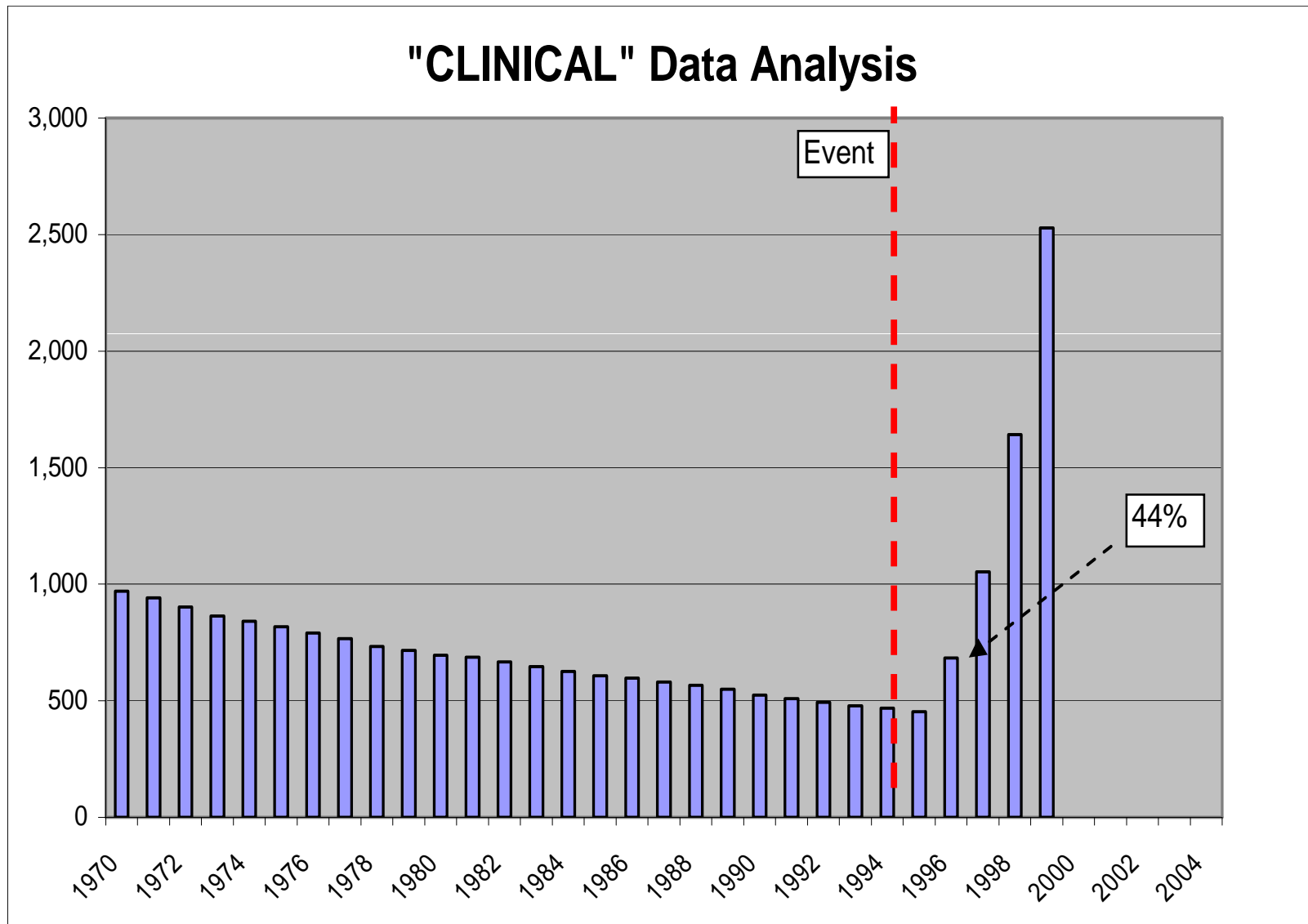
Where and when were these taken? Which was taken first?



3% Annual Decline



3% Annual Decline



Exam Question #5

- When analyzing audited, reviewed, or other financial statements, what is the primary test for skimming?

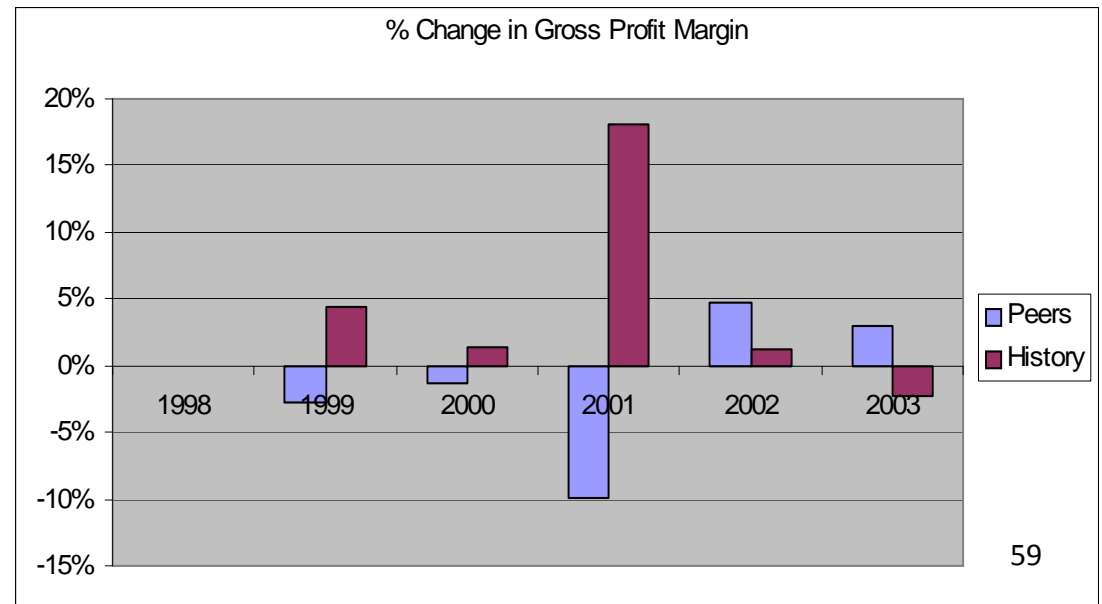
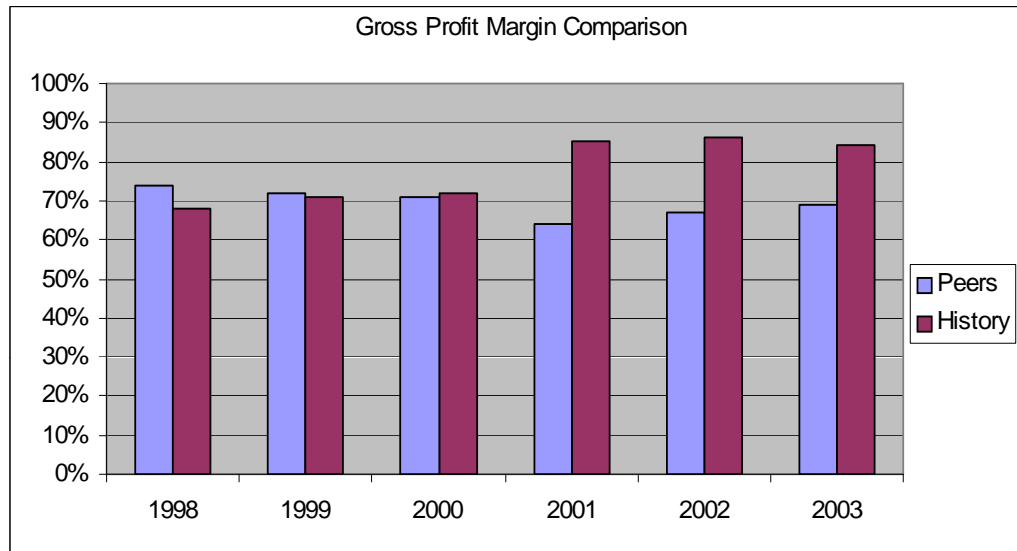
57

Exam Question #5 - Answer

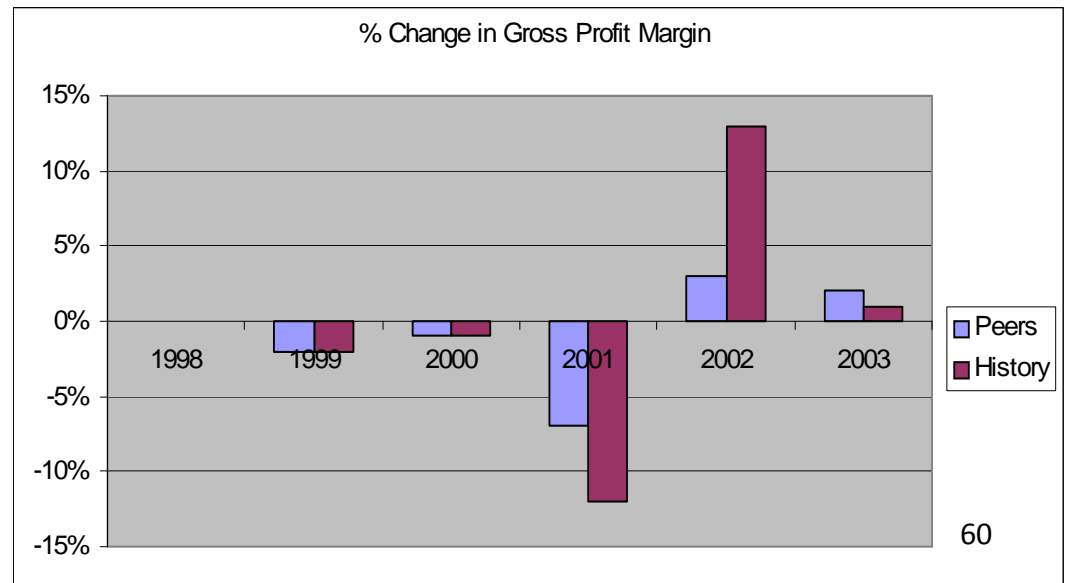
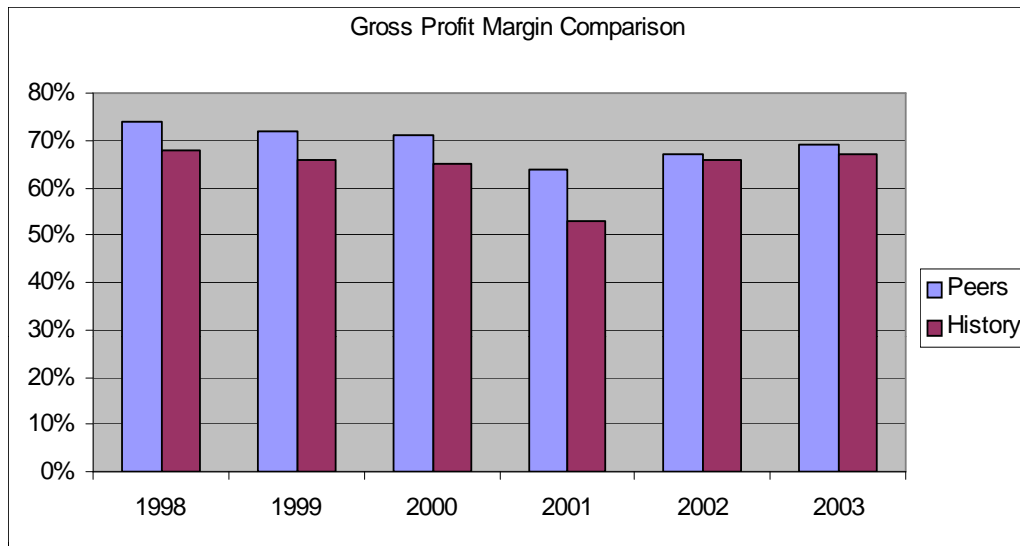
- When analyzing audited, reviewed, or other financial statements, what is the primary test for skimming?
 - Declining gross margin

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Compare to “Self” and “Peers”



Compare % “Change”

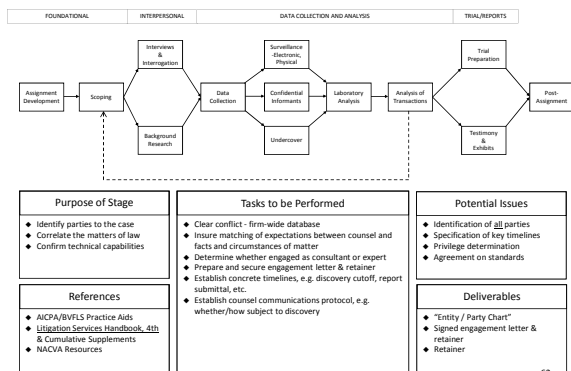


Framework of This Session...

- Define forensic accounting for **accounting** deployment:
 - Valuation, litigation, auditing, tax, fraud, etc.
- Provide **foundation** for forensic accounting
- Illustrate combined forensic accounting & criminal investigation procedures
- Demonstrate key forensic accounting tools & techniques
- Identify additional forensic accounting resources

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Forensic Accounting/Investigation Methodology (FA/IM)[®]



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A "reminder..."

- The intellectual property and supporting material, i.e. **Forensic Accounting/Investigation Methodology (FA/IM)[®]** is proprietary, copyrighted[®], trademarked[™] and stringently guarded to protect the thousands of hours invested in its development...
- Your participation permits you to:
 - Use it for your professional reference;
 - Reference the intellectual property on your cv;
 - Demonstrate its capabilities in capabilities in court;
 - "Show and tell" for your staff's training – they cannot use it;
 - Selected materials update;
 - Any/all other applications require explicit permission.

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Spectrum of Session

- High-level concepts
 - Linkage to technical references
- Leading-edge techniques
 - Combines criminal investigation with forensic accounting analysis
 - Illustration
- Detailed examples
 - Actual tools & techniques
 - Demonstrations
 - Used in trial

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7 primary outcomes for this session:

1. To serve as a “starting point” for accountants to establish their own forensic accounting skill set;
2. To serve as generalized and/or specific guidance to accountants involved in valuation, litigation, auditing, tax, writeup, etc.
3. To provide a framework through which forensic accounting techniques and methods can continually be refined;
4. To serve as a technical reference to those performing forensic accounting services on less than a full-time basis;
5. To insure consistency of forensic accounting delivery, thus enhancing the results of service delivery;
6. To serve as a training tool for those entering the forensic accounting arena; and
7. To enhance forensic accounting testimony credibility before triers of fact.

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A residual...

***Define Forensic Accounting for
the Accounting Profession***

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Your FUNDAMENTAL Challenge

- The fundamental challenge in forensic accounting stems from the sheer ***breadth and depth*** of the wide variety of technical disciplines that must be considered in forensic accounting cases, whether civil, criminal, or transactional.

Breadth & Depth...

- Accounting
- Adult-Learning Theory
- Banking
- Bankruptcy
- Board and Management Responsibilities
- Computer Forensics
- Corporate Governance
- Criminal Prosecution
- Document Management and Handling
- Economics
- Federal, State and Local Laws
- Finance
- Financial Analysis
- Financial Reporting
- Government Agency Interaction
- Industry
- Marketing
- Money Laundering
- Proxemics
- Psychology
- Purchasing
- Research
- Sociology and Anthropology
- Stages of Growth
- Statistics
- Stylometry
- Symptomatic Behavior Analysis
- Teaching Skills
- Testimony Skills
- Visual Aid Skills
- Writing Skills
- Etc...

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Forensic accounting applies to a *far wider* range of applications...

- *alter ego*, corporate disregard, piercing the veil
- Anti-trust
- Bankruptcy
- Breach of fiduciary duty
- Conversion
- Counter-terrorism
- Financial Misrepresentation
- Fraudulent Conveyance (constructive or actual)
- Intangible Assets
- Intellectual Property
- Lost Profits
- Marital Dissolution
- Performance Auditing
- Personal Injury
- Reasonable Royalty
- Valuation
- Value-for-money
- Wrongful Death
- Wrongful Termination
- Etc...

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Forensic Accounting Organizations

- **ACFE** – Association of Certified Fraud Examiners: www.acfe.org;
- **ACFE** – American College of Forensic Examiners: www.acfei.com;
- **AICPA** – American Institute of Certified Public Accountants: www.aicpa.org;
- **CICA** – Canadian Institute of Chartered Accountants: www.cica.ca;
- **IIA** – Institute of Internal Auditors: www.theiia.org;
- **IMA** – Institute of Management Accounting: www.imanet.org;
and
- **NACVA** – National Association of Certified Valuation Analysts: www.nacva.com.

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Definitions of forensic accounting

- **Forensic Accounting** - *The art and science of applying financial techniques to matters of law.* (financialforensics® Newsletter, September, 1993.)
- **Forensic Accounting**—*The application of accounting principles, theories, and discipline to facts or hypotheses at issue in a legal dispute is called forensic accounting. It includes every branch of accounting knowledge. (Providing Litigation Services – Technical Consulting, Consulting Services Practice Aid 93-4, Management Consulting Services Division, American Institute of Certified Public Accountants, (New York, New York – 1993), page 70/100-2.05.)*
- **Forensic Accounting** – *Forensic accounting applies accounting, statistical, research and economic concepts and techniques to legal problems or potential legal problems. ("Forensic Accounting and Financial Fraud," American Institute of Certified Public Accountants, (New York, New York – 1995), page 2.)*
- **Forensic Accountant** – *The term "forensic accountant" refers to an accountant who performs an orderly analysis, investigation, inquiry, test, inspection or examination in an attempt to obtain the truth and develop an expert opinion. (Forensic Examiner, Volume 10, Numbers 5 & 6, May/June 2001, American College of Forensic Examiners, (Springfield, MO – 2001), page 9.)*

71

AICPA “Definition”

- *“While many definitions exist for the general term forensic, the AICPA’s Forensic and Litigation Services Committee (FLS) believes that forensic accounting consists of two major components: litigation services that recognize the role of the CPA as an expert, consultant, or other role; and investigative services that make use of the CPA’s skills that may or may not lead to courtroom testimony. Forensic accounting may involve the application of special skills in accounting, auditing, finance, quantitative methods, certain areas of the law, and research, and investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings.*
(http://www.aicpa.org/members/div/mcs/exec_summ_forensic_svcs.htm, July 30, 2004.)

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AICPA “Definition”

- *“Forensic accounting services generally involve the application of special skills in accounting, finance, quantitative methods, certain areas of the law and research, and investigative skills to collect, analyze, and evaluate evidential matter and to interpret and communicate findings, and may involve either an attest or consulting engagement.”* (Definition adopted by the AICPA Business Valuation/Forensic and Litigation Services Executive Committee; January 2006)

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The definition of forensic accounting is:

***The art & science of investigating
people & money.®***

(Forensic Accounting Academy™ April 2007)

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Focus of Session

- A **formalized** forensic accounting methodology, (FA/IM®) will be demonstrated. FA/IM® *uniquely* merges forensic accounting with criminal investigation, thus providing attendees with:
 - A foundational skill set ranging from proxemics to Benford's Law
 - New ideas, methods and techniques
 - Actual examples from forensic assignments illustrating the practical application of theory
 - Trial-proven and cross-matter
 - Visuals, analytical schedules and report content that the participant can immediately employ
 - Actual output that you can immediately employ

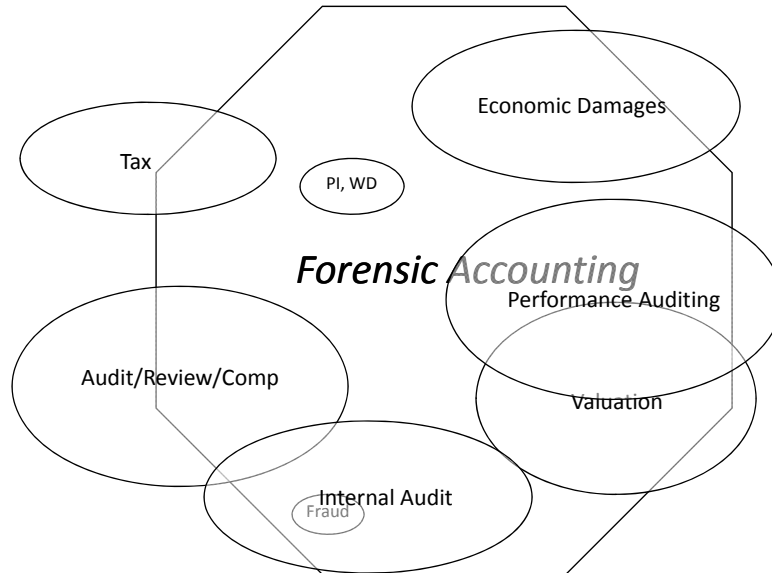
75

Forensic Accounting

- Must be considered:
 - Our ***foundational discipline...***
 - Our ***core capability...***

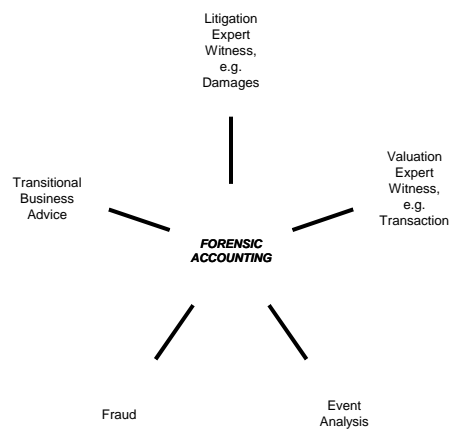
76

Forensic Accounting – *Foundational Discipline*



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Forensic Accounting as a Core Capability



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Can be applied to...

- **Valuation** for transactions, e.g. 706, 709, buy-in/buy-out, merger, et al
- **Litigation**, e.g. damages, lost profits
- **Attest**, e.g. applying SAS99
- **Fraud**
- **OCBOA**
- **Taxes** – compliance & planning
- et al

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Why is forensic accounting so important?

1. Your clients **expect** it!
2. It changes how you **think**.
3. It **defends** against client claims.
4. It **broadens** your practice base.
5. It's more **efficient - your staff has consistency**.
6. You can **charge/collect** more.
7. It attracts and retains better **recruits**.
8. It **distinguishes** you from appraisers, bankers, brokers, economists, financial analysts...
9. It distinguishes you from your CPA **competition**.
10. Other services are **improved**, i.e. audit, tax, litigation, valuation, fraud...

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What Is A **Methodology**?

- A *way of doing things*, a process...
 - Auditing, tax return preparation, valuation...
- Criminal Investigation
 - 7-Step Method
 - Others
- Forensic Accounting Investigation
- *Combined* Criminal/Forensic Accounting

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How/Where do you start/stay?

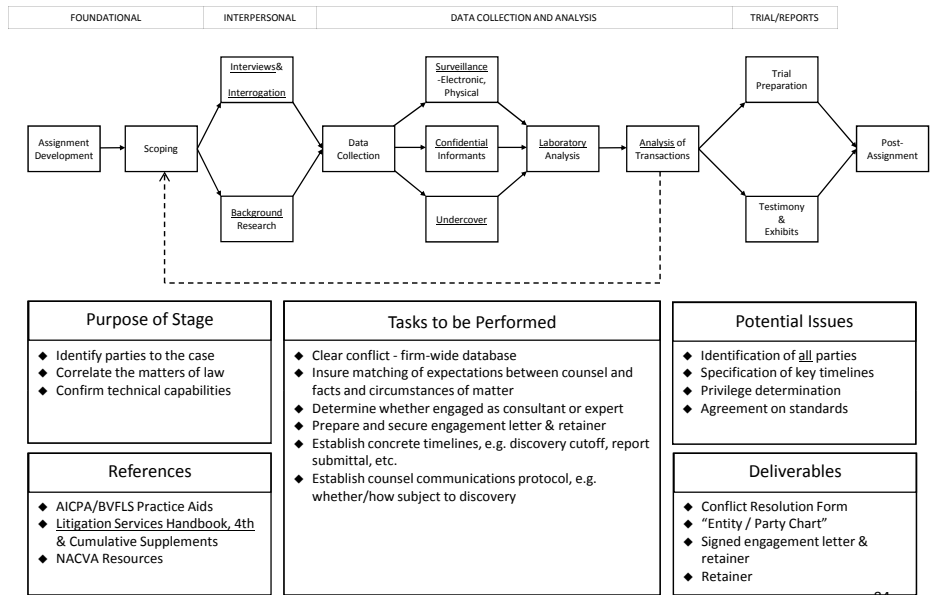


82

How does a methodology work?

83

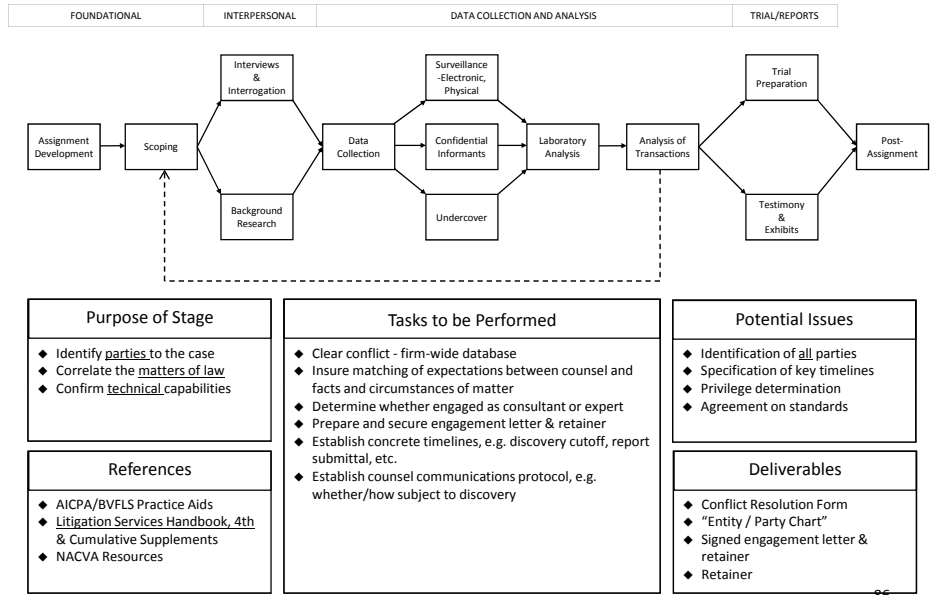
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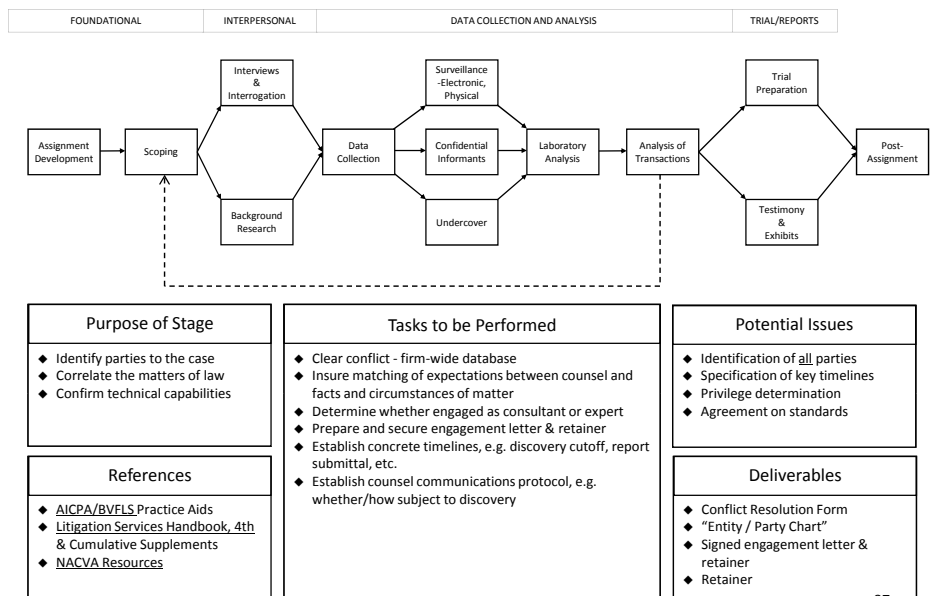
A not-so-friendly “reminder...”

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- Your participation permits you to:
 - Use it for your professional reference;
 - Reference the intellectual property on your cv;
 - Demonstrate its capabilities in capabilities in court;
 - “Show and tell” for your staff’s training – they cannot use it;
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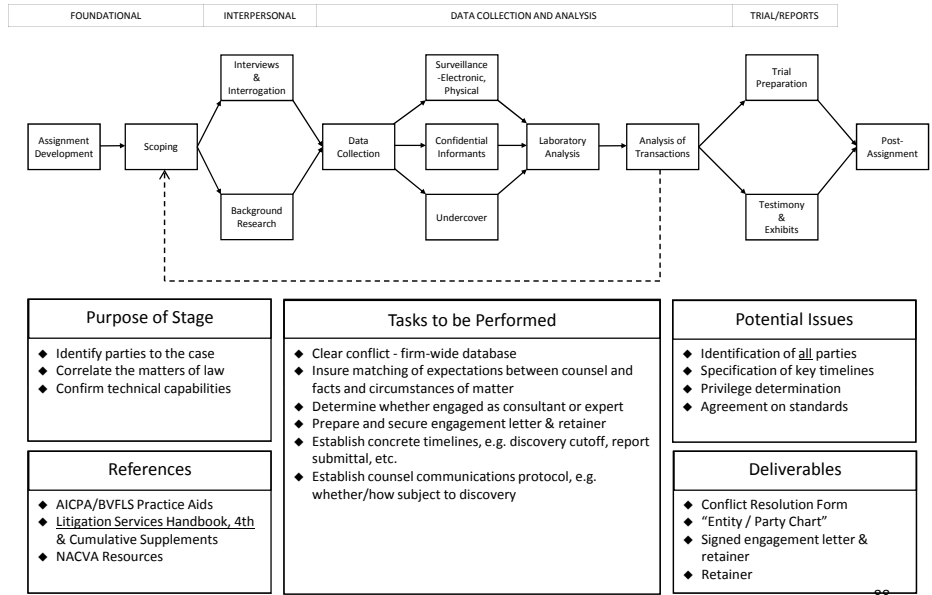
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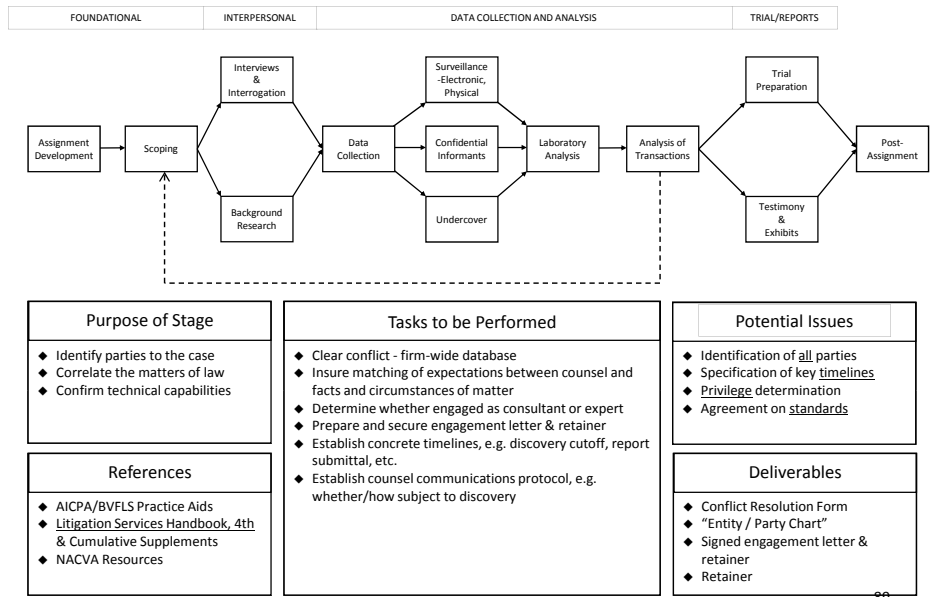
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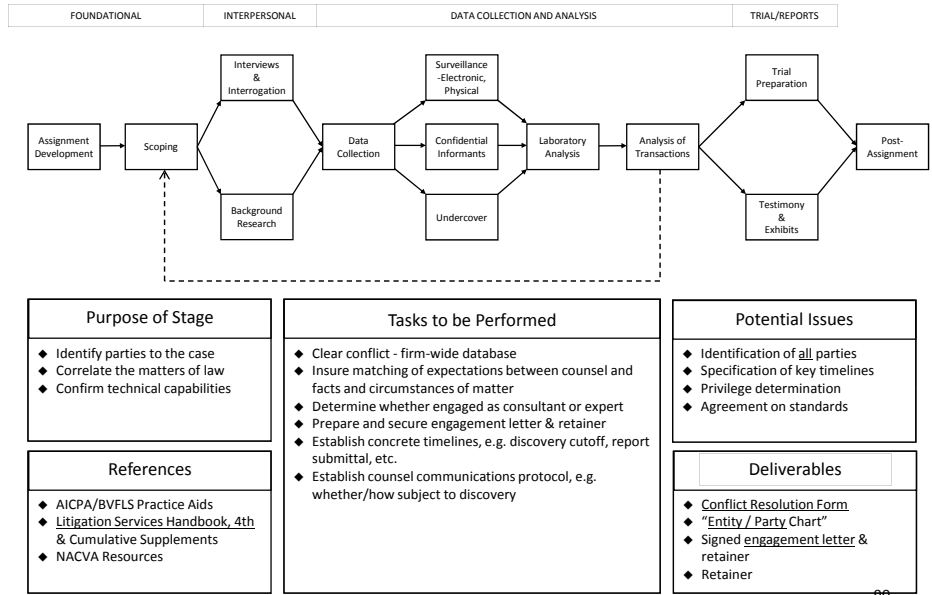
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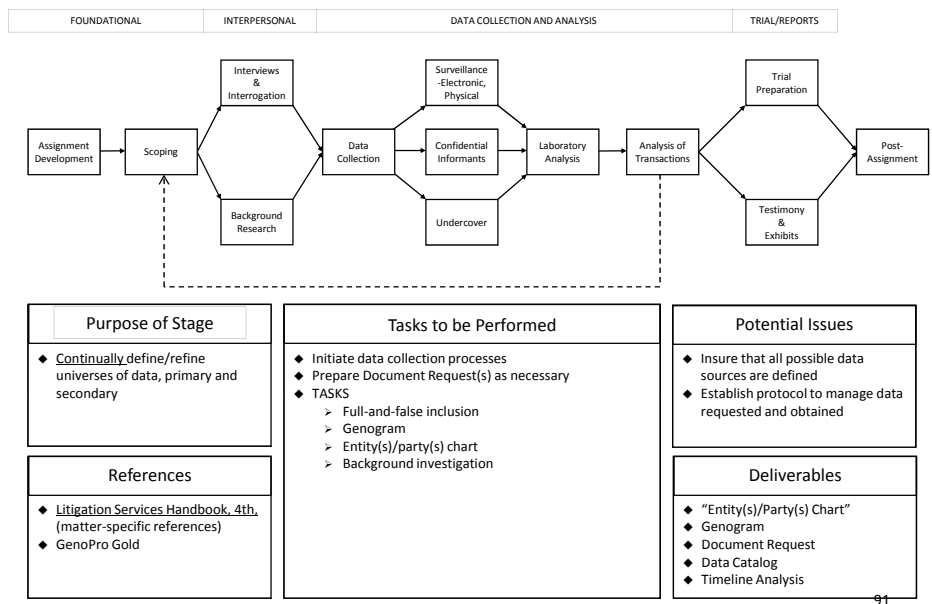
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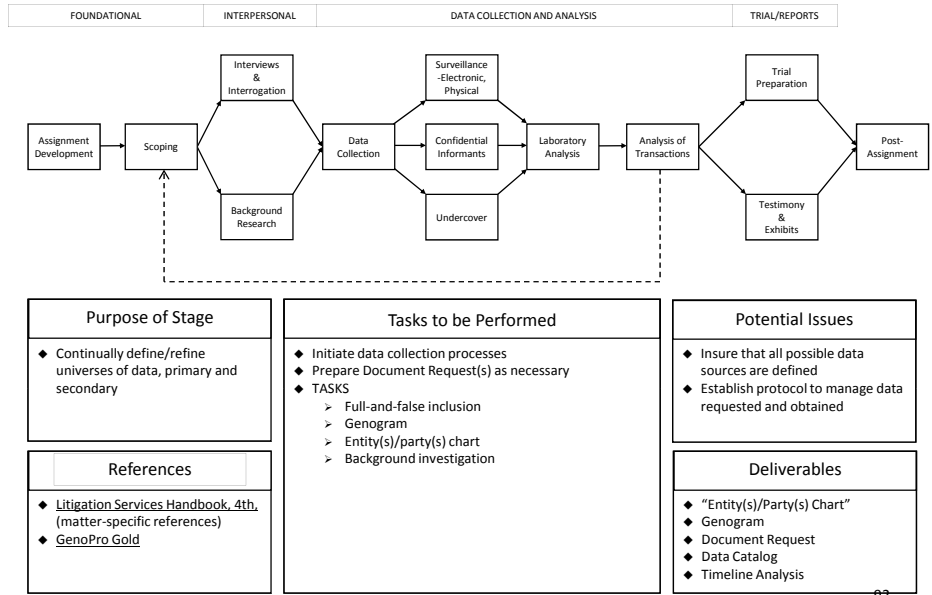
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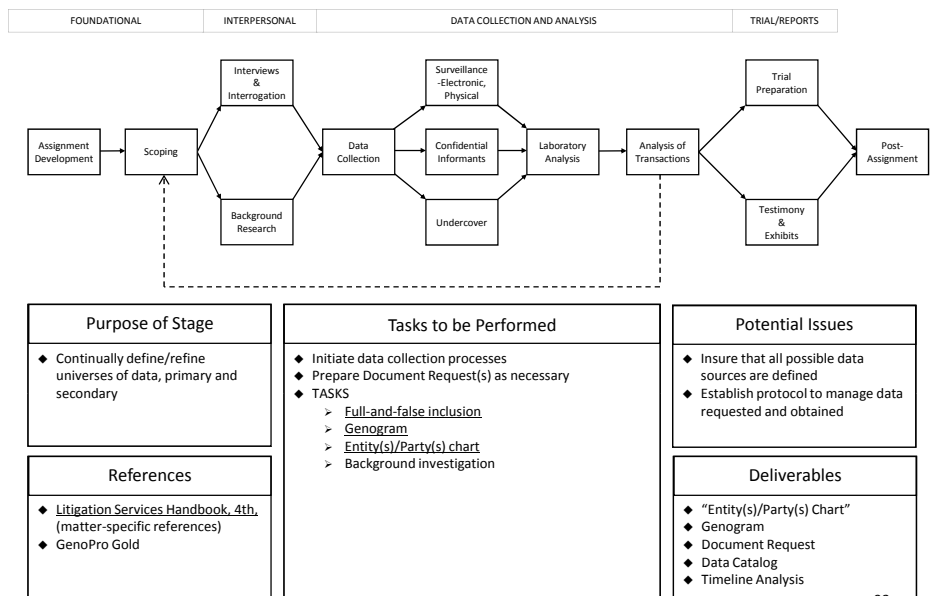


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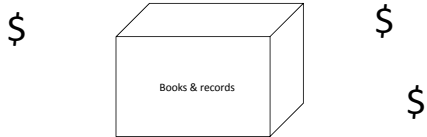
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Full-and-False-Inclusion

- **Foundational** yet foreign
 - Auditors routinely overlook
 - Auditors “do what they know” instead of what needs to be done, therefore,
 - Auditors focus on the “books and records”



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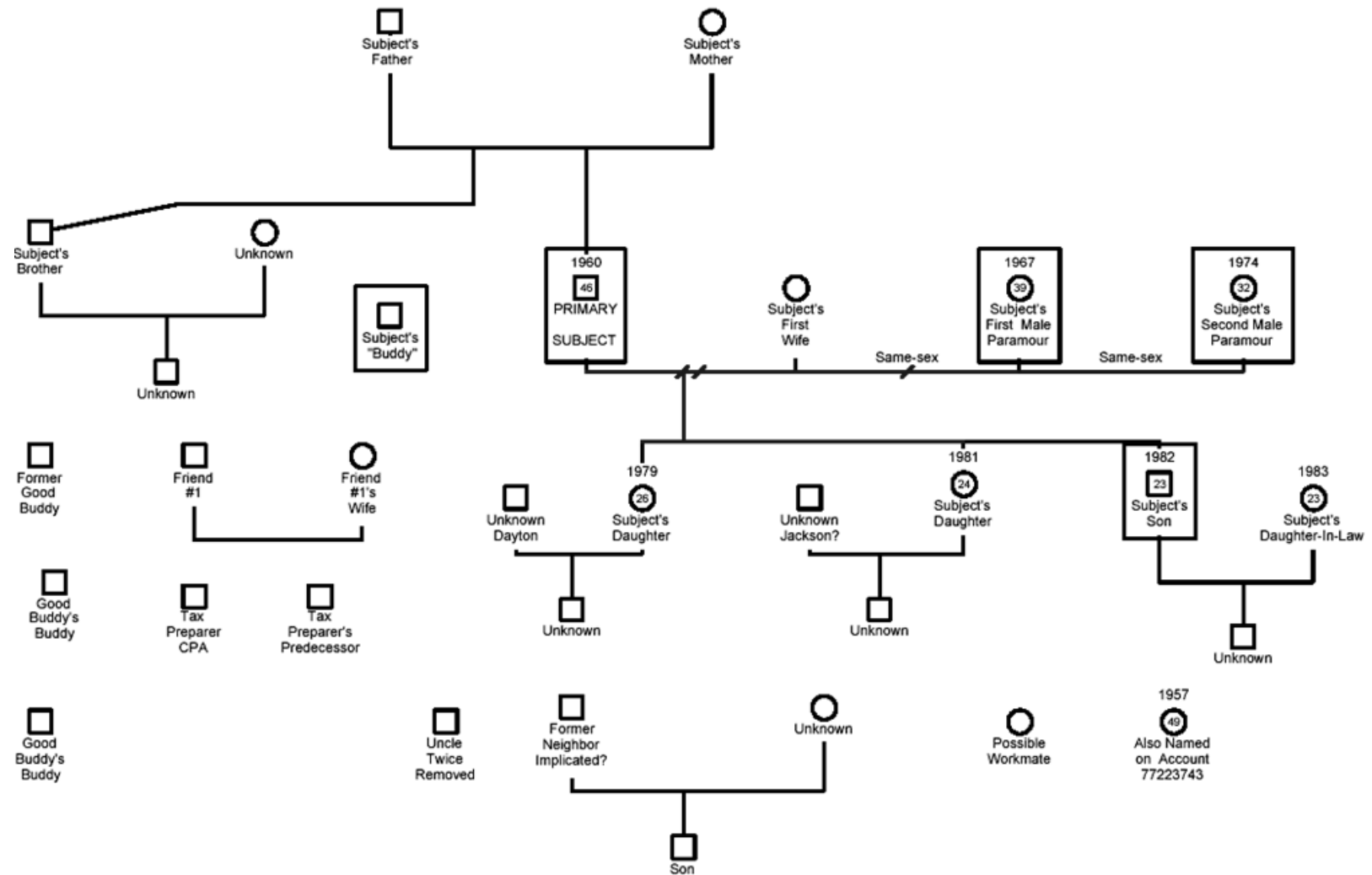
Full-and-False-Inclusion

...the **yellow** crime scene tape of forensic accounting...



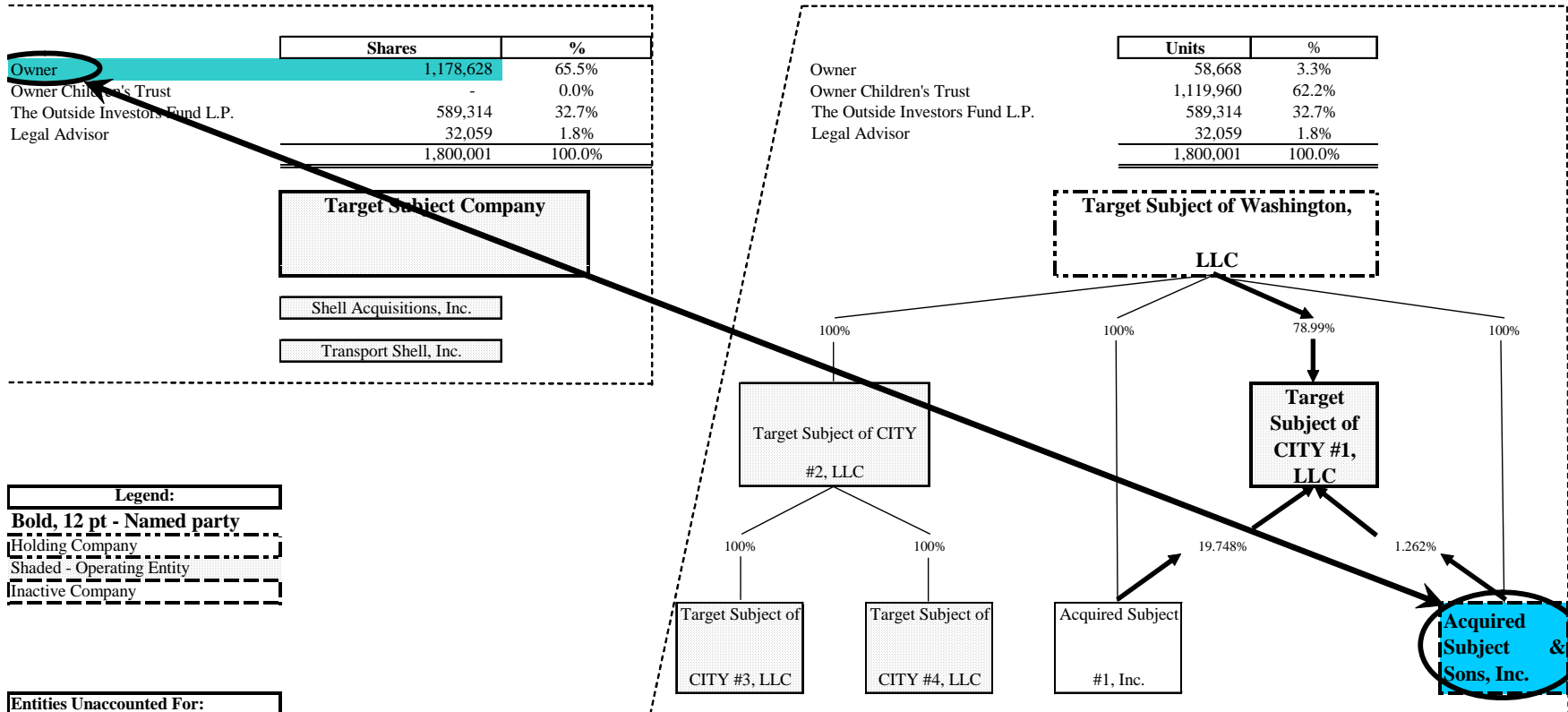
95

Genogram



Entity Chart(s)

TARGET SUBJECT GROUP - Exhibit 1

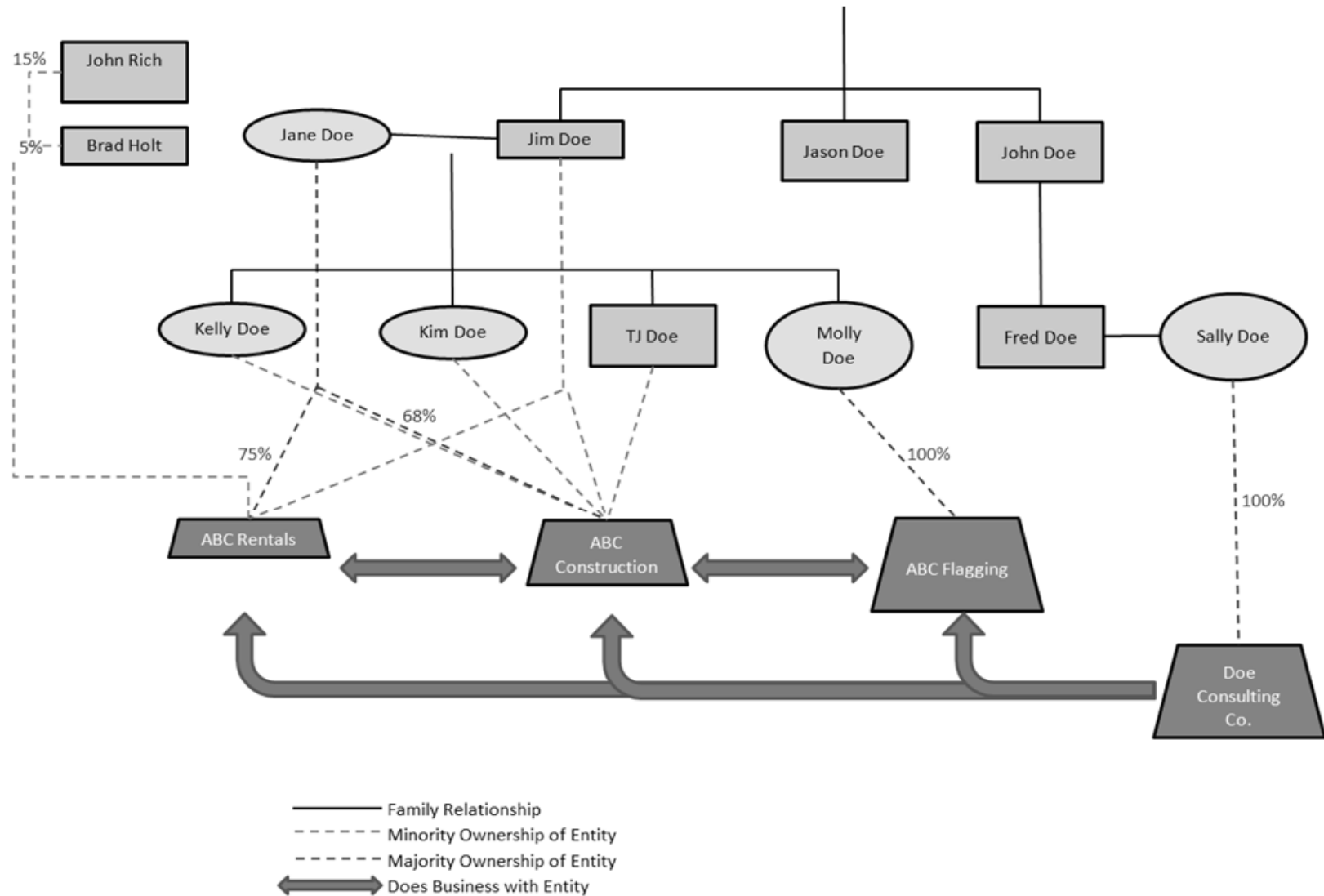


Notes:

Entity structure based upon discovery materials indicating relationships as of July 2003

Entities unaccounted for listed from www.targetsubject.com, www.onesource.com and other sources

Genogram/Entity Chart



Entity Chart Worksheet Exercise

You have been engaged to perform a forensic examination of :
Millennium Investments, Inc. Trust

During your initial interview with the client, you inquire as to the existence of any related entities. The client advises you that it is your job to make that determination. They did however, provide you with name's of the primary Subject's law partners, parents and children.

Your initial investigative research provides you with various names of individuals and entities that may have a relationship to the Subject.

ASSIGNMENT: Prepare an entity chart reflecting the following information:

Stonehedge Group Entities – (Owned by Subject's law partner)

Delta Financial – (Owned by Subject's law partner)

AFIS – (Owned by Subject's law partner)

Dorado Boats – (Owned by Subject's brother)

Investment Banker

Hydrogrow Corp – (Owned by Subject's Father)

Offshore Banker

Prog. Telecom – (Owned by Subject's Father)

Receiver

IBJ Publications – (Owned by Subject's Son)

The IR Firm – (Owned by Subject's Son)

CNG – (Owned by Subject's Daughter)

Biogen Tech – (Owned by Subject's Daughter)

Twenty (20) Affiliates that Millennium has stock ownership in

United States of America v. Gregory S. Schultz
vs
Millennium Investment, Inc. Trust And Related Entities

ENTITY CHART WORKSHEET

100

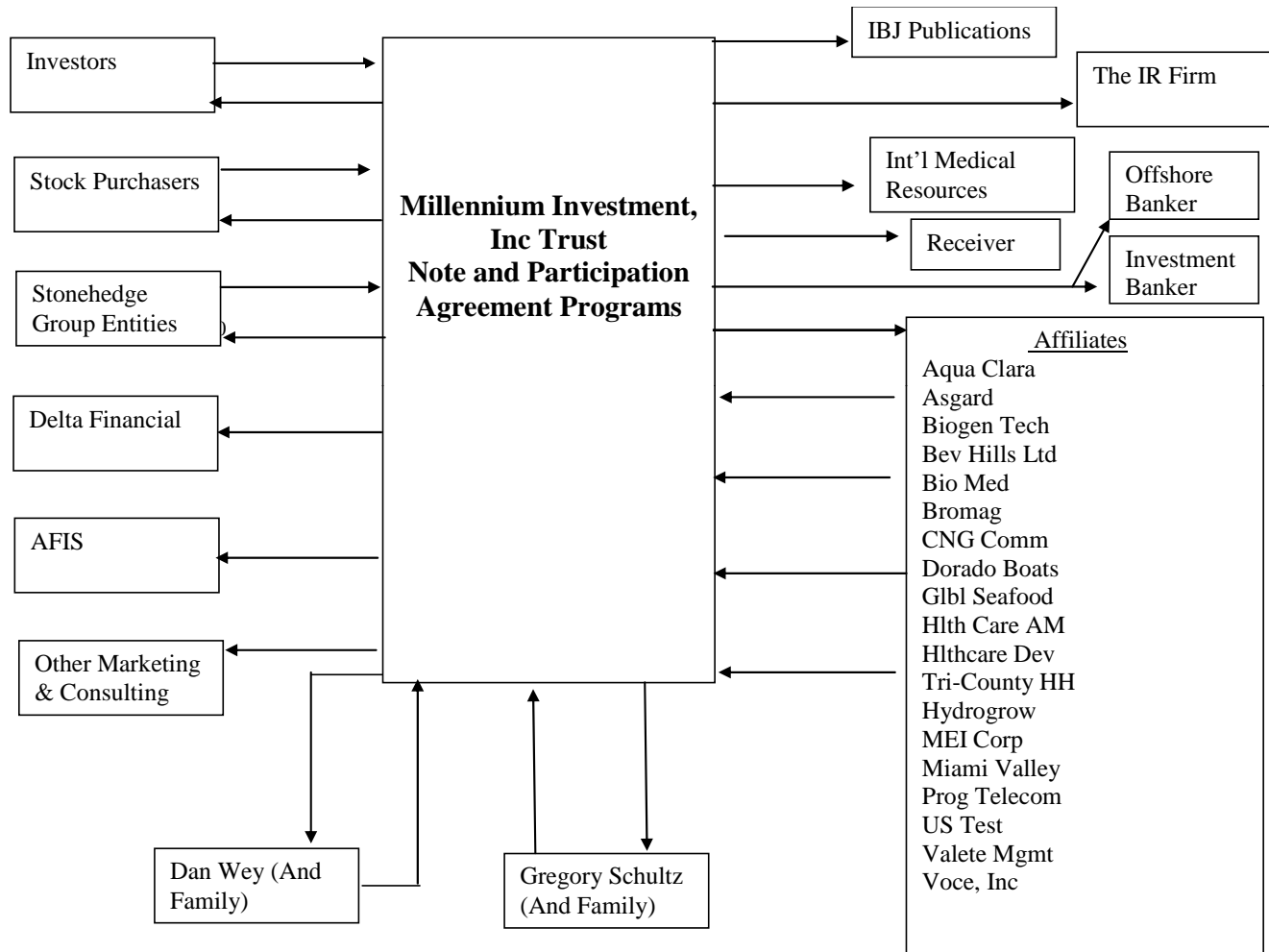
United States of America v. Gregory S. Schultz
vs
Millennium Investment, Inc. Trust And Related Entities

ENTITY CHART WORKSHEET

Millennium Investments,
Inc. Trust

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FINAL ENTITY CHART



ENTITY CHART UPDATE

During your Investigation you discovered various bank transfers to a company called MoneyFlow.

You determined that MoneyFlow was owned by the Brother of the Subject's Law Partner, Mr. Wey.

Please update the Entity Chart to reflect the inclusion of MoneyFlow.

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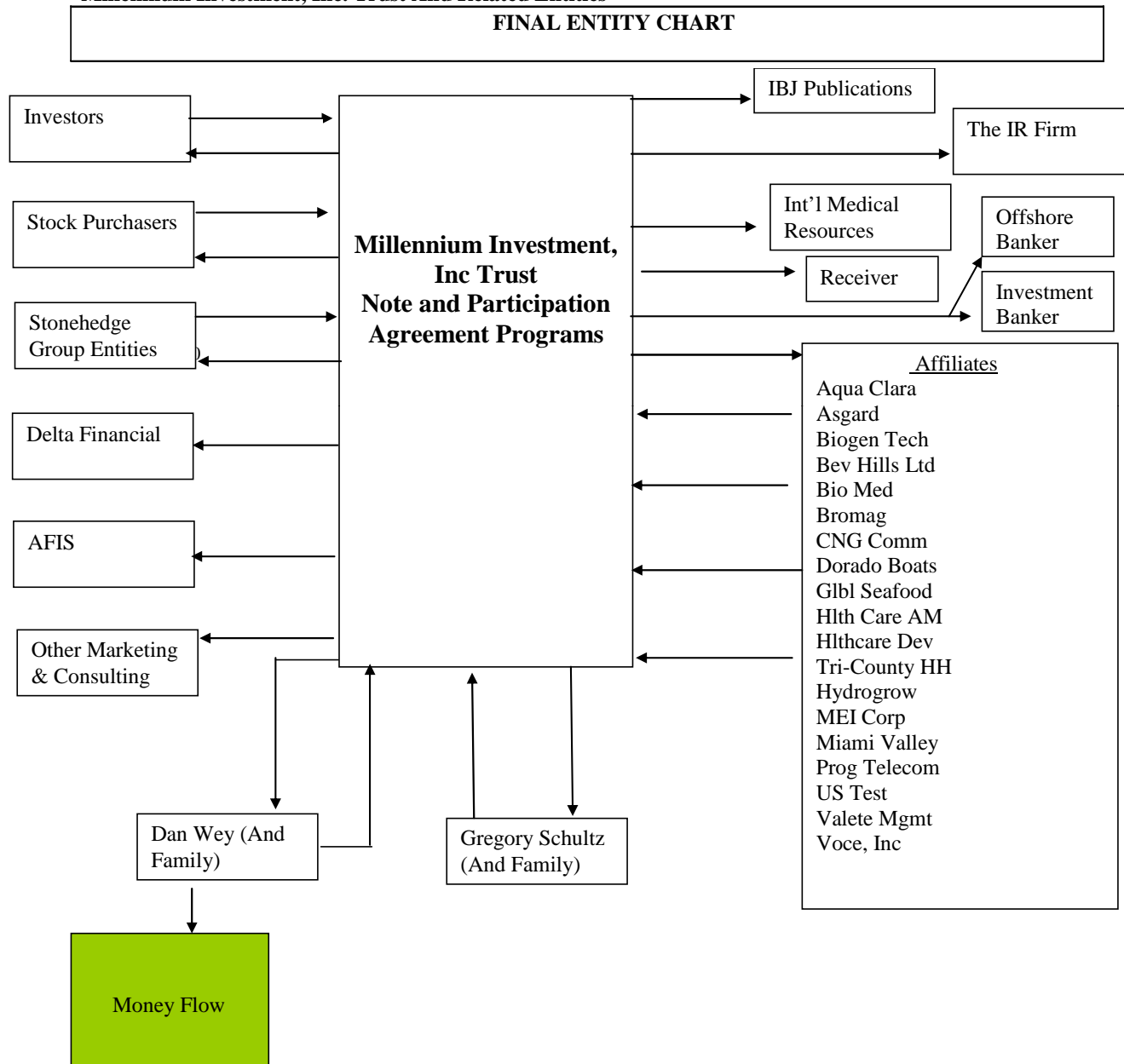
MoneyFlow

104

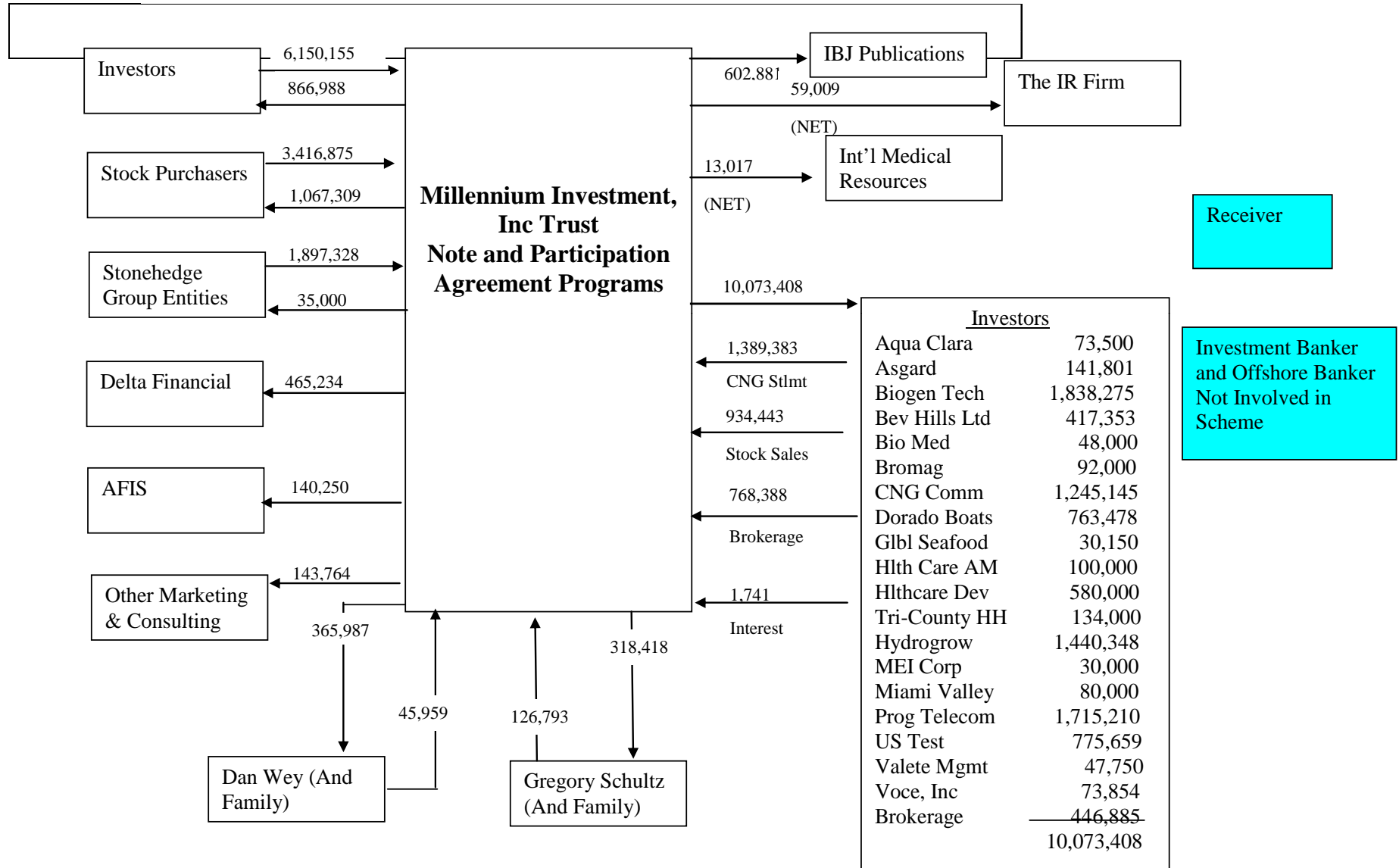
ENTITY CHART UPDATE

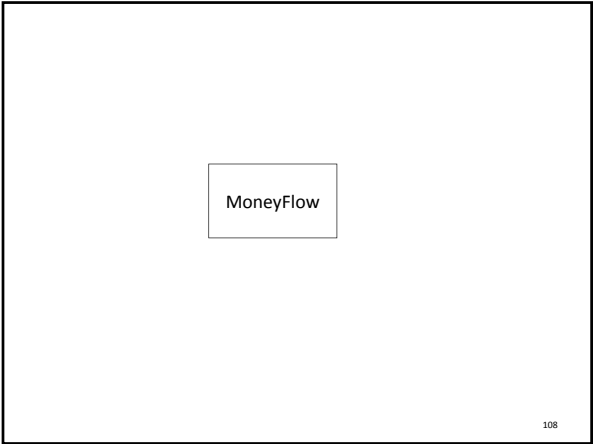
Assignment: Update Full & False Inclusion to reflect addition of MoneyFlow Entity.

105

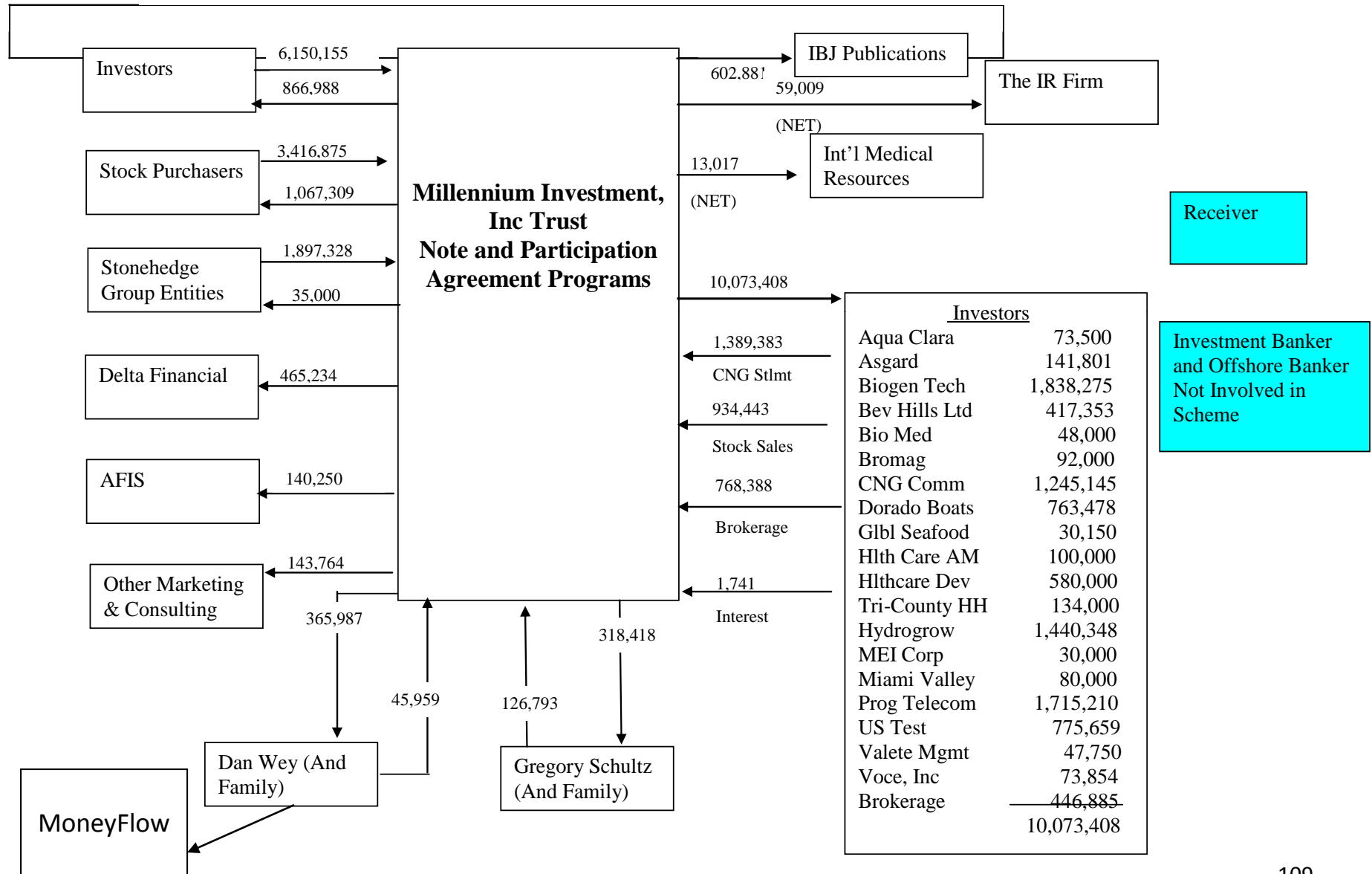


FULL AND FALSE INCLUSION – FINAL EXHIBIT





FULL AND FALSE INCLUSION – FINAL EXHIBIT



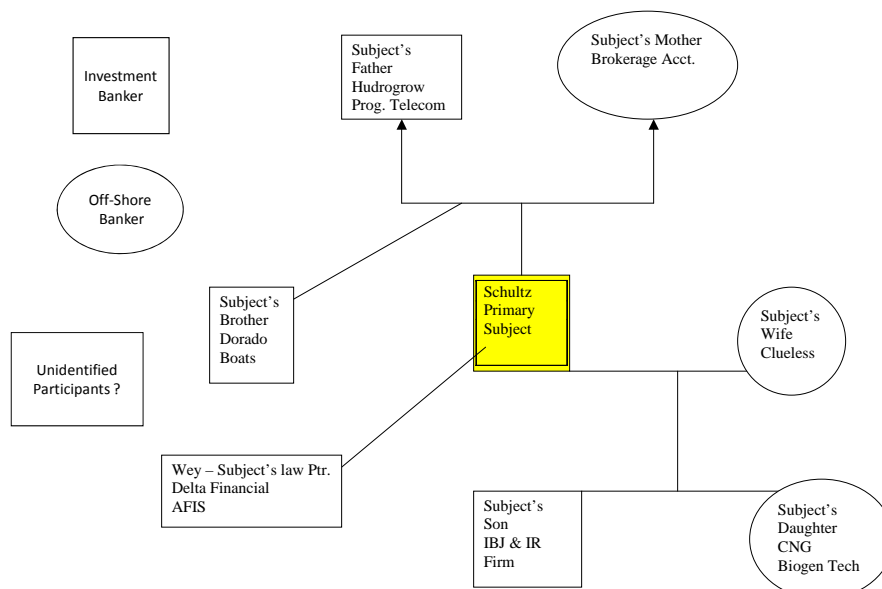
Genogram Worksheet Exercise

Please prepare a Genogram reflecting the Subject's relationships to the following parties:

Subject's Father
Subject's Mother
Subject's Sister
Subject's Brother
Subject's Law Partner
Investment Banker
Off-Shore Banker
Receiver
Unidentified Participants?

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GENOGRAM WORKSHEET



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GENOGRAM UPDATE

Assignment:

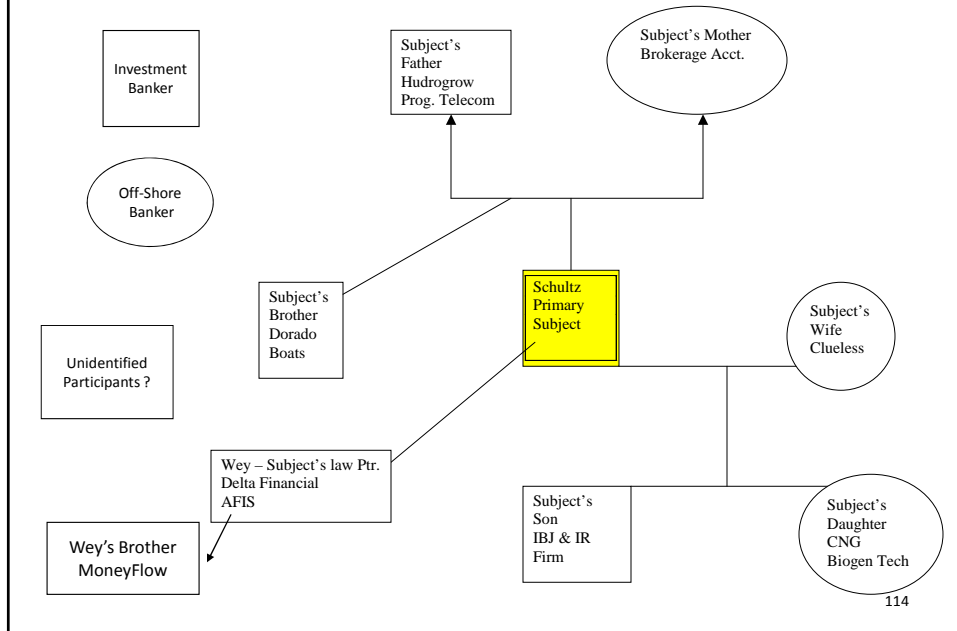
Update the Genogram to reflect Mr. Wey's Brother who owns MoneyFlow.

112

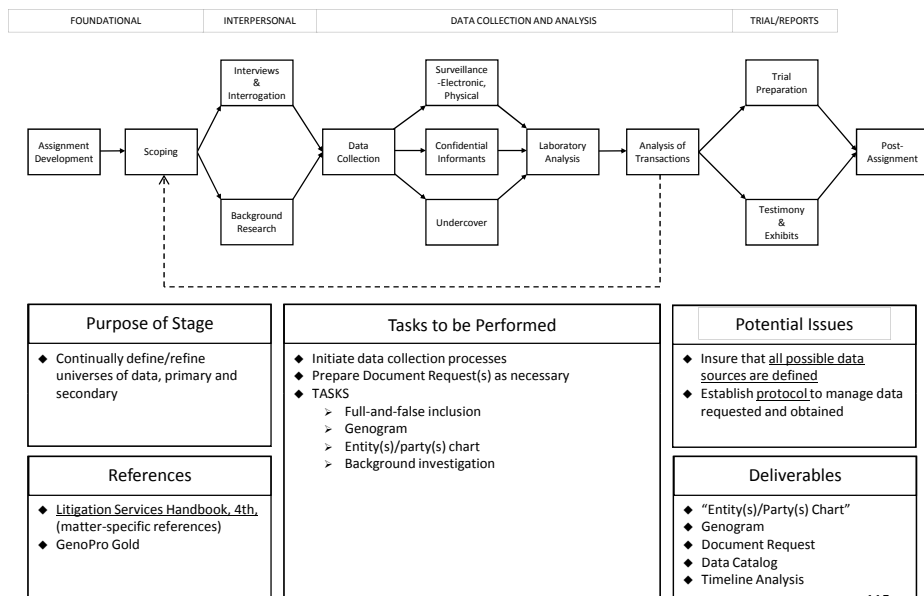
Wey's Brother

113

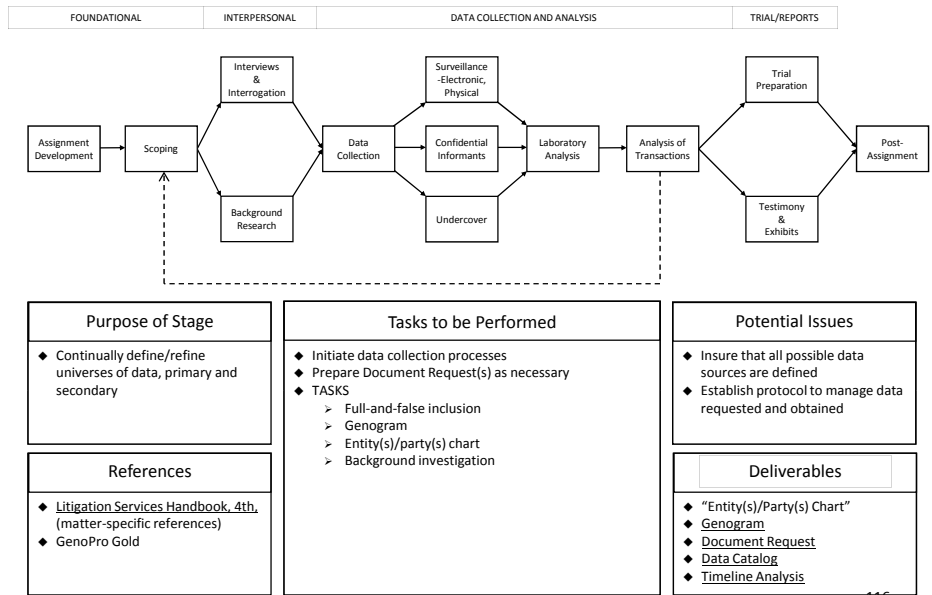
GENOGRAM WORKSHEET



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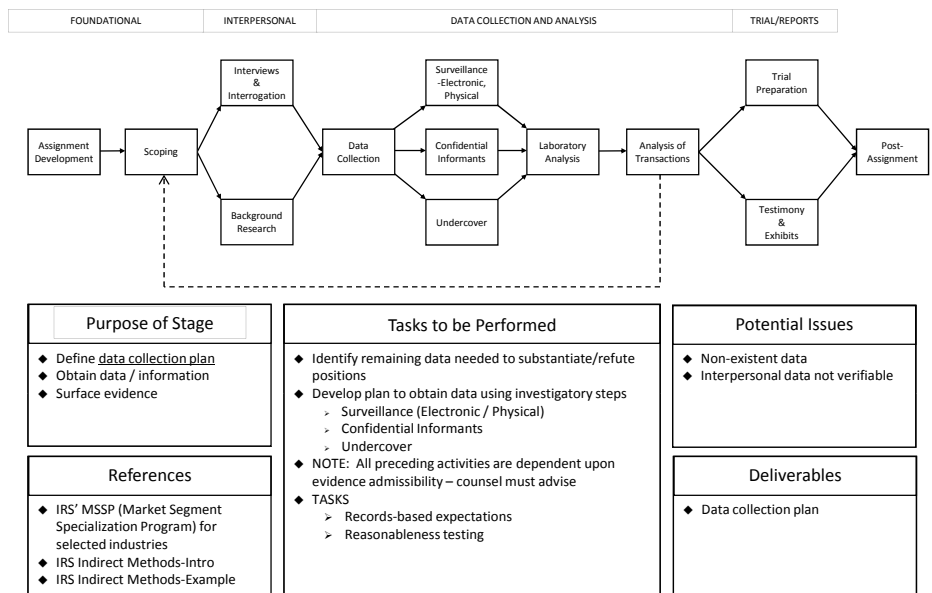


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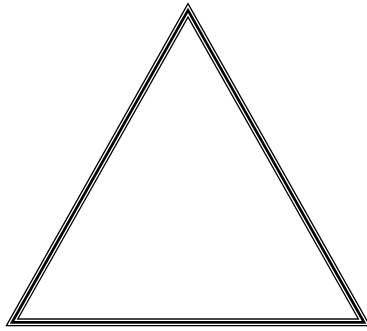


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“ICE[©]”

C - Control

I - Internal



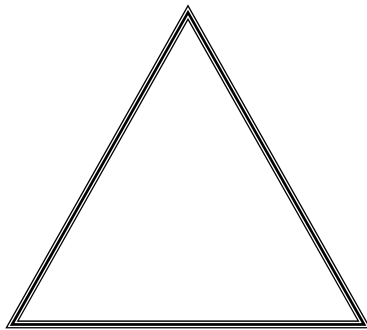
E - External

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“ICE[©]” Closely-Held Business Example

C – Control
Bank Statements

I – Internal
PBC Financials
Operating Reports



E – External
Tax Returns
Attest Reports

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“ICE[©]”

C – Control
Bank Statements

Proof-of-Cash
Timing
Non-Cash

I – Internal
PBC Financials
Operating Reports

E – External
Tax Returns
Attest Reports

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Why Isn't “ICE[©]” Sufficient?

- You must be:
 - ***“Thinking Outside the... Triangle[©]”***
- ***That is where SCORE[©] comes in***

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“SCORE[©]”

Stakeholder	Flow of \$ and/or Units	
	In	Out
S – Suppliers	U	\$
C – Customers	\$	U
O – “Owners” Investors/Lenders	\$	\$
R – Regulators	n/a	\$
E – Employees	U	\$

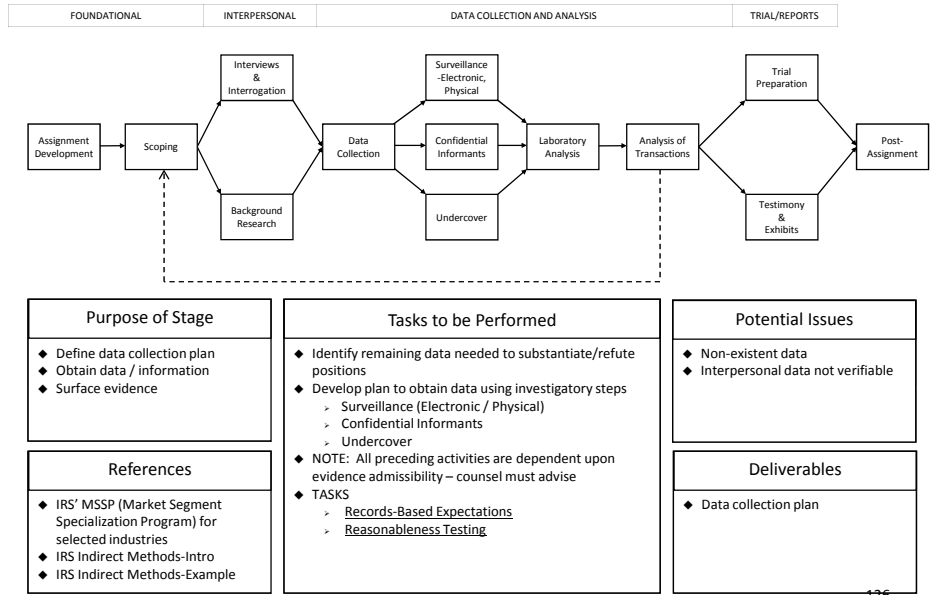
122

Chain of Custody

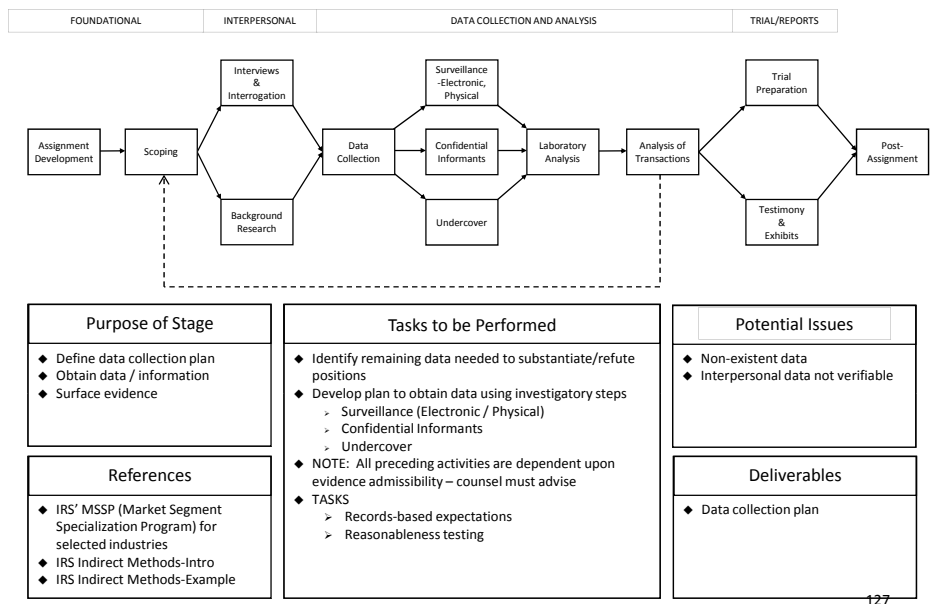
- Gaps in the chain or mishandling of evidence can damage a case
- Evidence may still be admissible if it can be authenticated by an identifying feature, but a mistake in custody affects the weight of the evidence
- In fraud cases, maintaining custody is particularly significant for electronic evidence (concern regarding alteration) – hand-to-hand chain of custody detailing how it was stored and protected from alteration

123

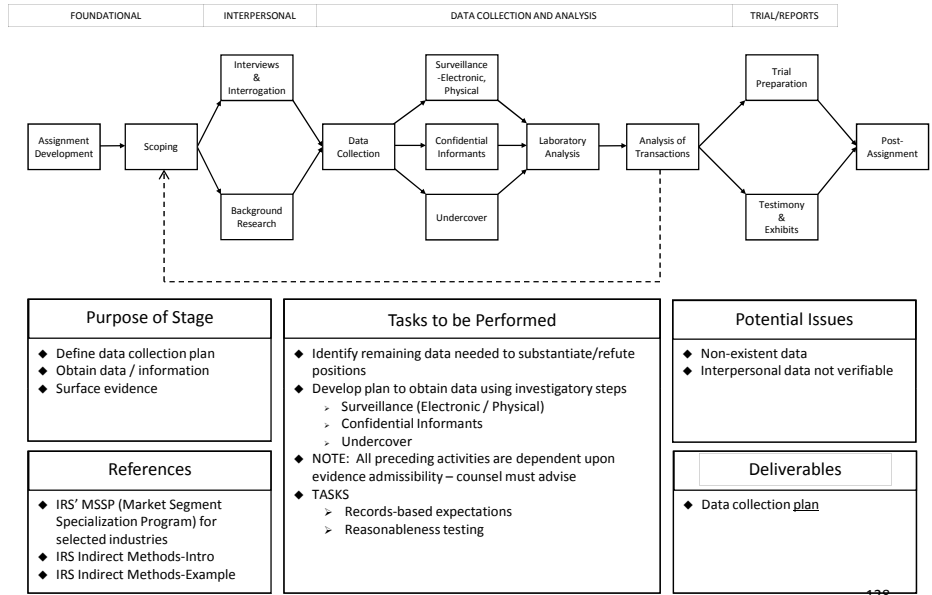
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FORMAL INDIRECT METHODS

**Internal Revenue Service,
Part 4 Chapter 10**

- FSAT – *Financial Status Audit Techniques*
- *Financial Status Analysis*
- Formal Indirect Methods
 - Not precluded by books and records. See *Lipsitz v. Commissioner*, 21 T.C. 917 (1954)

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When to Use Formal Indirect Methods

- Financial Status Analysis – unbalanced
- Irregularities – books & records; weak internal controls
- Gross margin – significant changes; by period or peer group
- Unexplained deposits in bank accounts
- Cash deposits
 - See www.bls.gov, “Inflation and Consumer Spending”
- Net worth increase – not supported

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Formal Indirect Methods

- Source & application of funds (IRM 4.10.4.6.3)
 - a.k.a. “Cash T” Analysis
- Bank Deposits & Cash Expenditures (IRM 4.10.4.6.4)
- Markup Method (IRM 4.10.4.6.5)
- Unit & Volume (IRM 4.10.4.6.7)
- Net Worth (IRM 4.10.4.6.7)

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Formal Indirect Methods

- Source & application of funds
 - a.k.a. “Cash T” Analysis
- Bank Deposits & Cash Expenditures
- Markup Method
- Unit & Volume
- Net Worth

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Source & Applications of Funds

United States v. Johnson, 319 U.S. 503 (1943)

- Uses subject’s cash flows to compare:
 - All known expenditures
 - Estimates personal living expenses
 - All known receipts
- Takes into account:
 - Net changes in assets & liabilities
 - Non-deductible expenditures
 - Non-taxable receipts
- If expenditures > receipts: unreported

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Source & Applications of Funds

- Typical uses
 - Deductions/expenditures out of proportion
 - Cash does not flow from a bank account
 - Common use of cash – in or out

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Source & Applications of Funds

- Accrual impacts
 - Beginning A/R shown on “debit” side
 - i.e., collected during period
 - Ending A/R shown on “credit” side
 - i.e., effects a noncash income increase
 - Beginning A/P shown on “credit” side
 - i.e., current period cash out
 - Ending A/P shown on “debit” side
 - i.e., current period income reduction

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Source & Application of Funds

Source and Application of Funds Method: Example of Computation for Cash and Accrual Based Taxpayers

Sources of Funds		Applications of Funds	
Wages		Withholdings (W-2)	
Interest Income		Investment Interest	
Dividends			
Tax Refunds			
Alimony Received			
Sch. C Receipts	\$50,000	Sch C Expenses (net of depreciation)	
		Sch C Purchases	
		Sch C Labor	\$32,000
		Sch C Material and Supplies	
		Sch C other period costs	
Sch. D - Gross Sales		Sch. D Asset & Investment Purchases	
Sale of Business			

Property			
IRA/Pension Distributions		Contributions to IRA, annuities & pensions, Penalties for early withdraw	
Rental Income		Rental Expenses (net of depreciation)	
Sch F Receipts		Sch F expenses (net of depreciation)	
Unemployment Comp.			
Social Security Benefits			
Unreported Income (IRP)			
Cash Distributions:		Contribution of Capital	
-- S-Corps		-- S-Corps	
-- Partnerships		-- Partnerships	
-- Fiduciaries			
Sale: Personal Residence		Sale of Residence Costs (Form 2119)	
Sale: Personal Property		Insurance Policies	
Advanced EITC			
Child Support Received			
Cash on Hand (beginning)		Cash on Hand (ending)	
Cash in Bank (beginning)	\$300	Cash in Bank (ending)	\$600
Credit Cards (End. Bal.)		Credit Cards (Beg. Bal.)	
Loans		Loan repayments	
Nontaxable Income - gifts, inheritances, etc.		Personal Capital Acquisitions	
Other sources of funds		Personal Living Expenses	\$40,000
		Other "cash out" items	
Accrual Basis Taxpayer		Accrual Basis Taxpayer	
-- Decrease in Accts/Rec.		-- Increase in Accts/Rec.	
-- Increase in Accts/Pay		-- Decrease in Accts/Pay	
Total Sources of Funds:	\$50,300	Total Expenditures:	\$72,600

Computing understatement of taxable income

Total Applications of Funds	\$72,600
Total Sources of Funds	\$50,300
Excess Applications over Sources (understatement of taxable income).	\$22,300

Formal Indirect Methods

- Source & application of funds
 - a.k.a. “Cash T” Analysis
- Bank Deposits & Cash Expenditures
- Markup Method
- Unit & Volume
- Net Worth

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Bank Deposits & Cash Expenditures

Gleckman v. United States, 80 F.2d 394 (8th Cir. 1935)

- Differs from Bank Account Analysis:
 - Depth of analysis of ALL bank account transactions
 - Accounts for cash expenditures
 - Estimates actual personal living expenditures
- Theory: only 2 things can occur with \$\$\$:
deposit or spent (including hoard)

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Bank Deposits & Cash Expenditures

- Assumptions:
 - Bank deposits, adjustment for non-applicable items reflect taxable receipts
 - Outlays on tax return were real:
 - Could only occur from check, cash or credit card
 - If cash, presumes taxable source
 - Taxpayer’s burden to demonstrate nontaxable

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Bank Deposits & Cash Expenditures

- Used for business & nonbusiness
- May lead to additional sources
- If method indicates understatement of income:
 - Underreported income AND/OR
 - Overstated expenses

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Bank Deposits & Cash Expenditures

- Typical uses:
 - Books & records unreliable
 - Deposits suggest income sources
 - Most expenses paid by check
 - Account previously used as reporting base
- Comments:
 - Significant cash reliance may preclude
 - Cannot take shortcut
 - Method **incomplete** unless cash accounted for

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Gross Receipts Defined

- Deposits into accounts
- Funds expended, but not deposited
- Funds accumulated, but not deposited

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Gross Receipts

1.	Total bank deposits
Less:	
2.	Nontaxable receipts deposited
3.	Net deposits resulting from taxable receipts
Add:	
4.	Business expenses paid by cash
5.	Capital items paid by cash (personal and business)
6.	Personal expenses paid by cash
7.	Cash accumulated during the year from receipts
Subtract:	
8.	Nontaxable cash used for lines 4-7.
For accrual basis taxpayers:	
9.	For Accounts Receivable, subtract the beginning balance from the ending balance. A net increase represents additional taxable gross receipts and is added here. A net decrease represents payments included in prior year gross receipts and is subtracted here.
10.	For Accounts Payable, subtract the beginning balance from the ending balance. A net increase represents purchases on account during the year and is subtracted here. A net decrease represents payments on accounts and is added here.
11.	Gross Receipts as corrected

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Overdrawn Accounts

Bank balance @ beginning of year per bank statement	\$11,500
Less: Prior year outstanding checks	<u>(13,000)</u>
Balance @ beginning of year as reconciled	(1,500)
Add: Deposits made during the year	<u>125,000</u>
Total available	\$123,500
Bank balance @ end of the year per bank statement	\$5,000
Less: Current year outstanding checks	<u>(\$7,200)</u>
Balance @ end of the year	(2,200)
Total checks written during the year	\$125,700

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Bank Deposits & Cash Expenditures

The Bank Deposits and Cash Expenditures Method: Example of Computation of Gross Receipts.

1.	Total bank deposits		\$151,000
	Less:		
2.	Nontaxable receipts deposited		(\$35,000)
3.	Net deposits resulting from taxable receipts		\$116,500
	Add:		
4.	Business expenses paid by cash	\$50,700	
5.	Capital items paid by cash (personal & business)	\$20,300	
6.	Personal living expenses paid by cash	\$7,034	
7.	Cash accumulated during the year from receipts	\$5,000	\$83,034
	Subtotal		\$199,534
8.	Less nontaxable income used for lines 4-7		(\$15,000)
9.	Accts. Rec.: Add the difference between the ending and beginning balances		0
10.	Acct. Pay.: Subtract the difference between the ending and beginning balances		0
11.	Gross Receipts as corrected		\$184,534

Line 1:			
	Deposits during the year		\$150,000
	Add receipts deposited in the subsequent year		\$13,000
	Subtract prior year receipts deposited during year		(\$11,500)
	Reconciled bank deposits		\$151,500

Line 2:			
	Loan proceeds		\$12,000
	Checks to cash redeposited		\$3,500
	Transfers between accounts		\$6,000
	Nontaxable Veterans Administration pension		\$14,000
	Total		\$35,000

Line 4:			
	Total business expenses per return		\$200,000
	Noncash business expenses		\$60,000
	Total business expenses requiring cash outlay per return		\$140,000
	Computation of business checks for the year		
	Account balance at beginning of year	\$10,000	
	Add deposits during the year	\$150,000	
	Subtotal	\$160,000	
	Less balance at the end of the year	(\$8,000)	
	Subtotal	\$152,000	
	Add checks written this year but cleared in the subsequent year	\$3,000	
	Subtotal	\$155,000	
	Less checks written in prior year but cleared this year	(\$6,000)	
	Total checks written this year	\$149,000	
	Less nonbusiness checks		
	Checks to cash for personal expenses	\$3,500	
	Check transfers	\$6,000	
	Personal expenses paid by check	\$34,500	
	Capital expenditure paid by check	\$15,700	\$59,700
	Total business checks	\$89,300	(\$89,300)
	Total business expenses paid by cash		\$50,700

Non-Cash Adjustments

- Should be separately considered
- For example:
 - If \$5,000 adjustment required & depreciation overstated by \$1,000:
 - \$5,000 unreported income
 - \$1,000 depreciation adjustment

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Formal Indirect Methods

- Source & application of funds
 - a.k.a. “Cash T” Analysis
- Bank Deposits & Cash Expenditures
- Markup Method
- Unit & Volume
- Net Worth

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Markup Method

United States v. Fior D'Italia, Inc., 1536 U.S. 238 (2002)

- Reconstructs income:
 - Uses subject-specific percentages or ratios
 - Obtained from Bureau of Labor statistics or industry sources
 - May use subject's actual markups
 - May overcome weaknesses of other Formal Indirect Methods when cash is unknown
 - Cost of Goods Sold verified and used to derive Revenues

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Markup Method

- Typical uses:
 - Inventories are principal income-producing asset and subject records unreliable
 - Cost of Goods Sold readily ascertained and reasonable certainty re sales prices
 - Cash-based business, e.g. gasoline retailers, liquor stores, taverns, restaurants, jewelry stores, et al

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Markup Method

- Gross Profit Margin to Sales:
 - $(\text{Sales} - \text{Cost of Goods Sold}) / \text{Sales}$

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Markup Method - Example

Sales per return:	\$140,000
Cost of Goods Sold (Product A):	\$50,000
Cost of Goods Sold (Product B):	\$80,000

The examiner determines the gross profit margins for products A and B by interviewing the taxpayer, analyzing the taxpayer's records, and reviewing industry standards.

Product A:	10%
Product B:	20%

Step 1: Determine the COGS%

	<u>Product A</u>	<u>Product B</u>
Gross Receipts:	100%	100%
Less: Gross Profit %	<u>10%</u>	<u>20%</u>
COGS%	90%	80%

Step 2: Determine the correct Gross Receipts: (COGS/COGS% = Gross Receipts)

	<u>Product A</u>	<u>Product B</u>
\$50,000/.90	\$55,555	
\$80,000/.80		\$100,000

Step 3: Determine the Adjustment to Gross Receipts

Sales of Product A:	\$ 55,555
Sales of Product B:	<u>+ \$100,000</u>
Sales as Recomputed:	\$155,000
Sales per Tax Return:	<u>- \$140,000</u>
Adjustment to Gross Receipts:	\$15,555

Formal Indirect Methods

- Source & application of funds
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- Bank Deposits & Cash Expenditures
- Markup Method
- Unit & Volume
- Net Worth

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Unit & Volume

Irby v. Commissioner TC Memo 1997-347

- Apply sales price to volume of subject business
 - Carryout pizza, coin operated laundry, mortuaries

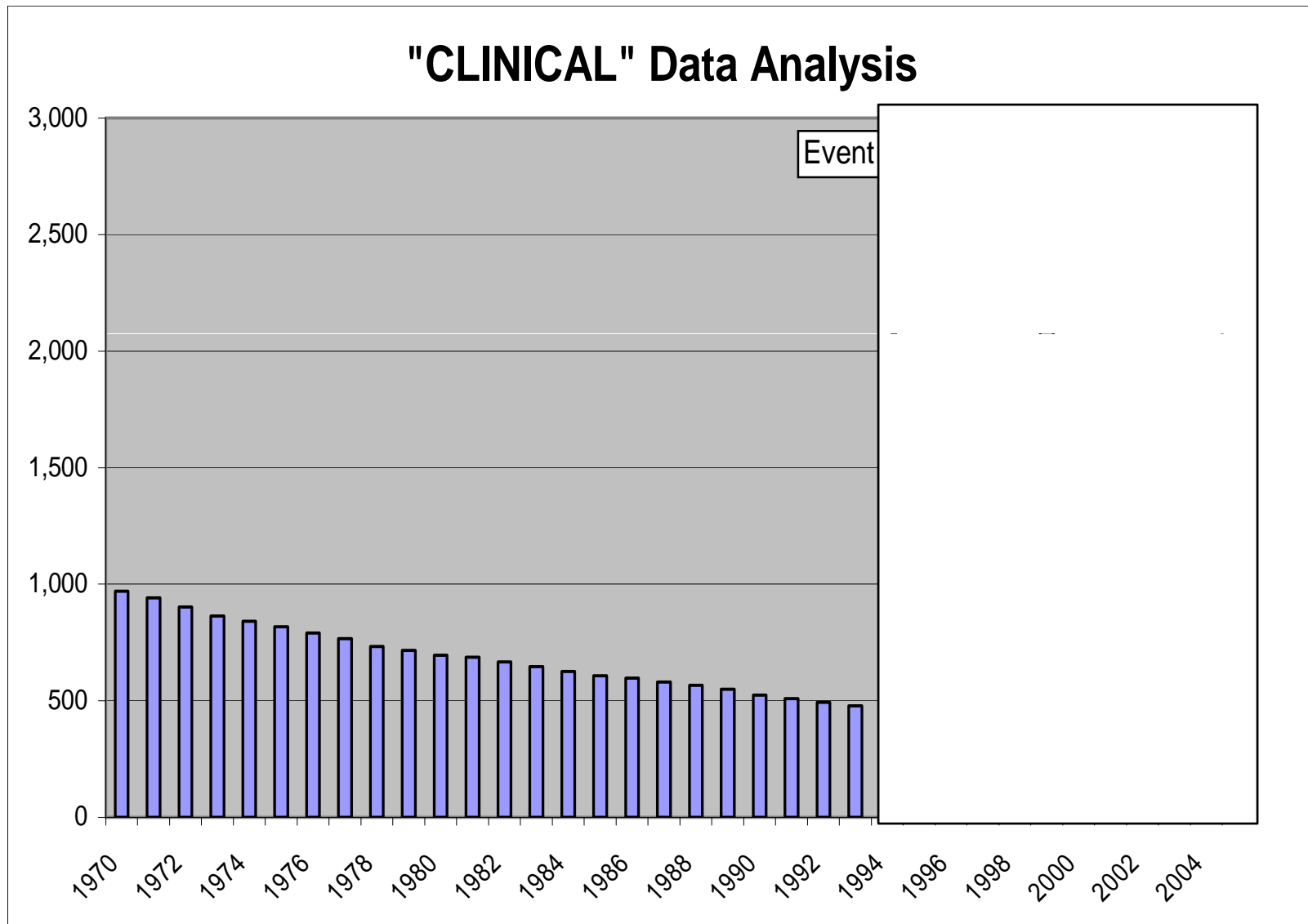
154

Unit & Volume

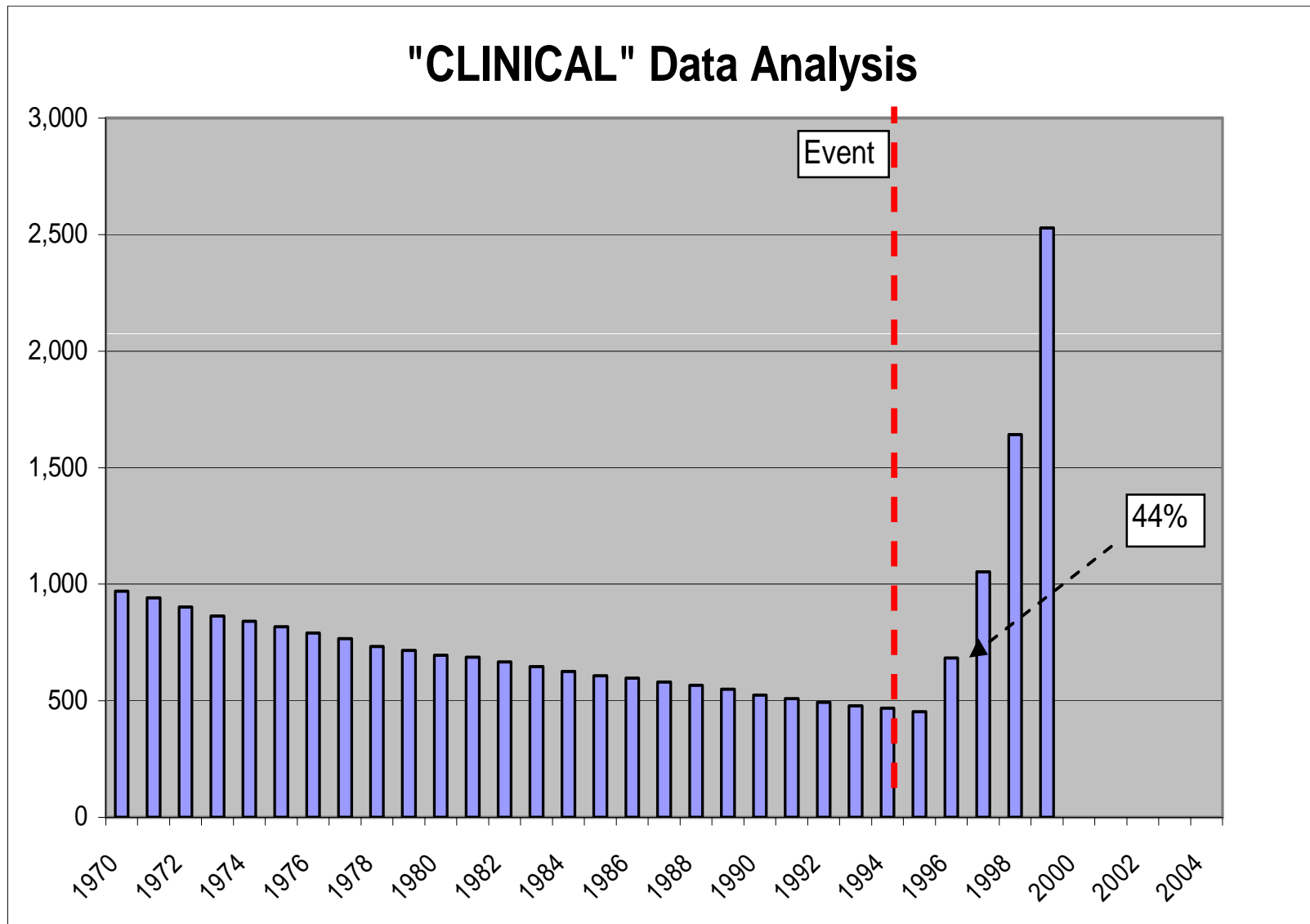
- Typical uses:
 - Units readily ascertained and pricing apparent
 - Few types of products/services with little variation and price

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3% Annual Decline



3% Annual Decline



Formal Indirect Methods

- Source & application of funds
 - a.k.a. “Cash T” Analysis
- Bank Deposits & Cash Expenditures
- Markup Method
- Unit & Volume
- Net Worth

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(Modified) Net Worth Method

- **Long-recognized** by the courts
 - *United States v. Frost*, 25 F.Cas. 1221 (N.D. Ill. 1869)
 - *United States v. Beard*, 222 F.3d 84 (4th Cir. 1955) – 1st criminal case
- Implied income based upon changes in cost-based net worth (equity)
- Intuitively understood
- “Relatively” simple to prepare
- Straightforward to explain in court
- aka “*Indirect Method*”

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Net Worth

- Typical uses:
 - 2 or more years
 - Significant changes – assets & liabilities
 - No books & records
 - Inadequate/absent books & records
 - Books and records not produced
- When “self-serving” books & records suggest inaccuracies
- Regularly recommended in fraud matters
- Can corroborate other techniques

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Net Worth Method

Modified Net Worth Method - Exhibit P
--

Net worth as of December 31, 2002	\$\$\$,\$\$\$	
Less: net worth as of December 31, 2001	<u>\$\$,\$\$\$</u>	
Increase in net worth	\$\$,\$\$\$	
Add: Living expenses	<u>\$\$,\$\$\$</u>	
Total expenditures	\$\$\$,\$\$\$	
Less: Income from known sources	<u>(\$,\$\$\$)</u>	
Expenditures in excess of known sources of funds		<u><u>\$\$,\$\$\$</u></u>

Example Net Worth Method

Hypothetical Modified Net Worth Method - Exhibit Q				
Line	ASSETS	Ref.	5/17/1999	2/20/2022
	Cash			
1	Currency	Test.	unk	\$71,000
2	Checking accounts	BR	1,732	8,434
3	Other accounts	BR	unk	5,100
	Undeposited items			
4	Traveler's checks	SR	-	9,000
	Time deposits			
5	60-day CD	BR	unk	5,000
6	120-day CD	BR	unk	12,000
7	Food stocks	SR	unk	2,932
8	Firearms, ammunition, explosives	SRS	unk	16,700
9	Computers, cameras, software	SRS	-	16,256
10	Automobile	BR	-	3,600
	Total Assets		1,732	150,022
	LIABILITIES			
11	Automobile loan	BR	-	1,900
12	Net worth, beginning and end		1,732	148,122
13	Less: Beginning net worth			1,732
14	Increase in net worth			146,390
15	Add: Personal living expenses	CES		61,748
16	Total expenditures			208,138
17	Less: Funds carried into country	Test.		3,000
18	Funds earned through employment	BR		19,976
19	Wire transfers from family	BR		17,000
20	Expenditures in excess of funds			\$ (168,162)

Cash Inflows/Outflows Analysis

Hypothetical Source and Use of Cash Method - Exhibit R						
	1999	2000	2001	2002	Total	
Line Known sources of cash						
1 Earned in various jobs	\$ 1,736	7,845	136	10,259	\$	19,976
2 Wire transfers from family	4,000	700	11,000	1,300		17,000
3 Carried into country	3,000	-	-	-		3,000
Total known sources of cash	8,736	8,545	11,136	11,559		39,976
Expenditures						
4 Seized currency	unknown			71,000		71,000
5 Increase in checking account				6,702		6,702
6 Seized in other accounts				5,100		5,100
7 Increase in traveler's checks				9,000		9,000
8 Increase in time deposits				17,000		17,000
9 Seized food stocks				2,932		2,932
10 Seized firearms, etc.				32,956		32,956
11 Net automobile purchase				1,700		1,700
12 Personal living expenses	9,952	14,871	16,589	20,336		61,748
13 Total expenditures	9,952	14,871	16,589	166,726		208,138
14 Expenditures in excess of funds	(1,216)	(6,326)	(5,453)	(155,167)	\$	(168,162)

(Modified) Net Worth - Applied

Dual Integration of (Pat Perzel):

- Lifestyle Cash Flow
 - Net Worth

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Forensic Analysis:

- Unreported Income
- Non-Business Expenditures

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MR. & MRS. IMACHEAT					
LIFESTYLE EXPENDITURES					
FUNDS AVAILABLE FOR LIFESTYLE:	2005	2004	2003	2002	
Funds Reported on 1040 Tax Returns:					
Husband's W-2 Gross Wages	300,000	300,000	300,000	300,000	
Interest, Dividends & Capital Gains	63,559	27,612	12,360	3,200	
	363,559	327,612	312,360	303,200	
Less:					
401K Pension Contribution	(12,500)	(12,000)	(11,000)	(10,500)	
Federal Income Tax Withheld from W-2	(75,000)	(75,000)	(75,000)	(75,000)	
Social Security & Medicare Withheld from W-2	(9,930)	(9,682)	(9,434)	(9,310)	
Employee Business Exp. Including 100% meals	(22,726)	(19,420)	(27,945)	(20,096)	
Fed. Inc Tax - Prior Yr. Balance (Paid) Refunded	1,935	7,286	186	7,439	
Funds from Additional Debt Borrowing	-	-	-	-	
Funds Available For Lifestyle:	245,338	218,796	189,167	195,733	
USES OF FUNDS					
Principal - Marital Mortgage	18,000	17,600	17,000	16,400	
Interest - Marital Mortgage	48,619	50,333	52,911	54,384	
Real Estate Taxes	22,756	17,998	15,368	14,812	
Contributions	13,456	15,115	10,511	12,200	
Tax Prep Fees	1,750	1,249	1,249	1,425	
H/O Insurance	6,422	5,459	4,720	4,180	
Condo Assoc Fees (for Husband's hidden Condo)	5,600	3,400	-	-	
Vehicle Lease & Insurance - Wife	15,470	15,390	15,020	14,690	
Vehicle Lease & Insurance - Child	7,931	7,786	7,468	7,245	
(H) Life & Disability Insurance	22,785	22,454	21,963	21,223	
Electric, Telephone, Cable, Water, Lawn @ 1750/mo Avg.	21,000	21,000	21,000	21,000	
Alimony Payments to former spouse -\$2,000 mo	24,000	24,000	24,000	24,000	
Credit Card Payments- Includes College Tuition	181,877	174,149	134,581	105,890	
Other Expenditures paid by Check	75,429	67,341	41,880	13,170	
Deposits to Joint Brokerage Account	135,000	85,000	85,000	41,000	
Deposits to Husband's Hidden Brokerage Account	398,559	164,000	50,000	-	
Down Payment on Husband's Hidden Condo	-	83,000	-	-	
Total Estimated Uses of Funds	998,654	775,274	502,671	351,619	
Cash Flow Excess (Deficit) from Income	(753,316)	(556,478)	(313,504)	(155,886)	

MR. & MRS. IMACHEAT

LIFESTYLE EXPENDITURES, CON'T

Cash Flow Excess (Deficit) from Income		(753,316)	(556,478)	(313,504)	(155,886)
SOURCE OF CASH TO COVER DEFICIT:					
-Unreported Business Sales		584,289	452,842	314,796	155,938
-Excess Payroll, net of tax		170,000	105,000	-	-
Adjusted Cash Flow Excess (Deficit)		973	1,364	1,292	52
ACTUAL GROSS INCOME		1,117,848	885,454	627,156	459,138

MR. & MRS. IMACHEAT					
NET WORTH METHOD OF INCOME RECONSTRUCTION					
Description	12/31/2001	2002	2003	2004	2005
Assets at Cost:					
Bank Acct #1 - Reconciled	23,457	23,509	24,801	26,165	27,138
Brokerage Account - Joint	35,000	76,000	161,000	246,000	381,000
Brokerage Acct. - Husb. Hidden	-	-	50,000	214,000	612,559
Personal Residence	750,000	750,000	750,000	750,000	750,000
Husband's Hidden Condo - Down Pymt.	-	-	-	83,000	83,000
Vehicles are leased	-	-	-	-	-
Furniture & Artwork	90,000	90,000	90,000	90,000	90,000
Investment in Imacheat, Inc.	400,000	400,000	400,000	400,000	400,000
Total Assets	1,298,457	1,339,509	1,475,801	1,809,165	2,343,697
Liabilities:					
Credit Cards - Paid off Monthly	-	-	-	-	-
Mortgage - Personal Residence	(600,000)	(583,600)	(566,600)	(549,000)	(531,000)
Total Liabilities	(600,000)	(583,600)	(566,600)	(549,000)	(531,000)
NET WORTH	698,457	755,909	909,201	1,260,165	1,812,697
Less: Prior Year's Net Worth	-	(698,457)	(755,909)	(909,201)	(1,260,165)
Increase in Net Worth		57,452	153,292	350,964	552,532
Add Expenditures (excluding mortgage)		294,219	350,671	425,674	447,095
Add Taxes & Pension Contr. & Employee Bus Exp.		107,467	123,193	108,816	118,221
ADJUSTED INCOME FOR YEAR		459,138	627,156	885,454	1,117,848

IMACHEAT, INC.								
INCOME STATEMENT PER TAX RETURNS								
	2005	%	2004	%	2003	%	2002	%
Sales	2,888,600	100%	2,465,380	100%	2,348,760	100%	2,169,840	100%
Cost of Sales	1,562,800	54%	1,313,200	53%	1,198,600	51%	1,046,600	48%
Gross Profit	1,325,800	46%	1,152,180	47%	1,150,160	49%	1,123,240	52%
Expense:								
Officers Comp	300,000	10%	300,000	12%	300,000	13%	300,000	14%
Salaries & Wages	779,922	27%	567,037	23%	328,826	14%	260,000	12%
Auto Expense	32,000	1.1%	28,000	1.1%	14,000	0.6%	12,000	0.6%
Credit Card Fees	69,458	2.4%	58,364	2.4%	53,271	2.3%	46,516	2.1%
Depreciation	37,000	1.3%	7,600	0.3%	8,900	0.4%	9,000	0.4%
Insurance	21,000	0.7%	19,000	0.8%	17,000	0.7%	15,000	0.7%
Employee Benefits	64,000	2.2%	60,000	2.4%	30,000	1.3%	28,000	1.3%
Interest	24,000	0.8%	25,000	1.0%	-	0%	-	0%
Office Exp	19,067	0.7%	18,912	0.8%	17,430	0.7%	16,120	0.7%
Professional Fees	59,000	2.0%	12,000	0.5%	11,500	0.5%	11,000	0.5%
Rent	52,000	1.8%	30,000	1.2%	28,000	1.2%	26,000	1.2%
Repairs	9,437	0.3%	11,903	0.5%	15,612	0.7%	14,568	0.7%
Utilities	29,812	1.0%	15,896	0.6%	15,568	0.7%	15,213	0.7%
Payroll Taxes	107,992	3.7%	86,704	3.5%	62,883	2.7%	56,000	2.6%
Telephone	31,610	1.1%	25,888	1.1%	23,412	1.0%	21,056	1.0%
Travel & Ent	14,100	0.5%	3,500	0.1%	3,400	0.1%	3,300	0.2%
Utilities	9,882	0.3%	6,111	0.2%	5,800	0.2%	5,600	0.3%
Total Expense	1,660,280	57%	1,275,916	52%	935,602	40%	839,373	39%
NET INCOME	(334,480)	-12%	(123,736)	-5%	214,558	9%	283,867	13%

IMACHEAT, INC.				
RECONSTRUCTION OF SALES				
	2005	2004	2003	2002
Cost of Goods as Reported	1,562,800	1,313,200	1,198,600	1,046,600
Cost of Goods Sold as determined	45%	45%	45%	45%
Sales Recalculated based upon 45% cost of goods	3,472,889	2,918,222	2,663,556	2,325,778
Reported Sales	2,888,600	2,465,380	2,348,760	2,169,840
UNREPORTED SALES	584,289	452,842	314,796	155,938

IMACHEAT, INC.							
INCOME AS ADJUSTED							
	2005		2004		2003		2002
Net Income as Reported	(334,480)	-12%	(123,736)	-5%	214,558	9%	283,867
Adjustments:							
Unreported Sales	584,289		452,842		314,796		155,938
(A) Fictitious Payroll	250,000		170,000		-		-
(B) Automobile Exp	14,000		12,000		-		-
(C) Depreciation	30,000		-		-		-
(D) Employee Benefits	28,000		30,000		-		-
(E) Interest	24,000		25,000		-		-
(F) Payroll Taxes	25,000		17,000		-		-
(G) Professional Fees	47,000		-		-		-
(H) Rent	20,000		-		-		-
(I) Travel & Ent	14,100		3,500		3,400		3,300
(J) Telephone	4,500		-		-		-
(K) Utilities	3,100		-		-		-
Total Adjustments	1,043,989		710,342		318,196		159,238
INCOME ADJUSTED	709,509		586,607		532,753		443,105
(A) Add back excess payroll paid to girl friend that was returned to Husband							
(B) Add back Automobile lease paid for girl friend							
(C) Add back Depreciation on furniture purchased for Husband's hidden Condo							
(D) Add back travel expense for Husband and girl friend coded to employee benefits							
(E) Add back interest expense for purchase of Husband's hidden Condo							
(F) Add back payroll taxes related to excess payroll							
(G) Add back Husband's divorce Attorney fees							
(H) Add back rent paid for girlfriend's apartment							
(I) Add back non-business travel & entertainment							
(J) Add back Husband's and girlfriend's home and cell phones							
(K) Add back Husband's hidden Condo utilities and girlfriend's utilities.							

(Modified) Net Worth Method

- ***Long-recognized*** by the courts
- Implied income based upon changes in cost-based net worth (equity)
- Intuitively understood
- “Relatively” simple to prepare
- Straightforward to explain in court
- aka “*Indirect Method*”

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Net Worth Method

Modified Net Worth Method - Exhibit P	
Net worth as of December 31, 2002	\$\$\$,\$\$\$
Less: net worth as of December 31, 2001	<u>\$\$,\$\$\$</u>
Increase in net worth	\$\$,\$\$\$
Add: Living expenses	<u>\$\$,\$\$\$</u>
Total expenditures	\$\$\$,\$\$\$
Less: Income from known sources	<u>(\$,\$\$\$)</u>
Expenditures in excess of known sources of funds	<u><u>\$\$,\$\$\$</u></u>

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Example Net Worth Method

Hypothetical Modified Net Worth Method - Exhibit Q				
Line	ASSETS	Ref.	5/17/1999	2/20/2022
	Cash			
1	Currency	Test.	unk	\$71,000
2	Checking accounts	BR	1,732	8,434
3	Other accounts	BR	unk	5,100
	Undeposited items			
4	Traveler's checks	SR	-	9,000
	Time deposits			
5	60-day CD	BR	unk	5,000
6	120-day CD	BR	unk	12,000
7	Food stocks	SR	unk	2,932
8	Firearms, ammunition, explosives	SRS	unk	16,700
9	Computers, cameras, software	SRS	-	16,256
10	Automobile	BR	-	3,600
	Total Assets		1,732	150,022
	LIABILITIES			
11	Automobile loan	BR	-	1,900
12	Net worth, beginning and end		1,732	148,122
13	Less: Beginning net worth			1,732
14	Increase in net worth			146,390
15	Add: Personal living expenses	CES		61,748
16	Total expenditures			208,138
17	Less: Funds carried into country	Test.		3,000
18	Funds earned through employment	BR		19,976
19	Wire transfers from family	BR		17,000
20	Expenditures in excess of funds			\$ (168,162)

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Net Worth – In Class

- In Class Handout
- In Class Problem (Helen Weeks)
- Source & Use for In Class Problem
- Sources & Uses of Cash Example
(Forensic Reconstruction Techniques by Pat Perzel)

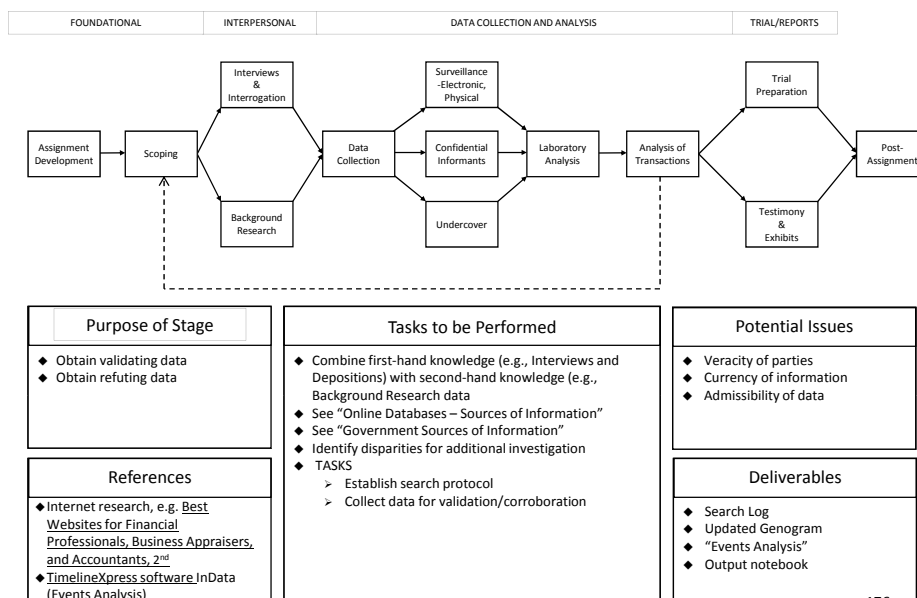
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Cash Inflows/Outflows Analysis

Hypothetical Source and Use of Cash Method - Exhibit R						
		1999	2000	2001	2002	Total
Line	Known sources of cash					
1	Earned in various jobs	\$ 1,736	7,845	136	10,259	\$ 19,976
2	Wire transfers from family	4,000	700	11,000	1,300	17,000
3	Carried into country	3,000	-	-	-	3,000
	Total known sources of cash	8,736	8,545	11,136	11,559	39,976
	Expenditures					
4	Seized currency				71,000	71,000
5	Increase in checking account				6,702	6,702
6	Seized in other accounts				5,100	5,100
7	Increase in traveler's checks				9,000	9,000
8	Increase in time deposits				17,000	17,000
9	Seized food stocks				2,932	2,932
10	Seized firearms, etc.				32,956	32,956
11	Net automobile purchase				1,700	1,700
12	Personal living expenses				20,336	61,748
13	Total expenditures	9,952	14,871	16,589	166,726	208,138
14	Expenditures in excess of funds	(1,216)	(6,326)	(\$,453)	(155,167)	\$ (168,162)

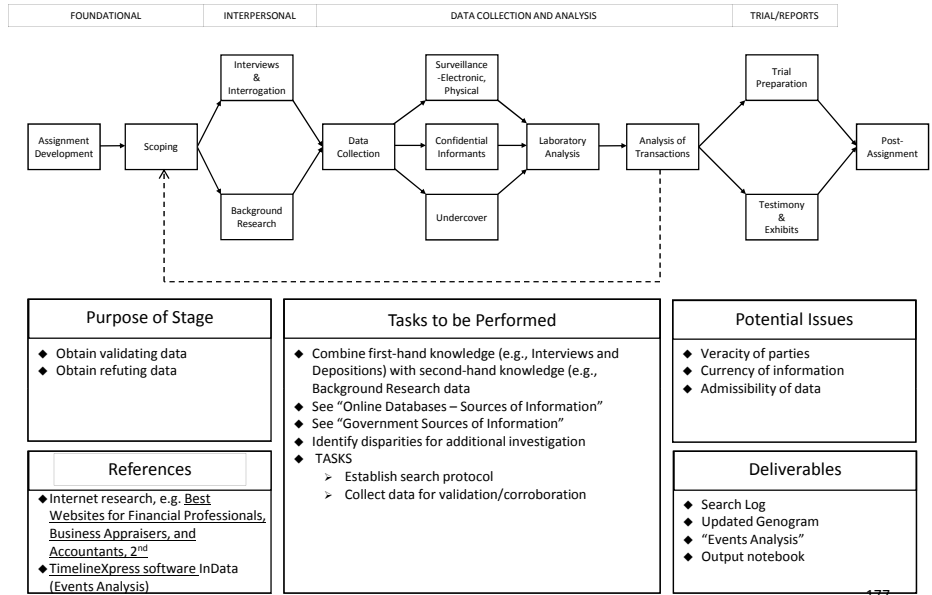
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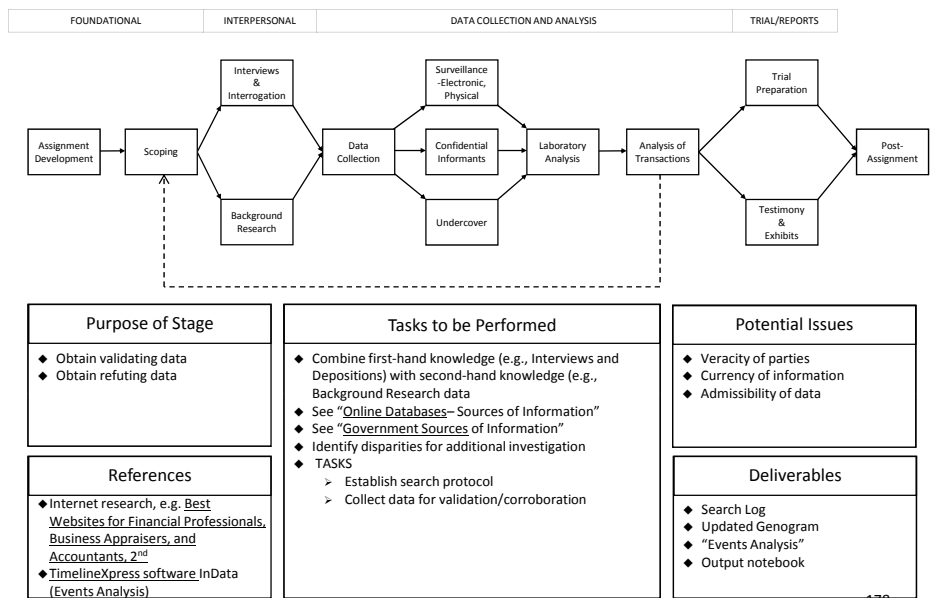


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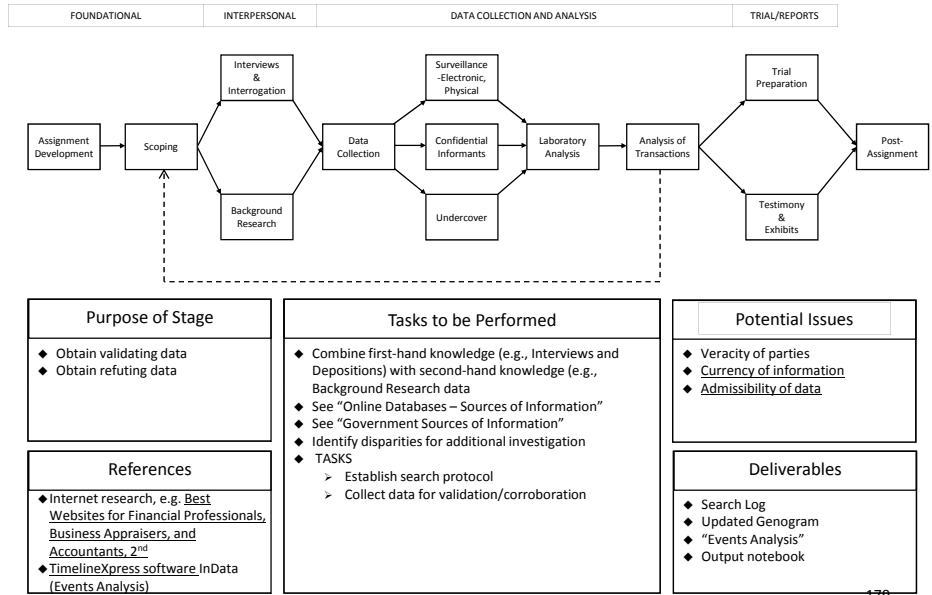
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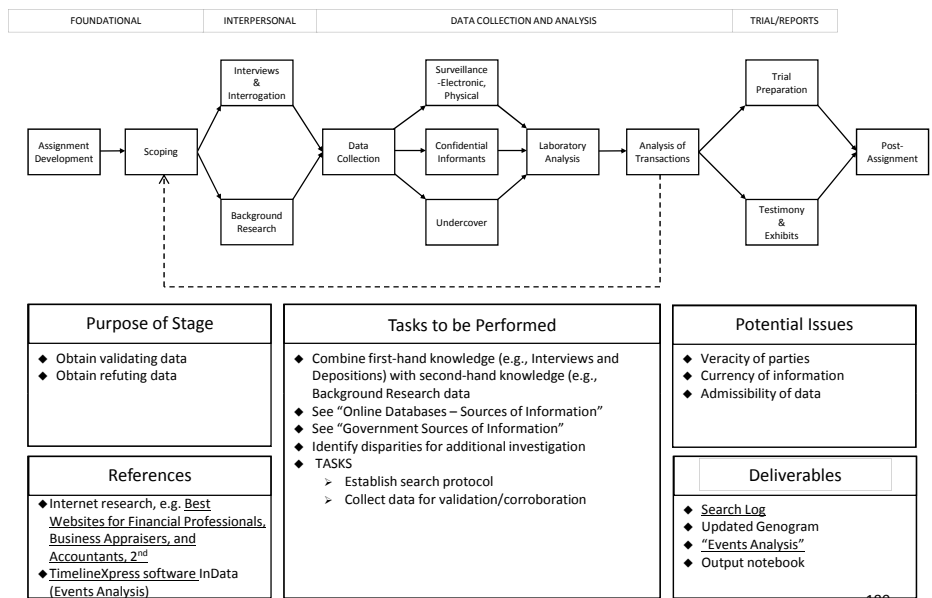
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Day Two



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Day 2

Diane A. Matthews, PhD, CPA, CFE, CFF
Carlow University
Pittsburgh, PA
DAMatthews@carlow.edu

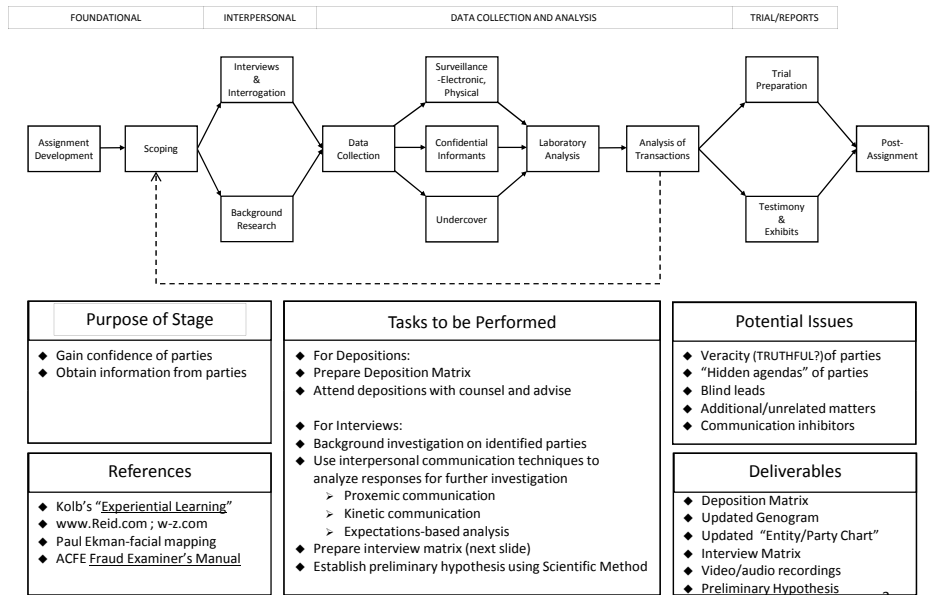
1

The following picture has 2 identical dolphins in it. It was used in a case study on **stress levels** at Cedars Sinai Hospital. Look at both dolphins jumping out of the water. The dolphins are **identical**. A closely monitored, scientific study revealed that, in spite of the fact that the dolphins are identical, a person **under stress would find differences in the two dolphins**. The more differences a person finds between the dolphins, the more stress that person is experiencing. Look at the photograph and if you find **more than a few differences** you may be experiencing undue stress.

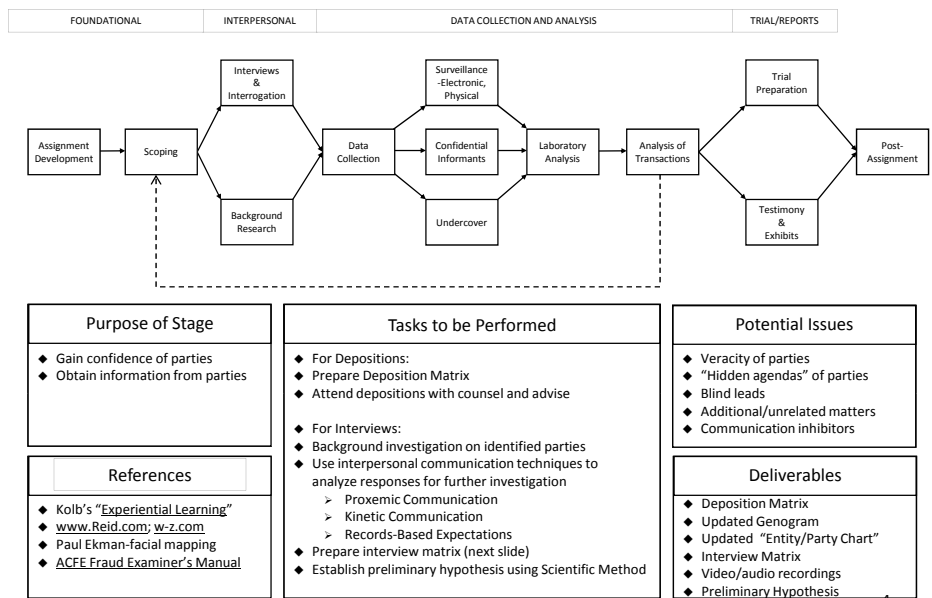


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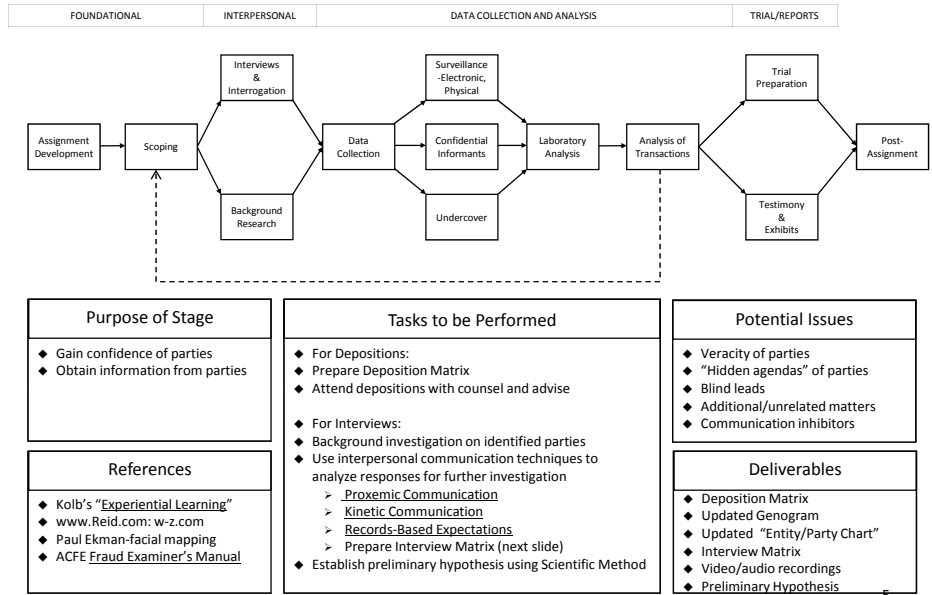
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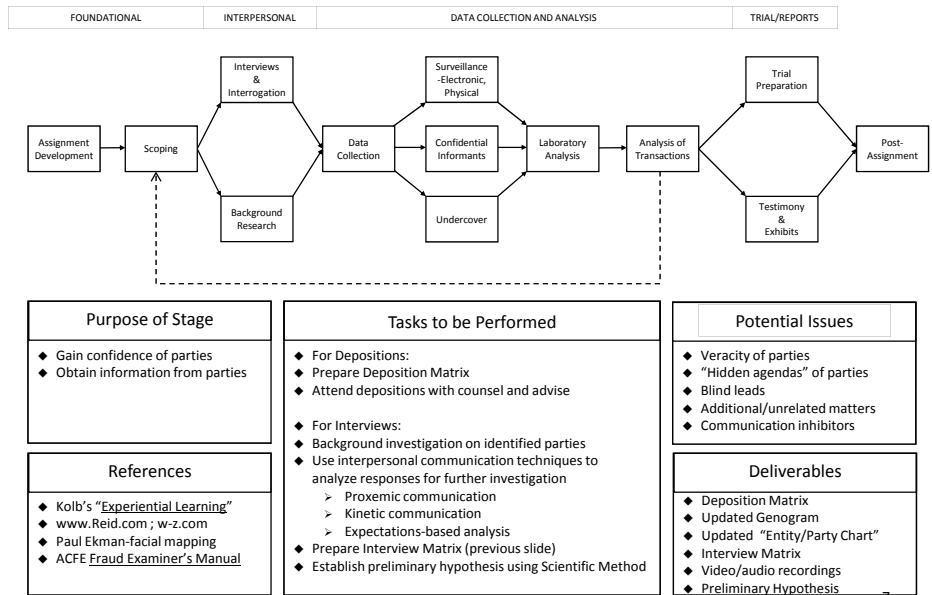
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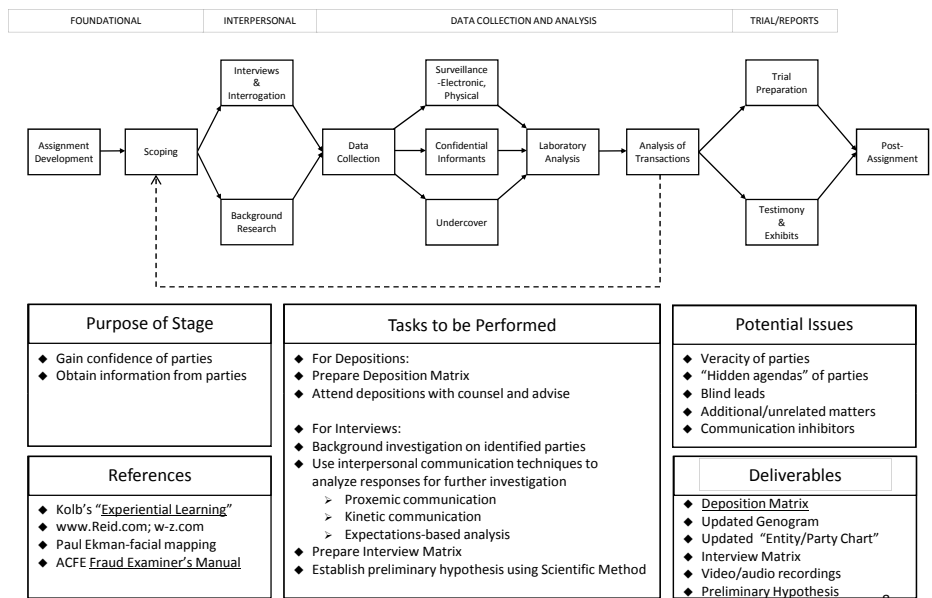
Interview Matrix

	A	B	C	D	E	F	G	H	I	J	K	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	
1	Years																							
2	Position	Employee		Comp.	From	To	Position	Total	Age	On-Site?	1979	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	
3	City Councilor	Person A		n/a																				
4		Person B		n/a																				
5	Council President	Person C			Feb-06	Present				Y														
6		Person D			2001	Aug-06				N														
7	Mayor	Person E			1995	2001				n/a														
8		Person F			1985	2001				N														
9	City Manager	Person G			Sep-80	Feb-99				N														
10		Person H			Jun-79	Sep-80				n/a														
11		Person I			Jul-02	Feb-05				N														
12		Person J			Sep-85	Jul-02				n/a														
13	(Interim City Manager)	Person K			Feb-02	Present				Y														
14		Person L			May-99	Feb-02				n/a														
15	Director of Hmn Rsrcs	Person M			Sep-03	Present				Y														
16		Person N			Sep-79	Sep-03				n/a														
17	Library Director	Person O			Sep-03	Present				Y														
18		Person P			Nov-89	Sep-03				n/a														
19	Police Chief	Person Q			Jul-02	Present				Y														
20		Person R			Mar-95	Jul-02				n/a														
21	Director of Prks & Rec	Person S			Jul-05	Present				Y														
22		Person T																						
23	Director of Pblc Wrks	Person U																						
24		Person V																						
25	Planning Director	Person W																						
26		Person X																						
27	Finance Director	Person Y																						
28		Person Z																						
29	(Interim Finance Director)	Person AA																						
30		Person BB	542-62-XXXX	\$3,374	2/19/1992	2/23/2010																		
31	Operations Manager	Person CC	544-76-XXXX	\$6,348	1/17/2006	2/23/2010																		
32		Person DD	550-82-XXXX	\$6,275	1/7/1985	4/6/2001																		
33	Accounting Supervisor	Person EE																						
34		Person FF																						
35	Accountant	Person GG																						
36		Person HH	549-37-XXXX	\$4,515	2/25/2002	2/23/2010																		
37	Senior Accounting Clerk	Person II																						
38		Person JJ	542-60-XXXX	\$4,176	3/28/1995	2/23/2010																		
39	Accounting Clerk	Person KK	556-70-XXXX	\$3,385	7/1/2005	2/23/2010																		
40		Person LL	542-56-XXXX	\$3,637	6/22/1979	2/23/2010																		
41	Accounting Clerk	Person MM	540-74-XXXX	\$3,832	11/27/1989	2/23/2010																		
42		Person NN	540-64-XXXX	n/a	11/18/1985	2/16/2005																		
43	Accounting Clerk	Person OO	531-48-XXXX		9/13/1988	7/30/1993																		
44																								
45																								
46																								

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Forensic Accounting/Investigation Methodology (FA/IM)[®]



Behavior Detection: Interviewing & Interrogation

9

Characteristics of a Good Interviewer?

10

Characteristics of an Interviewer

- Easy to talk to
- Empathetic
- Good listening skills
- Anticipatory skills – chess game
- Evaluate verbal/non-verbal clues
- Professionalism
- Impartial

11

Interviewing

- Consider interviewing as an investigative technique
- Employees possess much needed knowledge of the organization and other employees
- Employees may be reluctant to tell management or others about suspected fraud

12

Benefits of strong interviewing skills

- Obtain more information
- Enhanced investigation findings
- Reduced investigation time
- Higher success rate
- Improved confidence for the investigator
- Stronger evidence – Direct vs. Circumstantial

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Lying

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What is a Lie?

- Embellishing
- Concealment or omission of information (resumes, job performance reviews, etc..)
- Falsification of information
- Ambiguity
- *What is the motive of the person?? Is it to mislead the listener, reader, or evaluator of the information?*

15

Quote

Nancy Reagan justified the younger age she claimed because of the unhappy childhood she endured. "I deserve a couple of bonus years."

B.S. & M.S. Degrees from the University of Chicago – Larry Ellison, CEO Oracle – He had neither!

"I love fooling people and making them act on knowledge that only I know is untrue" – 10 year old girl

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Why do we Lie??

- Get ahead
- Gain an edge
- Wiggle out of a tight spot
- Avoid embarrassment
- Avoid punishment
- Insecurity
- Adventure
- Taking Control

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Facts about Lying

- Individuals are trained liars
- People will defend themselves by lying until the pain of their conscience becomes unbearable or until outside influences prompt to reveal their guilt
- Completely voluntary confessions are a myth
- Lying is a stressor, which exhibits signs/symptoms.
- Lying is hard work, which is revealing
- Lying subjects will issue qualifiers

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Facts about Lying

Lies are more likely to be detected when:

- The lie is not expected
- The lie is challenged
- The liar has little experience
- The consequences are high
- The person being lied to is personally acquainted with the liar
- The person being lied to is not easily deceived

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Why do we not detect lies?

- We traditionally label the wrong behaviors as deception signals
- We fail to recognize reliable clues to deception due to a lack of knowledge and efforts to detect them
- Lying is becoming the “norm” so clues are harder to identify
- More likely to be deceived by strangers

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Why do we not detect lies?

- We generally prefer not to catch liars because trusting others is easier
- We want to be misled, it may not be in our best interest to discover the lie
- We are brought up to be polite and not confrontational
- We do not have a history of lie detecting

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Clues to Deception

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Judging Deception

- People are generally poor judges of deception
- Identifying lies can be challenging
 - Lies are usually interspersed with truth
 - Many lies are subtle variations of truth
- We only correctly identify about 50% of the lies to which we are exposed

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Communication

- Early landmark study found that communication is
 - 38% vocal (pitch, stress, tone, pauses)
 - 55% physical (expressions, gestures)
 - 7% verbal (content) – Active listening required
- Subsequent studies have refined these numbers, but consistently find that at least $\frac{2}{3}$ of meaning is communicated nonverbally

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Generally Truthful Behavior

- Direct answers – nothing to hide, facts are allies
- Spontaneous answers – nothing to think about
- Generally attentive and interested – not distracted
- Nonverbally engaged – oriented toward the interviewer
- Verbal and nonverbal consistency – words and behavior in agreement

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Identifying Deception

- Behavior is generally a response to some stimulus – in an interview, the stimulus is
 - A question (primarily)
- Identifying deception requires you to do two things at the same time
 - Look
 - Listen
- It is difficult to both look and listen for more than five seconds

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Looking and Listening

- We think at least 10 times faster than we consciously communicate
- Deceptive behavior usually begins within the first 5 seconds of a stimulus (question)
- *If deceptive behavior is delayed longer than 5 seconds, you cannot be certain of its cause (because the mind moves on quickly)*

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Clustering

- Deceptive behaviors usually occur in clusters of two or more
- Clusters
 - Disregard transient (isolated or individual) behaviors
 - The first deceptive behavior must begin within 5 seconds of stimulus
 - The second behavior must follow shortly thereafter
 - The greater the number of behaviors in the cluster the greater the likelihood of deception

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Deceptive Behaviors

- Verbal
- Nonverbal

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Deceptive Verbal Behaviors

- Failure to deny
- Repeating the question (as opposed to seeking clarification) – buys time
- Overly specific answers (next slide)
 - Narrows the question – selectively excludes negative information
 - Attempt to influence, mislead, buy time

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Classic Overly Specific Answer

I did not have a twelve-year affair with Ms. Flowers

Bill Clinton during his 1992 presidential campaign

The fact is, there was no twelve-year affair
Bill Clinton, *My Life*

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Deceptive Verbal Behaviors

- Inappropriate level of concern
- Verbal attacks directed at the accuser
- Detour statements
 - “As I said before ...”
 - “However, in this [other] instance ...”
 - “That reminds me of something that happened last week ...”
- Failure to understand a simple term or question – attempt to buy time

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Deceptive Verbal Behaviors

- Invoking religion
 - “I swear to God”
 - “As God is my witness”
- Selective memory
 - “Not that I can recall/remember”
 - “To the best of my knowledge”
- Statements that fail to answer a question
 - “That’s a good question”
 - “I knew you were going to ask me that”

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Deceptive Nonverbal Behaviors: Grooming Gestures

- Adjusting clothes, hair, jewelry, glasses
- Inspecting hands and nails
- Cleaning up surroundings
- Lint picking
- Scratching
- Smoothing
- Tapping feet
- Feet placement

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Deceptive Nonverbal Behaviors: The Telltale Face

- Touching the face
- Covering mouth or eyes
- Licking/Biting lips
- Clearing throat
- Labored swallowing
- Coughing
- Wiping sweat

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Deceptive Nonverbal Behaviors: The Telltale Face

Facial Mapping: Paul Ekman—(born 1934), Oakland, CA

- psychologist studied emotions and their relation to facial expressions
- One of the 100 most eminent psychologists of the 20th century
- Facial expressions are not culturally determined but universal ...including anger, disgust, fear, joy, sadness, surprise, & contempt
- Developed the Facial Action Coding System (FACS) to taxonomize every conceivable human facial expression
- FACS: interpreting involuntary expressions to understand our real emotions, reactions, intentions; careful analysis can be used to gauge a subject's real reaction
- Also contributed significantly to the study of lying
- Jones, D. (2008, February 25). It's written all over their faces. *USA Today*.
READ FOR HOMEWORK!
http://www.usatoday.com/money/companies/management/2008-02-24-ceo-faces_N.htm

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Common Behavioral False Positives

- EYES – contact, movement, blinking
- Facial tics or twitches
- Sweating
- Closed posture or barriers (crossed arms)
- Clenched hands
- General nervous tension
- Blushing

Watch TV show “Lie to Me” FOX Broadcasting

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Paul Ekman - Conclusions

- Those who use verbal & non-verbal cues are better at detecting lies.
- Subtle facial expressions are important clues.
- Liars make mistakes which could be detected.
- Detecting lies is a poorly developed skill.

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Reliable Cues to Deception

- Negation cues
- Aversion cues
- Performance cues
- Contradiction cues
- Control cues

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Negation Cues

- Any contact with the head or face that covers any orifices of the head
 - Eyes
 - Nose
 - Mouth
 - Ears
- Includes scratching, rubbing, even covering or hiding

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Aversion Cues

- Any major aggressive movement of the body away from the interviewer (*sit close with arms folded to appear aggressive*)
- Includes
 - total body leans
 - turning away the torso
 - turning the head away or throwing the head back and away
 - changing the position of the legs by pointing or stretching them away from the interviewer

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Performance Cues

- Any exaggeration of responses or physical gestures as a means to “oversell” the response to the interviewer (*subject needs to fill space with extra information*)
- Includes
 - extended shaking of the head (yes or no)
 - overly animated gestures

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Contradiction Cues

- Any contradictory behavior seen on three levels
- Includes
 - Verbal contradiction – voice pitch and volume that contradict stated demeanor
 - Nonverbal contradiction – eyes and lips in opposition (piercing stare with a smile)
 - Verbal and nonverbal contradiction – words and actions in conflict (saying “no” while shaking the head up and down)

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Control Cues

- Any obvious attempt by the subject to suppress normal gestures
- Includes
 - Sitting on hands at certain points
 - Jamming hands into pockets
 - Hand wringing
 - Tightly gripping the arms of a chair

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Remember!!

- No single symptom or behavior proves anything because even truthful subjects can generate a random symptom that is of no consequence.
- Look for a “cluster” of symptoms – two or more behaviors occurring at the same moment
- The behaviors should be “timely” in that they should occur or will occur at the same moment the mental and emotional stress level of the subject either peaks or dramatically ceases.

In-class exercise: Admission Seeking Interview & Ethics
Watch Reid interviewing tapes

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Interviewing

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Interviewing

- Combination of
 - Good questions!
 - Careful observations!
 - Good listening!
 - Documenting Results!



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Interviewing and Interrogation

Interviewing:

The systematic questioning of persons who have knowledge of the events, of the people involved, and of the evidence surrounding the case under investigation.

Interrogation (Admission Seeking Interviews):

The questioning of suspects, or uncooperative witnesses, to obtain evidence or proof of significant omissions, or to give the subject of the investigation an opportunity to volunteer facts.

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Interview Planning - Offense

- Alleged date, time, place of occurrence
- Possible motives
- Available evidence?
- Methodology used to commit the fraud

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Interview Planning - Employee

- Personal background – married, education, job history
- History with company
- Possible motives/pressure
- Possible rationalizations
- Work habits
- Unusual behavior
- Documents supporting the interviewee's theory
- Personal lifestyle

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Interview Planning - Venue

- Interviewee's office - ?
 - May have distractions
 - Reduces anxiety
 - Raises suspicions w/ office employees
- Scheduling
 - Allow sufficient time
 - Schedule an appointment
 - Arrive early and prepare

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Interview - Conduct

- Build rapport
- Sit acceptable distance apart
- Avoid physical barriers
- Be respectful
- Be professional
- Avoid technical language
- Be complimentary
- Avoid taking copious notes
- Be empathetic
- Be honest

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Interview Process

Interviewing involves three different and distinct phases:

- Phase I - Introduction
- Phase II - Body
- Phase III - Close

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Introduction

Brief introduction

Reason for interview – use of soft words

Be professional

Solicit cooperation

Establish rapport

Behavioral analysis—establish baseline

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Body

Facts are reviewed and uncovered.

Proceed from general to specific questions.

Use of open-ended questions

Allow complete explanations

Understand facts in detail before moving on

Most interviews gather too little information

Patience

Don't interrupt – avoid bias & tunnel vision

Avoid excessive note taking

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Checklist

- Creates tunnel vision – inhibits “think as you go methodology”
 - Limits scope of discussion
 - Distracts interviewee
 - Distracts interviewer – less flexible
 - May indicate lack of knowledge of facts
- Use main topics and not list of questions

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Close

Summarize the facts

Clarify misunderstandings

Recap highlights

End on positive note

“Is there anything I have forgotten to ask?”

“Is there anything else you would like to say?”

“Is there anyone else I should speak to?”

Leave door open for future discussions

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Admission Seeking Interviews (Interrogation!)

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Interrogation

- Obtain confession of guilt
- Establish motive for fraud
- Define methodology used to commit the fraud
- Identify other responsible parties
- Obtain a written statement

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When to Interrogate

- Investigation is complete
- Strong indicators of guilt or involvement
- Strong understanding of the facts/evidence
- Interrogator can control the discussion

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Interrogation – Rules of the Road

- Neutral location
- Participants – HR/Legal/Management
- Avoid distractions
- Arrangement of chairs
- Note taking
- Confront subject directly
- Provide themes
- Afford ability to rationalize behavior
- Eat before you work☺

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Interrogation - Process

- Confront
- Observe
- Themes
- Reduce level of perceived consequences
- Provide an out
- Admission
- Persistence, persistence, persistence

Source: Reid Interviewing & Interrogation Techniques

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Defense Mechanisms - Disassociation

- Vague or evasive
- Details non relevant issues
- Distances themselves from the fraud
- Doesn't suspect anyone
- Not proactive/talkative
- May stare –avoid eye contact
- Become tired and silent

Source: Don Rabon, *Interviewing and Interrogation*

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Defense Mechanism - Projection

- Hostility
- Casts guilt towards other
- Indignant or arrogant
- Interrupts
- Moves erratically (verbally) during conversations

In-class exercise: Accounts Payable Fraud

Source: Don Rabon, *Interviewing and Interrogation*

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Defense Mechanisms - Identification

- "Holier than thou" attitude
- Never acts unethical
- Very honest person
- Attends church quite frequently
- Very nice during interview

Source: Don Rabon, *Interviewing and Interrogation*

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Obtain a Written Statement

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Obtaining a Written Statement

- At the conclusion of the admission-seeking interview
- Greater credibility than oral confession
- Discourages recanting

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Info in Written Statement

- Voluntary confession
 - contain language expressly stating the confession is being made voluntarily
- Intent
 - Elements of proof require the confessor knew the conduct was wrong and intended to commit the act
 - Use precise language that clearly describes the act *“I wrongfully took assets from the company that weren’t mine”* vs *“I borrowed money from the company without telling anyone.”*
 - Avoid words such as “lie” “steal” --confessor may balk at signing

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Info in Written Statement

Instead of

- Lie

- Steal

- Embezzle

- Fraud

Use

- I knew the statement/ action was untrue
- I wrongfully took the property of X for my own benefit
- I wrongfully took X's property which had been entrusted to me and used it for my own benefit
- I knowingly told X an untrue statement and she relied on it.

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Info in Written Statement

- Approximate Dates of Offense
 - Unless exact dates are known, use “approximately” or “On or about”
- Approximate Amounts of Losses
 - Include approximate losses; stating “ranges” is satisfactory
- Approximate Number of Instances
 - Ranges are satisfactory for the number of instances
 - Number is important—shows repeated pattern of activity, which helps establish intent
- Willingness to Cooperate
 - Easier for confessor if statement includes language portraying confessor in a more favorable light
 - *“I am willing to cooperate in helping undo what I have done.”*

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Info on Written Statement

- Excuse Clause
 - Include the confessor's moral excuse
 - *“I wouldn't have done this if it had not been for pressing financial problems.”*
- Have the Confessor Read the Statement
 - Confessor must acknowledge he read the statement
 - Confessor initials each page
- Truthfulness of the Statement
 - Written statement should state specifically that it is true, but also allow for mistakes
 - *“This statement is true and complete to the best of my current recollection.”*

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Preparing a Signed Statement

- No legal requirement that a statement must be in the handwriting or wording of the subject.
- Generally not a good idea to let confessor draft the statement. You should prepare the statement.
- Confessor should read and sign without undue delay
- Instead of asking the confessor to sign the statement, say, "Please sign here."
- Good to have two people witness the signing (not legally required).

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Preparing a Signed Statement

- No more than one statement for each offense.
- If facts inadvertently omitted, add as an addendum.
- Preserve all notes, including stenographic notes.
 - Having access to pertinent notes can aid in a cross-examination.
- Once confession obtained, substantiate it through additional investigation, if necessary.

In-class exercise—review "Example of Written Statement"—any additions/deletions?

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Evidence Management

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Evidence

- Anything legally presented at trial to prove a contention and convince a jury
- Evidence is generally admissible in court if
 - Relevant
 - Probative value outweighs prejudicial effect
 - Trustworthy
- Governed by
 - Federal Rules of Evidence (in federal courts)
 - State Rules of Evidence are based on FRE

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Evidence vs. Facts in a Trial

- Establishing facts is an objective of a trial
- Trial attorneys attempt to prove “facts at issue”
- Facts at issue are not evidence
- Facts are supported by evidence
- For example, whether or not the defendant was at the victim’s home on the night of a crime is a fact at issue
 - evidence (such as a fingerprint) is offered to prove or disprove the fact
 - the fingerprint is evidence
 - the fingerprint, while factual, *is not a fact at issue*

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Direct vs. Circumstantial Evidence

- Direct – evidence that tends to directly prove or disprove a fact at issue
 - Eyewitness testimony
 - Confession
 - Physical evidence
- Circumstantial – evidence that is merely suggestive; tends to prove a fact by inference (indirectly)
 - Even if the evidence is believed, it does not resolve the issue unless additional reasoning (inference) is used

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Rules of Admissibility

- Relevant – evidence must have probative value (tendency to make the existence of a consequential fact more or less probable)
- Material – evidence must be offered to prove a fact that is at issue in the case
- Competent – evidence must meet certain traditional requirements of reliability

Establishing these prerequisites (as well as any other special requirements) is referred to as “laying the foundation” for evidence

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Types of Evidence

- Real – physical objects that played a role in the issues being litigated
- Demonstrative – tangible items that illustrate a material proposition
 - Visual aid created specifically for the trial
- Documentary – documents, permanent instruments
- Computer – data in hardware
- Testimonial – oral statements (assertions) made by witnesses under oath in court

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Real Evidence

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Real Evidence

- Evidence that “speaks for itself”
- Real evidence is relevant and material because of its
 - existence (the murder weapon, bank statement, cancelled check)
 - or characteristics (the golf club is mangled)
- Must be authenticated, but it does not depend upon the testimony of a witness

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Real Evidence

- *Testimony* – “The defendant took the victim’s money”
- *Real Evidence* – A cancelled check with the actor’s endorsement
- Real evidence can be seen, touched, or in some cases heard or smelled
- Chain of custody – established/proven/proper

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Demonstrative Evidence

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Demonstrative Evidence

- Evidence that
 - Illustrates or explains oral testimony
 - Recreates a tangible object, occurrence, event, or experiment
- Examples of demonstrative evidence
 - Photographs and videotapes
 - Maps, charts, diagrams, drawings
 - Scale models
 - Computer reconstructions or animations
 - Scientific tests or experiments
 - Hundreds of cancelled checks endorsed by the victim
 - Can't bring in all the checks, so we use charts/graphs/ratios
 - "Summary of voluminous records"

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Rules of Demonstrative Evidence

- There must be another piece of evidence that needs to be illustrated or demonstrated
- Foundational requirements – give weight to evidence
 - Authentication – must not alter anything of significance
 - Representational accuracy – must fairly depict underlying evidence
 - Identification – must exactly match underlying evidence

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Demonstrative Evidence - Tips

- Make a clear and understandable point
- Keep it simple
- Tell a story (test it)
- Avoid argument
- Accomplish your purpose
- Prepare exhibit list
- Summarize proof in closing statements
- Use charts and graphs
- Use reputable companies
- Check equipment!
- Don't overdo it!

Prepare early and practice!

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Documentary Evidence

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Documentary Evidence

- Documents are usually the centerpiece of the investigative process. They are permanent instruments to memorializing thoughts, ideas, and actions.
- Documents both directly and indirectly trap history.
- Documents are superior to oral testimony since memory fades while documents stay in tact.
- Governed by FRE 1001

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Best Evidence Rule – FRE 1002

- Legal doctrine that the original of any document, photograph or recording be used as evidence at trial, rather than a copy
- A copy will be allowed into evidence only if the original is unavailable (this rule has been loosened over the years)
 - Copy is subject to errors
- Original contains additional features such as handwriting, paper type, aging, color, stains,

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Documentary Evidence - Duplicates

- Duplicates given original status include:
 - Search warrants
 - Lease/mortgage agreements
 - Duplicate sales slips
 - Official documents/public records
 - Government seal documents
 - Deeds, notes, judgments
 - Summaries
 - Testimony or written admission

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Exclusionary Rule

- Evidence illegally obtained or analyzed is inadmissible in criminal trials
- Constitutional basis
 - Fourth Amendment – protection from unreasonable search and seizure
 - Fifth Amendment – protection from compelled self-incrimination
 - Fourteenth Amendment – “due process” clause extended the exclusionary rule to state courts

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Illegally-Seized Evidence

- Specifically, the Fourth Amendment excludes evidence obtained by authorities without
 - a warrant
 - or authorization from the owner
- This rule generally only applies in criminal cases or to government employers
- There is no prohibition against a private employer admitting evidence that was seized illegally
- However, the employer may be exposed to litigation for invasion of privacy or trespass

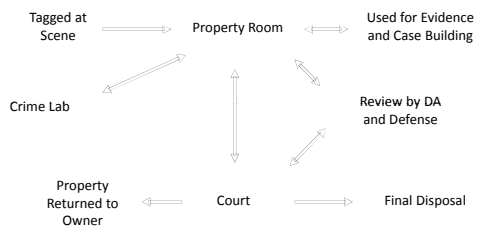
92

Chain of Custody

- Gaps in the chain or mishandling of evidence can damage a case
- Evidence may still be admissible if it can be authenticated by an identifying feature, but a mistake in custody affects the weight of the evidence
- In fraud cases, maintaining custody is particularly significant for electronic evidence (concern regarding alteration) – hand-to-hand chain of custody detailing how it was stored and protected from alteration

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Chain of Custody



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Computer Evidence

- Protecting data in hardware seizures
- E-mails
- Computer log files
- Electronic documents and files
- Internet log files
- Insure expertise is present to process electronic evidence

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Computer Forensics

- Art and science of applying computer science to aid the legal process.
- Computer forensics = Crime scene investigations (apply the same principles).
- Establish parameters of the scene.
- Physically secure the scene.
- Physically secure evidence.

In-class exercise: The Payroll Fraud

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Evidence Management

- Do not mark, staple, or otherwise alter any documents or other evidence that might find its way into court
- Record how the documents were obtained and who has handled it
- Use see-through holders to avoid putting fingerprints on documents

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Evidence Management

- Store original documents and working papers in fireproof safes or locked cabinets
- Protect material stored on a computer with a password
- Make backup copies on a regular basis and store in a separate location
- Copy, inventory, and index evidence so that it can be readily found when needed

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Common Mistakes - Evidence

- Chain of custody
- Documentation retention/preservation
- Collection methodology and planning
- Working papers – labeling
- Writing the results of the investigation

99

Case Studies

- Gates Rubber Co. v. Bando Chemical Indus.
 - Plaintiff used in-house IT department in lieu of experts
 - Made a file-by-file copy of data instead of bit stream
 - Potential evidence was overlooked that was saved in unallocated disk space
 - Court ruled a mandatory legal duty to properly perform computer forensics and use sound methodologies
 - Plaintiff lost

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Example

Which one would you choose and why??

- Example A - “the user John A. Suspect, performed a specified action on the computer because an event log showed that the user accessed the file”
- Example B - “the user id ‘jasuspect’ which had been assigned to John A. Suspect, was used to access the file on August 22, 2007 at 12:03 EST.

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Testimonial Evidence

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Testimonial Evidence

- The most basic form of evidence
- Does not usually require another form of evidence as a prerequisite for its admissibility
- To be competent, a witness must:
 - take the oath--with understanding
 - have personal knowledge about the subject of his testimony (the witness must have perceived something with his senses that is relevant to the case)
 - remember what he perceived
 - be able to communicate what he or she perceived

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Expert vs. Lay (Fact) Witnesses

- A *lay* (or *fact*) *witness* testifies as to facts.
- An *expert witness* is an individual who, because of specialized training or experience, is allowed to testify in court to help the judge or jurors understand complicated and technical subjects.

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Lay Witness

- Requirement of competency (FRE 601)
 - Capacity to observe, record, recollect, recount & understand duty to tell the truth
 - Possess personal knowledge, awareness and understanding of facts

Everyone deemed competent unless otherwise provided for in FRE 601

- Is information reliable?
- Are ulterior motives present?
- Believable
- Can withstand personal attack

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Lay Opinion Rule

- Witnesses are required to answer in the form of statements
 - What they saw, heard, felt, tasted, or smelled
 - Observations must be factual
- Generally forbidden to express opinions or draw conclusions
 - The distinction between fact and opinion is not always clear
 - Certain perceptions are difficult to communicate without using language that suggests judgments and opinions

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Exceptions to Lay Opinion Rule

- A person who is not testifying as an expert is allowed to testify in the form of an opinion if (FRE 701)
 - The opinion is rationally based on perception
 - Helpful to an understanding of the testimony
- Opinions on certain subjects specifically permitted
 - Personal identity – by appearance, voice, or other
 - A person's sanity
 - Quantities – speed, distance, size, time
 - Demeanor, mood, or intent
 - Intoxication or sobriety
 - Physical condition – health, sickness, injury
 - Identification of handwriting

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Qualifying as an Expert Witness

Under the FRE, a judge will permit an accountant to testify as an expert witness only if the judge decides that:

- The accountant's testimony will help the jurors or judge understand the evidence or determine a fact in issue
- The accountant is qualified as an expert by knowledge, skill, experience, training or education
- The accountant can show that his or her testimony (a) will be based on sufficient facts or data and (b) will be the product of reliable principles and methods that have been applied reliably to the facts of the case
- Whether the theories and/or techniques relied upon by the expert are generally accepted by the relevant professional community

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Qualifying as an Expert Witness

In *Daubert v. Merrill Dow Pharmaceuticals, Inc.*, the U.S. Supreme Court established the rule for federal courts that trial judges have a special responsibility to ensure that scientific testimony is not only relevant, but also reliable.

In *Kumho Tire Company, Ltd. v. Carmichael*, the Supreme Court decided that a judge's "gatekeeping" obligation applies not only to scientific testimony but to all expert testimony.

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Qualifying as an Expert Witness

In *Daubert*, the U.S. Supreme Court suggested that judges consider the following factors:

- Whether the theory or technique in question can be (and has been) tested
- Whether the theory or technique in question has been subjected to peer review and publication
- The theory's or technique's known or potential error rate
- Whether the theory or technique has attracted widespread acceptance within the relevant community

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Qualifying as an Expert Witness

Figlewicz and Sprohge in their article, “The CPA’s Expert Witness Role in Litigation Services: A Maze of Legal and Accounting Standards,” offer ten guidelines to help avoid legal challenges:

1. Know the relevant professional standards
2. Apply the relevant professional standards
3. Know the relevant professional literature
4. Know the relevant professional organizations

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Qualifying as an Expert Witness

5. Use generally accepted analytical methods
6. Use multiple analytical methods
7. Synthesize the conclusions of the multiple analytical methods
8. Disclose all significant analytical assumptions and variables
9. Subject the analysis to peer review
10. Test the analysis—and the conclusions—for reasonableness
11. In-class exercise: PPT (with clickers if available)

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Preparing to Testify as an Expert Witness

- Maintain independence from the client
- Use evidence upon which experts widely accept
- Prepare expert report
- Organize working papers
- Evaluate other experts’ information
- Prepare exhibits and other demonstrative evidence

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Testifying at a Deposition

Expert witnesses can expect to be asked about the following at a deposition:

- The scope of their assignment
 - Their current employment (job title, duties)
 - Their educational background
 - Licenses
 - Work experience
 - Memberships in professional organizations
- (continued on next slide)

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Testifying at a Deposition

- Publication and lectures
- Fields in which they are qualified as an expert
- Other work they have performed as an expert or other litigation consultant
- What compensation they are receiving (and what percentage of their compensation is derived from testifying as an expert witness)
- What opinions they have formed
- The bases for their opinions

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Testifying at Trial

According to Bursztajn and Brodsky in their article, "Ethical and Effective Testimony During Direct Examination and Cross-Examination Post-Daubert," the following should be the primary goals of an expert witness:

- To communicate the truth to the jury in an ethical, objective, and effective way
- To maintain your autonomy, authenticity, and integrity
- To uphold the values of your profession

(continued on next slide)

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Testifying at Trial

- To interact with attorneys and with the judge and jury in an atmosphere of mutual respect
- To engage in an ongoing dialogue with your attorney so that, together, you can educate as well as learn from the judge and jury as to what questions each may have
- To speak directly to the issues

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The “Likeability Factor”

- Intangible quality
- People overlook shortcomings of those they like
- Judges and juries are human – opinionated
- First impression is very important
- Like yourself – be passionate – grab the jury
- Avoid egotistical/sarcastic behavior
- Engaging behavior – eye contact – smile☺

According to Dr. Robert Gordon – Forensic Psychologist

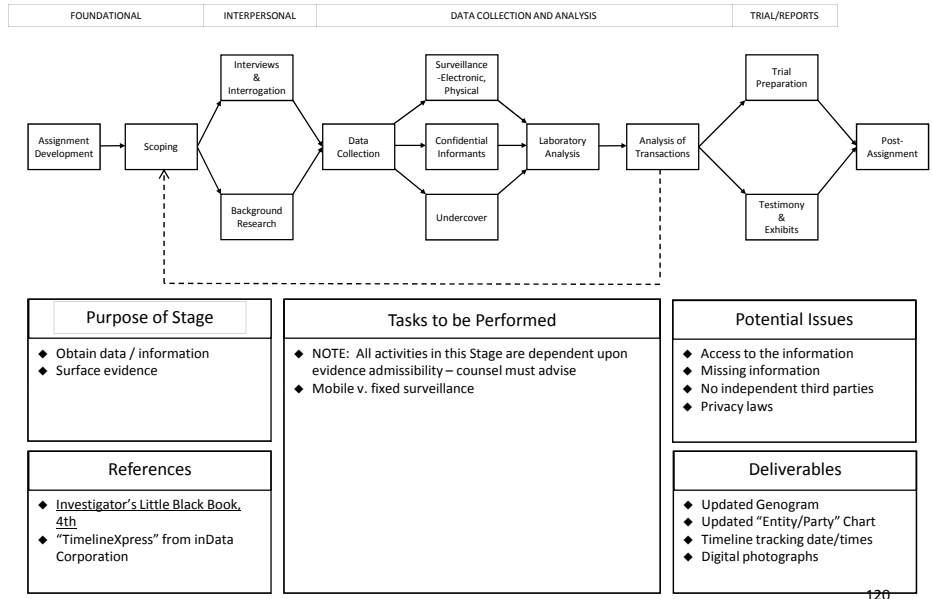
118

Tips for Testimony

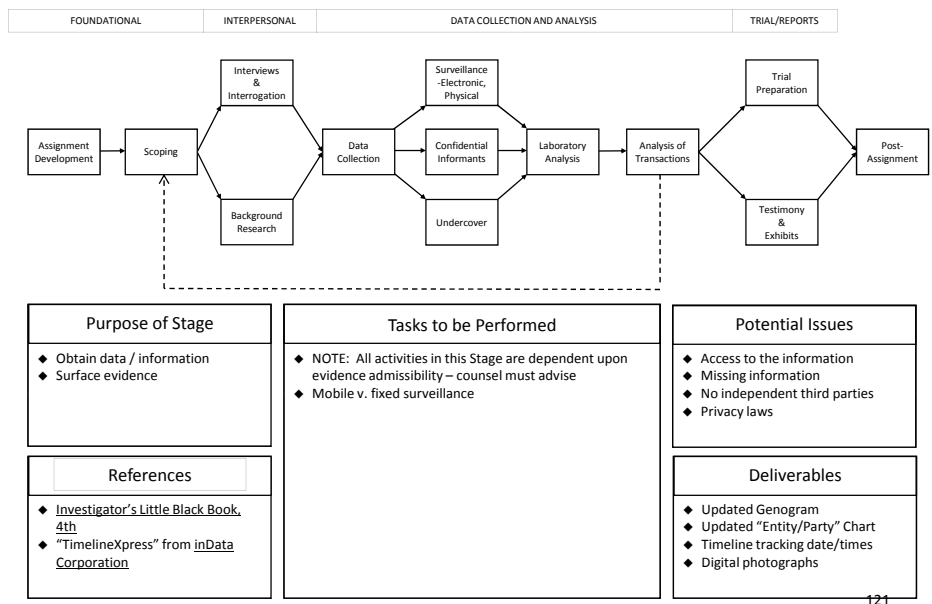
- Teach
- You are not the most important person in the dynamic
- The recipients will evaluate your communication skills
- You are the expert
- Be entertaining
- You will not make anyone feel stupid
- Be HONEST!

119

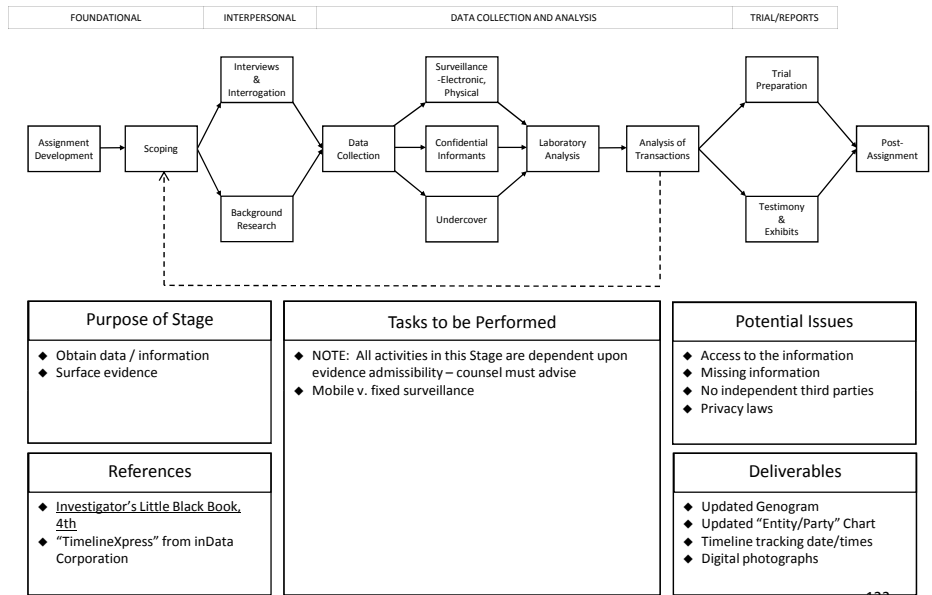
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Workplace Surveillance

123

Monitoring Phone Calls

- Intercepting oral or electronic communication is generally prohibited by statute (*Electronic Communications Privacy Act (ECPA) of 1986*)
- Exceptions
 - Ordinary course of business – legitimate business purpose (quality control, employee misconduct)
 - Service provider – telecommunication employees can monitor calls in the ordinary course of business
 - Consent – if the entity is a party to the call or if one of the parties has given prior consent
 - Written policy as a condition of employment
 - Legitimate business purpose

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Monitoring Stored Communications

- The ECPA generally prohibits third parties from accessing stored communications
 - E-mail
 - Voice mail
- Exceptions
 - Service provider
 - Consent – express written consent as a condition of employment
 - Stored messages are property of employer
 - Legitimate business purpose
 - Notification that computer network is for work purposes only and subject to review and monitoring by the employer

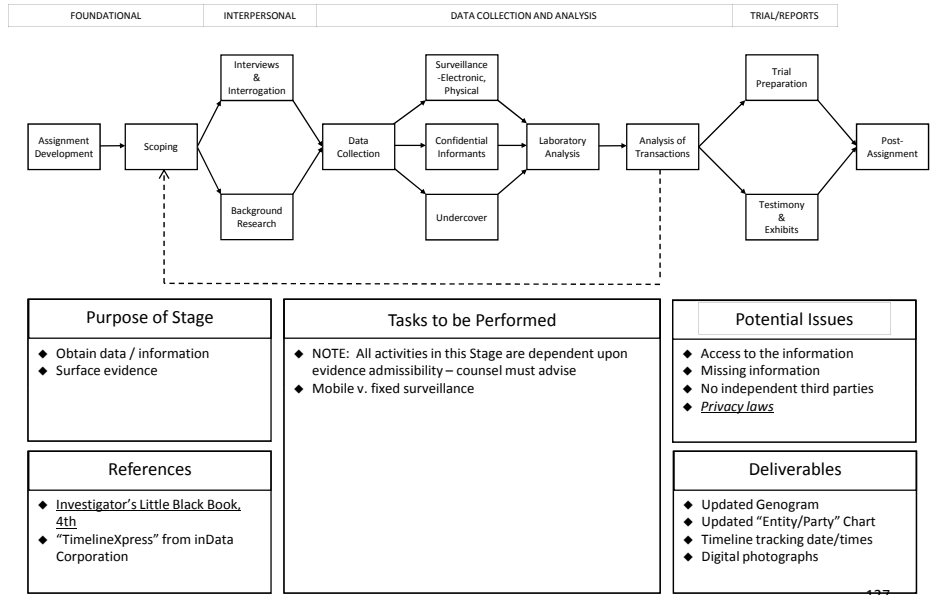
125

Video Surveillance

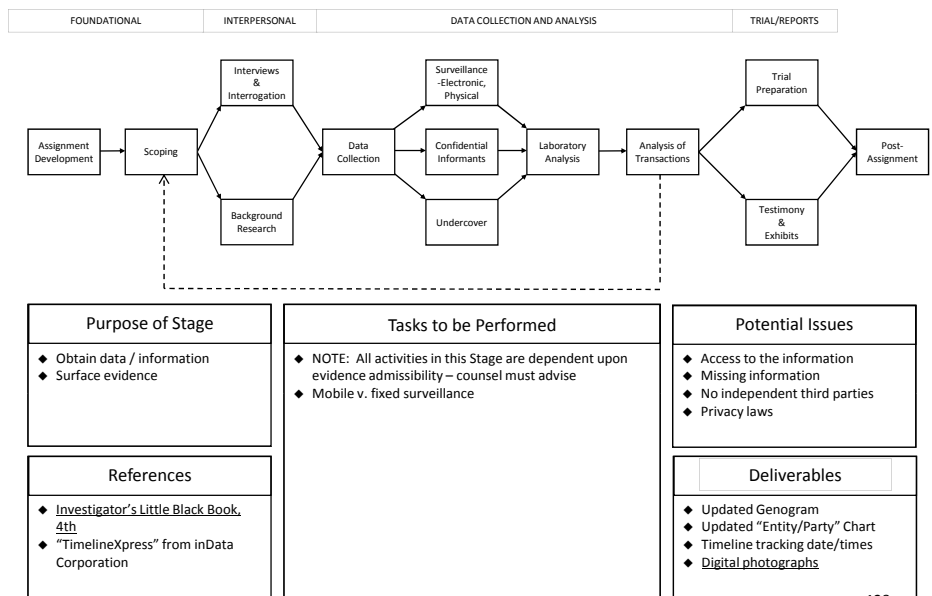
- Not permitted in areas where employees have a legitimate expectation of privacy
- Not covered by ECPA if monitoring is silent (oral communications are covered by ECPA)
- Written policies advising employees that activities are subject to video monitoring
- Surveillance must be for a legitimate business purpose

126

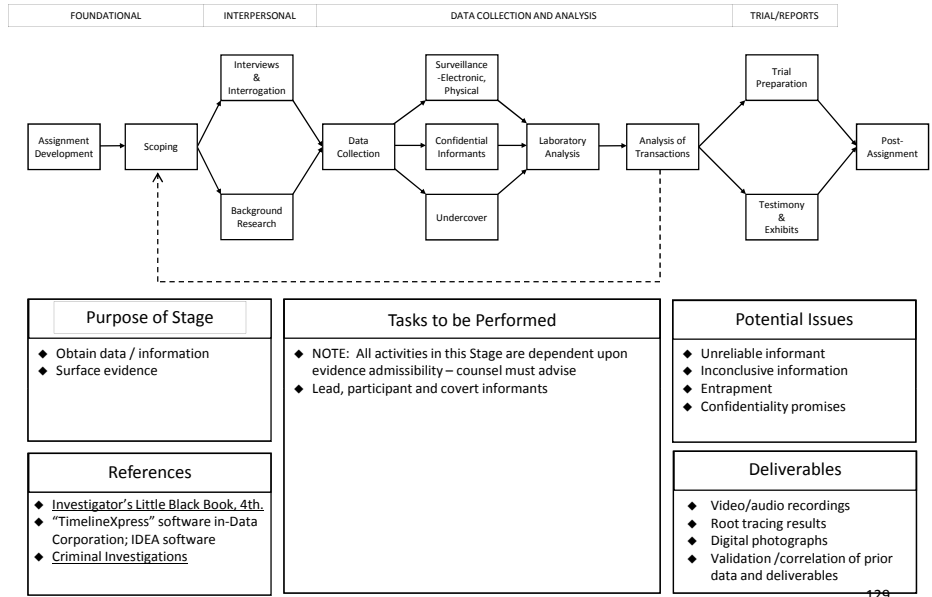
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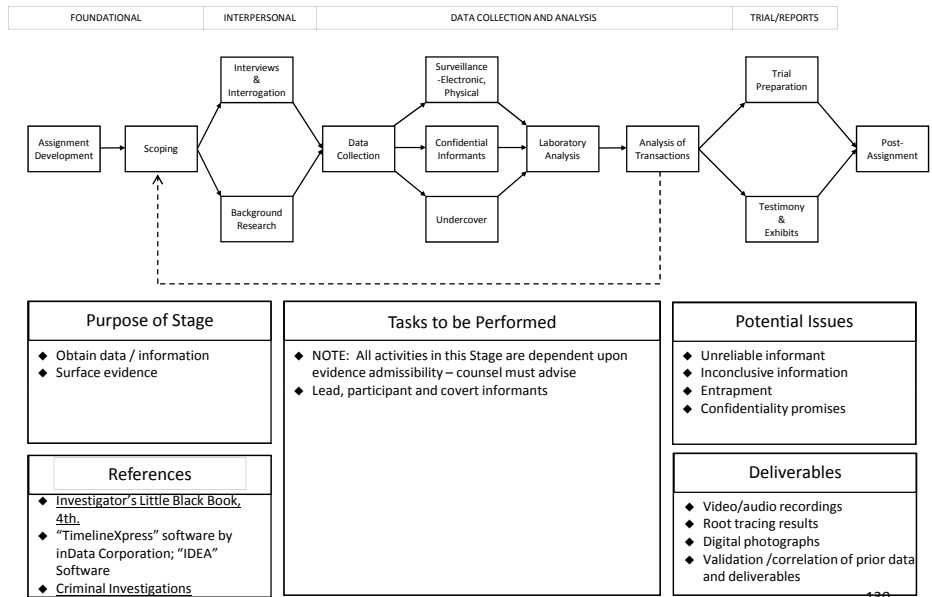
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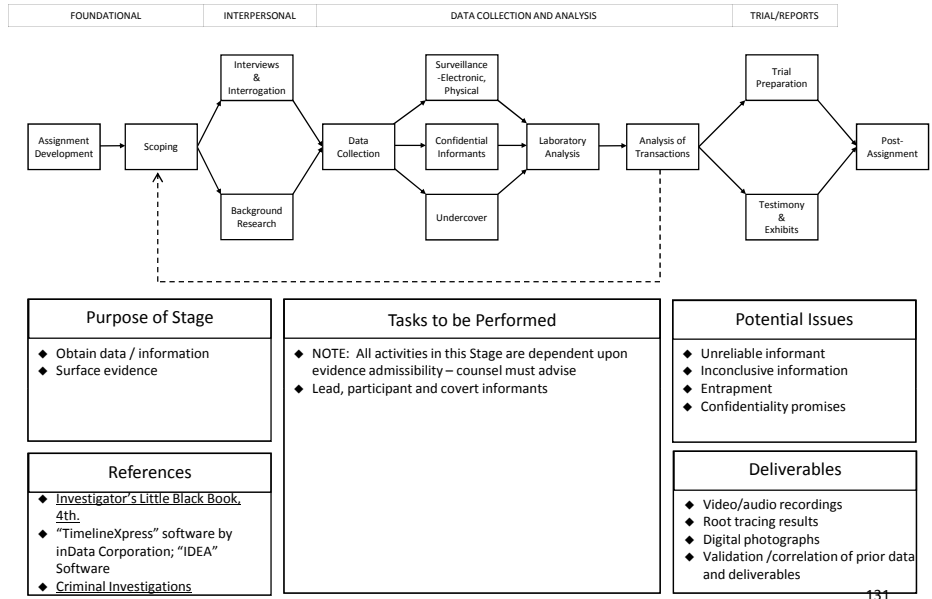
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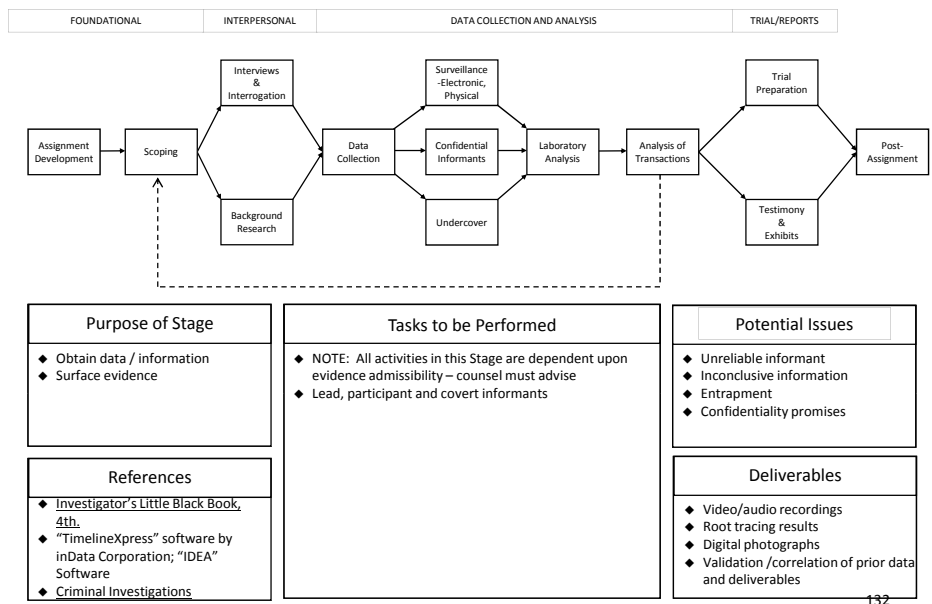
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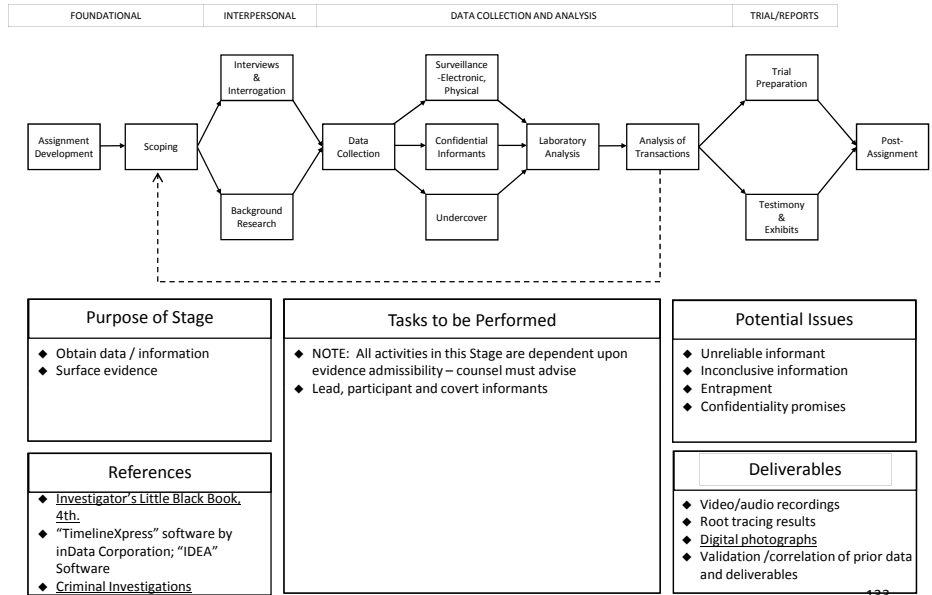
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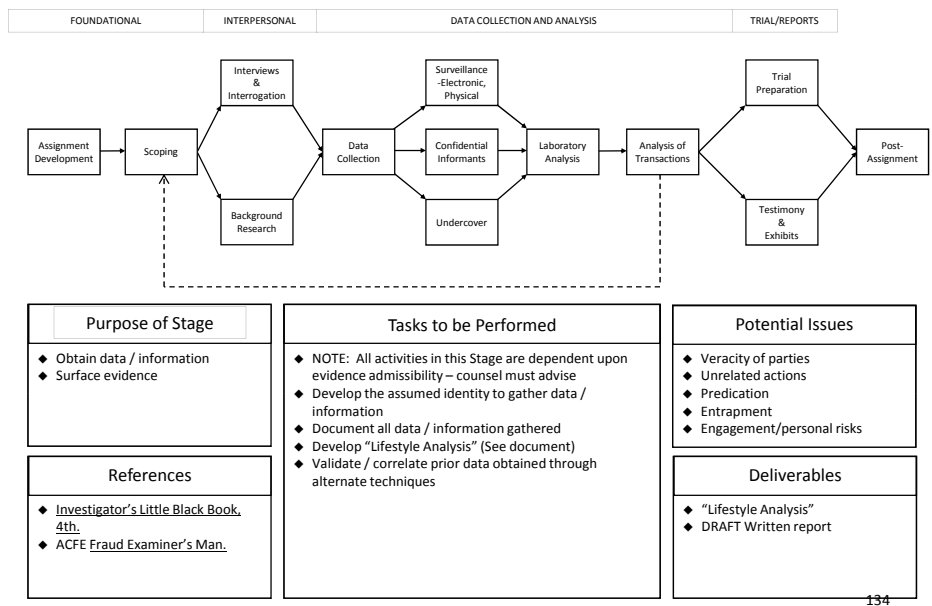
Forensic Accounting/Investigation Methodology (FA/IM)[®]



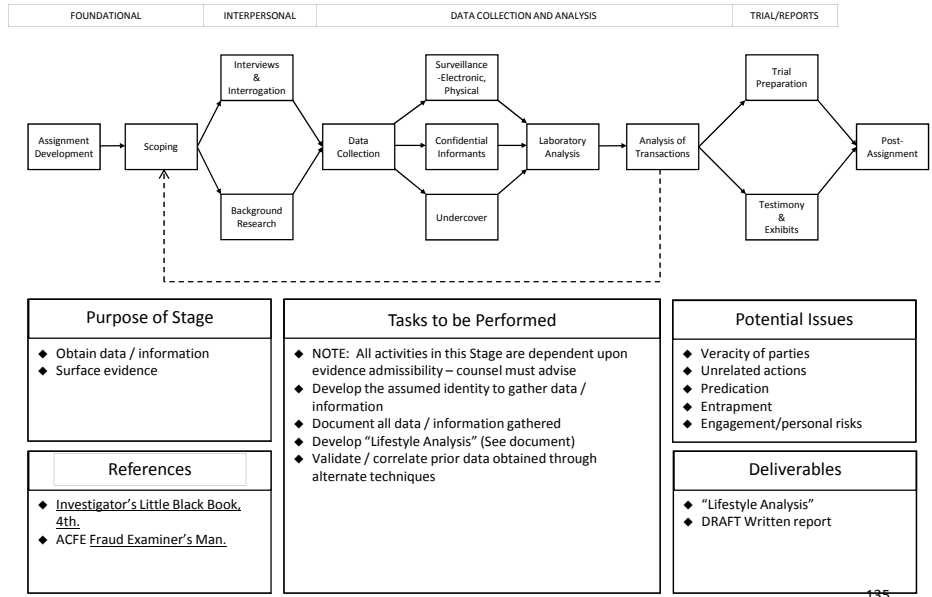
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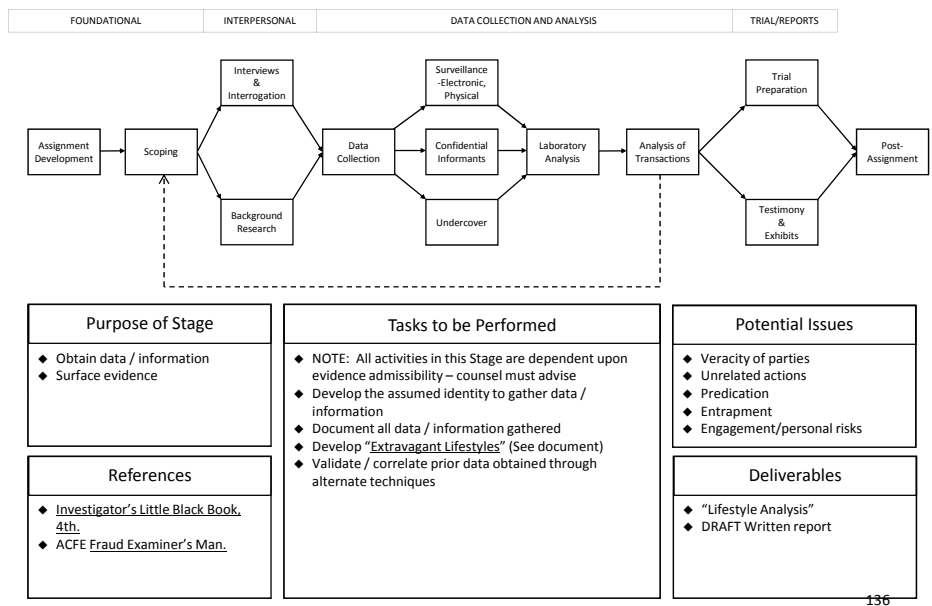
Forensic Accounting/Investigation Methodology (FA/IM)®



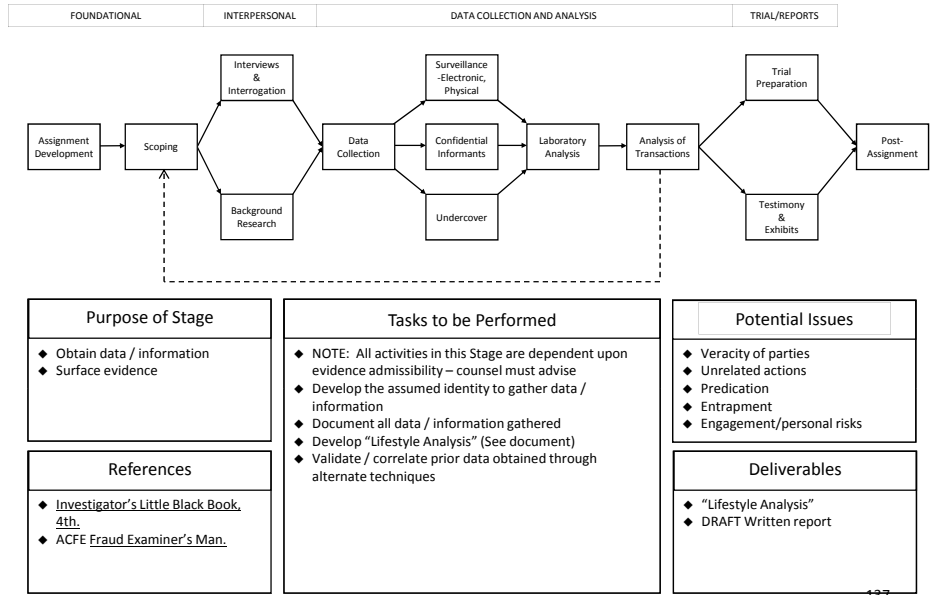
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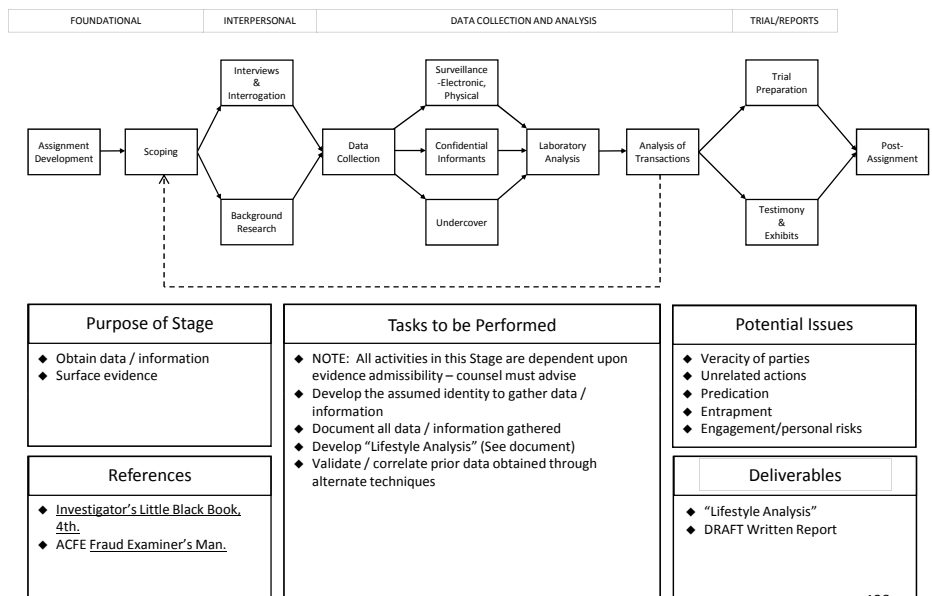
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Forensic Accounting Academy™

PPTs

Day Three



CONSULTANTS' TRAINING INSTITUTE

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P: (801) 486-0600 www.nacva.com

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Day 3

1

Why is *forensic accounting* so important?

- Your clients *expect* it!
- It changes how you *think*.
- It *defends* against client claims.
- It *broadens* your practice base.
- It is more *efficient* - *your staff has consistency*
- You can *charge/collect* more.
- It attracts and retains better *recruits*.
- It *distinguishes* you from appraisers, bankers, brokers, economists, financial analysts...
- It distinguishes you from your CPA *competition*.
- Other services are *improved*, i.e. audit, tax, litigation, valuation, fraud...

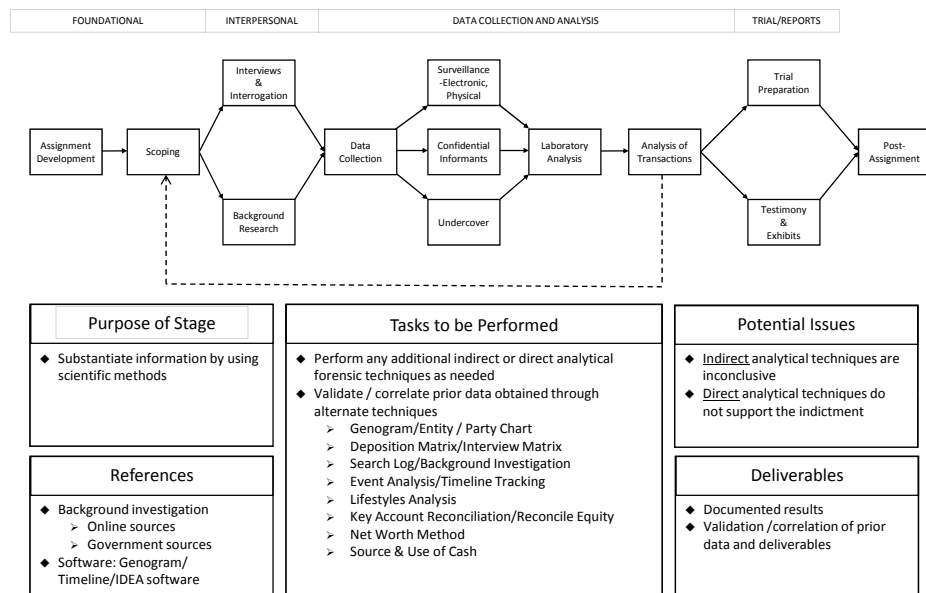
2

25+/- “New” forensic accounting techniques...

- ✓ Full-and-False Inclusion
- ✓ Genogram
- ✓ TATA
- ✓ AQI
- ✓ Behavior Detection
- ✓ FACS
- ✓ Styleometry
- ✓ ICE©/SCORE©
- ✓ Link Analysis
- ✓ Articulated Cash Flow
- ✓ Dechow-Dichev Techniques
- ✓ Timeline Analysis
- ✓ (Modified) Net Worth
- ✓ Expectations Attributes
- ✓ Gap Detection
- ✓ www.BlackBookOnLine.Info
- ✓ Proof-of-Cash
- ✓ Deposition Matrix
- ✓ Entity(s) Chart
- ✓ Lev-Thiagarajan Techniques
- ✓ Damages Report Card
- ✓ Digital Analysis
- ✓ CATA
- ✓ TITA
- ✓ CRO
- ✓ MSSP

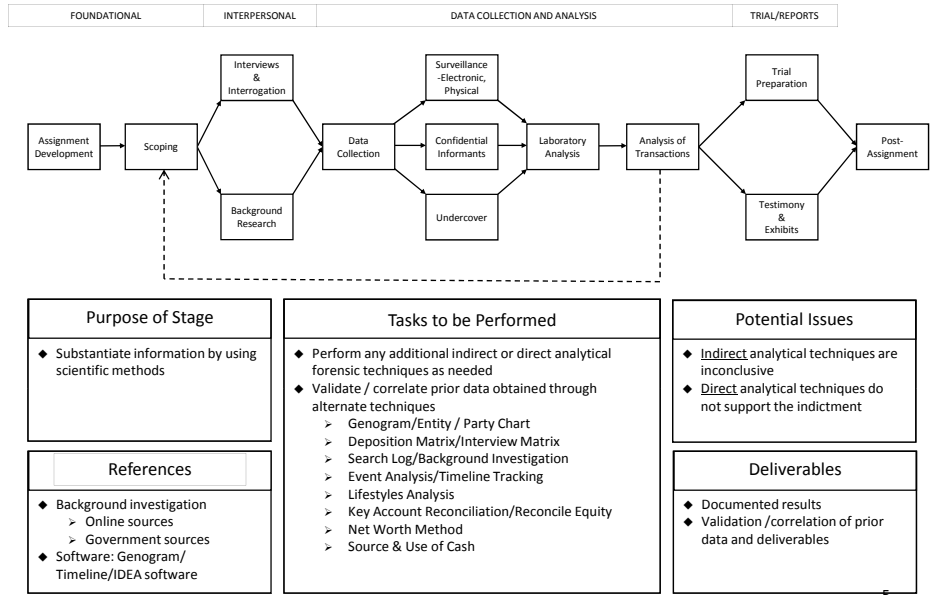
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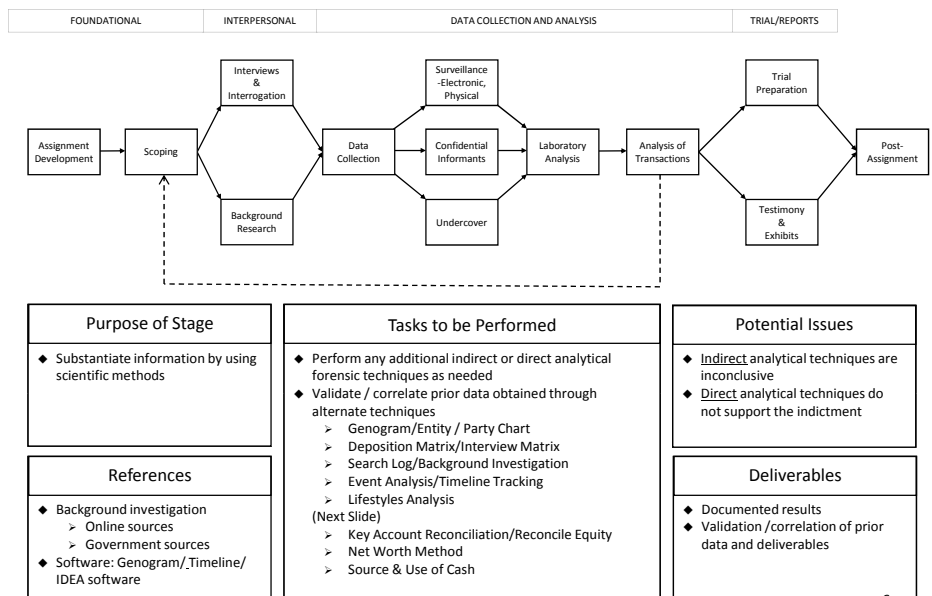
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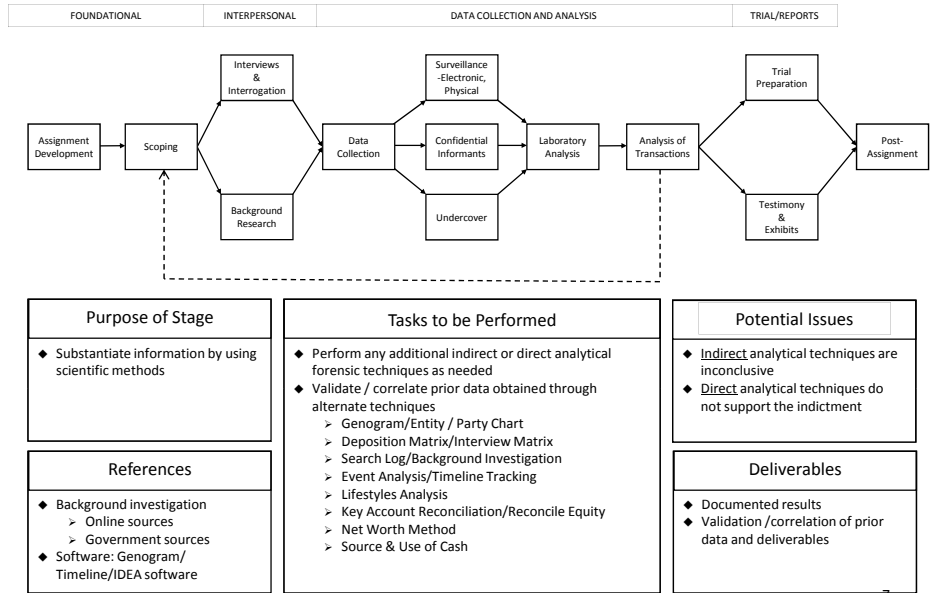
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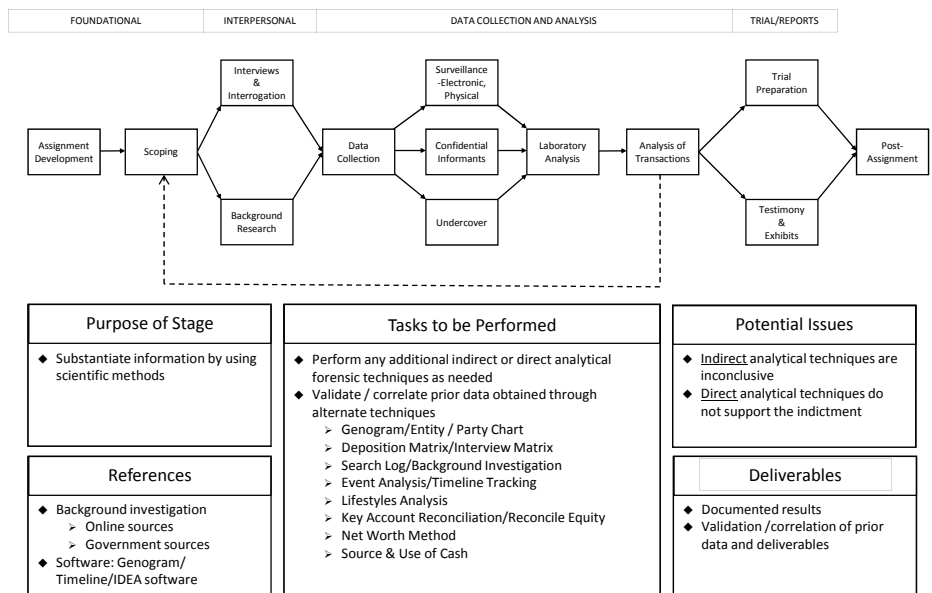
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Forensic Accounting/Investigation Methodology (FA/IM)[®]



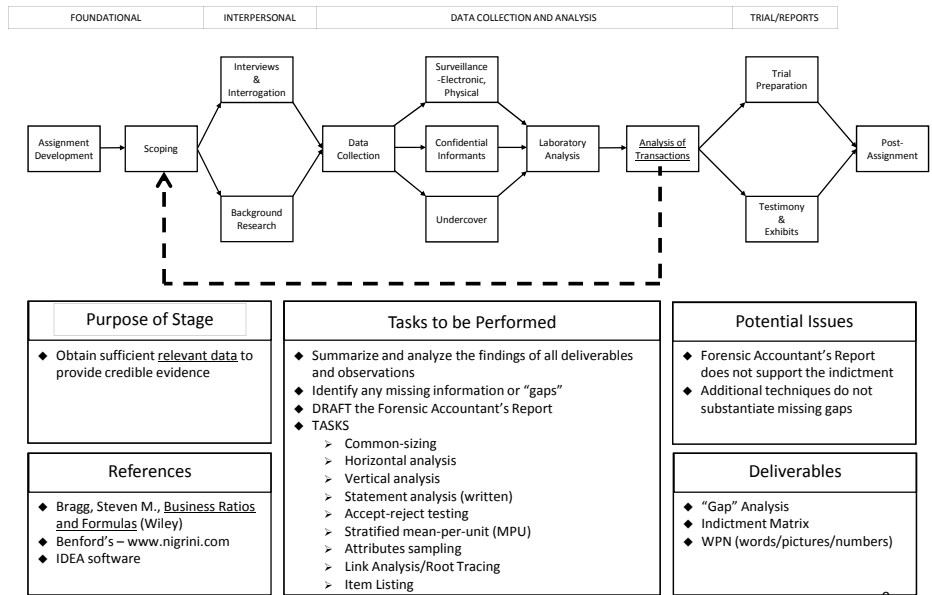
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Forensic Accounting/Investigation Methodology (FA/IM)[®]



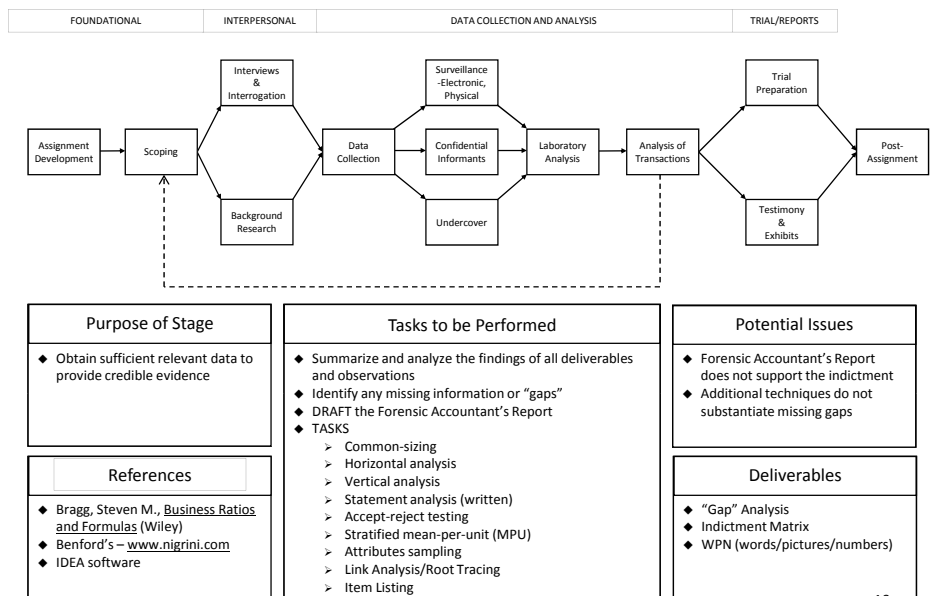
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Forensic Accounting/Investigation Methodology (FA/IM)[®]



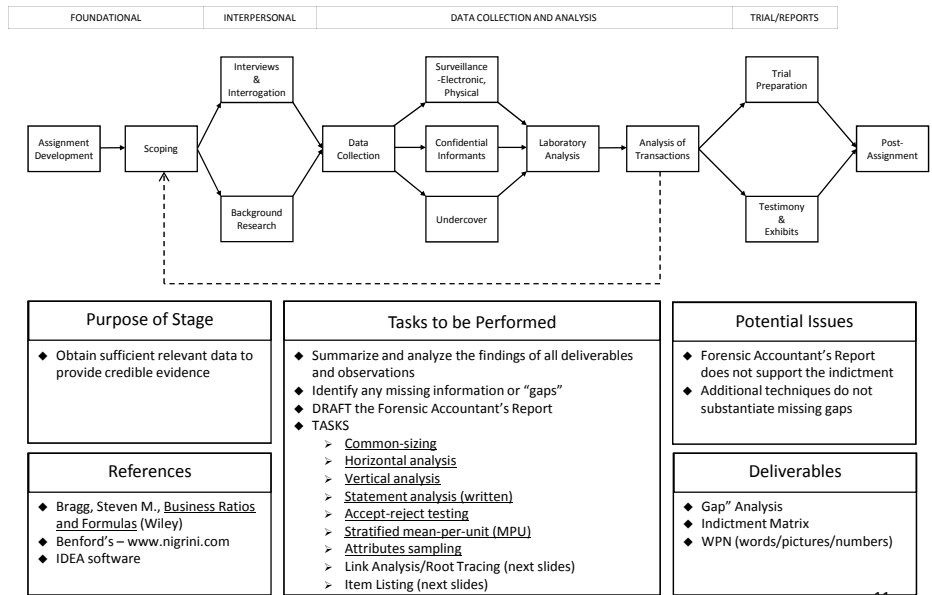
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Forensic Accounting/Investigation Methodology (FA/IM)[®]



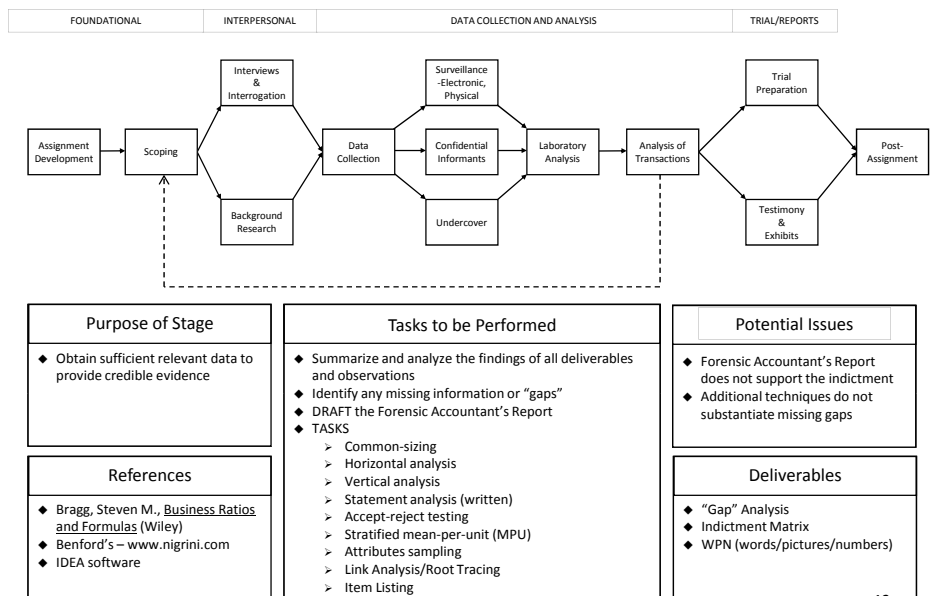
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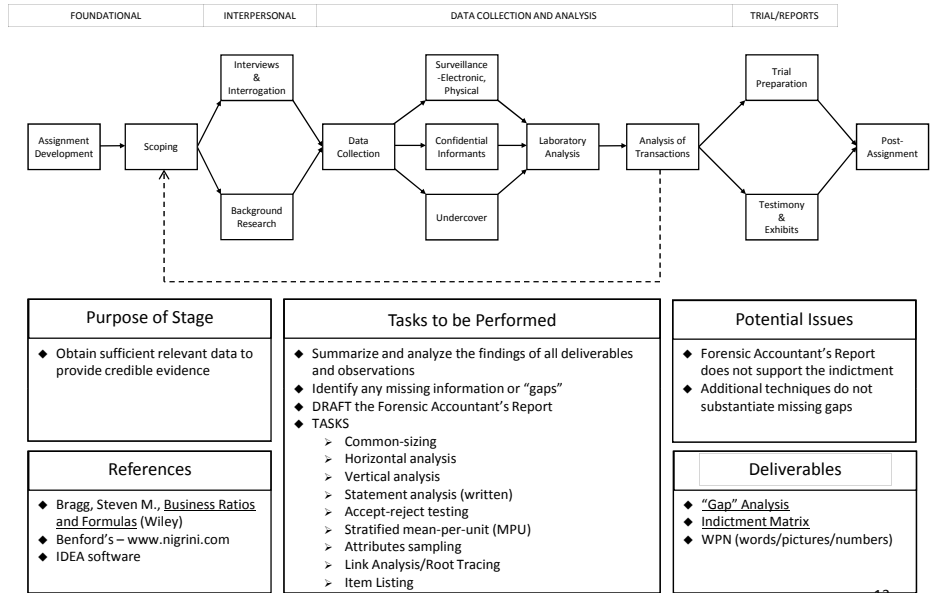
11

Forensic Accounting/Investigation Methodology (FA/IM)®



12

Forensic Accounting/Investigation Methodology (FA/IM)®



Document Map

XYZ Professional Practice, LLP																										
Bank Statements Analyzed																										
For the Period August 2004 - July 2007																										
Bank	Acct#	Type of Acct																								
North Fork Bank - XYZ Professional Practice, LLP	938416 071 0	Business Checking																								
Citibank - XYZ Professional Practice, LLP	5921111	Operating Account																								
HSBC - XYZ Professional Practice, LLP	666-96348-9	Operating Account																								
Chase - XYZ Professional Practice, LLP	957-087654	Operating Account																								
Chase - XYZ Professional Practice, LLP	957-081234	Operating Account																								
Bank of New York - Suspicious Management Company LLC	61C-6488881	Commercial Checking																								
Bank of New York - Suspicious Management Company LLC	61C-6487462	Commercial Checking																								
Bank of New York - XYZ Professional Practice, LLP	61C-7531221	Commercial Checking																								
North Fork Bank - Off The Charts Management Inc.	938401 018 4	Payroll Acct.																								
North Fork Bank - Off The Charts Management Inc.	938401 047 5	Essential Bus. Checking																								
			Aug-04	Sep-04	Oct-04	Nov-04	Dec-04	Jan-05	Feb-05	Mar-05	Apr-05	May-05	Jun-05	Jul-05	Aug-05	Sep-05	Oct-05	Nov-05	Dec-05	Jan-06	Feb-06	Mar-06	Apr-06	May-06	Jun-06	Jul-06
			Aug-06	Sep-06	Oct-06	Nov-06	Dec-06	Jan-07	Feb-07	Mar-07	Apr-07	May-07	Jun-07	Jul-07												

Key Account Reconciliations

- Regular balance sheet account reconciliations are a **foundational** control tool.
 - Identify and correct errors
 - Vorhies, J. B (September, 2006). Account Reconciliation: An Underappreciated Control. *Journal of Accountancy*, AICPA. <http://aicpa.org/pubs/jofa/sep2006/vorhies.htm>
 - More important since SOX passage; timely, accurate accounting recons have become a critical internal control practice.
 - Companies must report most errors the auditor finds as material misstatements and material weaknesses unless they can prove their own controls would have found the error.
 - Companies can use recons to compensate for the failure of primary controls as well as to detect and prevent deficiencies and material weaknesses

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Does This Warrant Further Investigation?

"Additionally, it is apparent that bank account reconciliations were not performed on a timely basis. Bank reconciliations were often done in batch, preparing more than one month's reconciliation at a time, and they were often done well after the respective month had ended. For example, on October 22, 2002, bank reconciliations were prepared for the months spanning September through December 2001. These bank reconciliations were prepared 10 months to a year after the respective months had ended."

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Key Account Reconciliations (cont.)

- Lack of timely and accurate reconciliations should be investigated
- Not just for bank accounts
 - Accounts Receivable
 - Inventory
 - Fixed Assets
 - Liabilities
 - Equity Accounts
 - Key Revenue and Expenditure Accounts

17

Reconcile Equity

Where are the holes? What do you see?

	2004	2003	2002	2001	2000	1999
Beginning Shareholders' Equity	641,000	534,900	412,897	350,570	317,049	287,574
Net Income/(Loss)	768,398	508,400	467,138	267,377	27,797	29,475
Dividends Paid Common Stock	(500,500)					
Dividends Paid Common Non-Voting Stock						
Dividends Paid Preferred Stock						
Common Stock Issued						
Common Non Voting Stock Issued	500,500					
Treasury Stock Purchased		(402,300)	(367,050)	(205,050)	(27,797)	
Distributions to Shareholder	(100,000)					
Foreign currency translation adj	5,500					
Min. pension liability adj.						
Unreal gains on marketable sec	400					
Prior Period Adjustments						
Other Restatements, Net	(298,632)					
Ending Shareholders' Equity	1,016,666	641,000	512,985	412,897	317,049	317,049

Link Analysis

Entity Name	Registry Date	Principal Place of Business	Registered Agent
Hobbies, Inc.	8/11/1978	2301 N. Watermain Rd City ZIP	Old Attorney, P.C.
Watermain Marketing, Inc.	8/11/1978	Links to "Hobbies, Inc..."	Old Attorney, P.C.
Regional Purchasing, Inc.	8/11/1978	2301 N. Watermain Rd City ZIP	Old Attorney, P.C.
Hobbies, Inc.	2/23/1973	13367 Street Rd NE City ZIP	Old Attorney, P.C.
Example Dog and Cat Hospital, P.C.	7/31/1981	9876 SW Small Road Hwy Example ZIP	First Name Partner #2
The Spouse Company	8/12/1985	xxxxx SW Heather Road #620 Small Town ZIP	First Name Spouse, Jr.
Big-Ticket Services, Inc.	8/15/1985	Links to "The Spouse Company"...	First Name Spouse, Jr.
Big-Ticket Services, Ltd.	8/12/1985	Links to "The Spouse Company"...	First Name Spouse, Jr.
Spouse Partner Clinic Properties, L.L.C.	4/7/1995	9876 SW Small Road Hwy Example ZIP	First Name Spouse, Jr.
Spouse Partner Management Company of STATE, Inc.	4/7/1995	9876 SW Small Road Hwy Example ZIP	First Name Spouse, Jr.
Spouse Partner Management Company of STATE, Inc.	6/17/1996	9876 SW Small Road Hwy Example ZIP	First Name Spouse, Jr.
CSmall Townsed, P.C.	4/7/1995	433 Third St Small Town ZIP	First Name Spouse, Jr.
Ark Management, Inc.	4/7/1995	Links to Spouse Partner Management Co"...	First Name Spouse, Jr.
City Spouse Partner Clinic, P.C.	5/1/1996	9876 SW Small Road Hwy Example ZIP	C.First Name Spouse, Jr.
Town Square Spouse Partner Hospital, P.C.	11/22/1996	Address SW Main #100 Town, State ZIP	C.First Name Spouse, Jr.
Spouse Econometrics, Inc.	10/7/1998	xxxxx SW Heather Road #330 Small Town ZIP	First Name Spouse, Jr.
Hobby Toy Ventures, LLC	5/26/1999	P.O. Box 459 City State ZIP	New Attorney
Animal Allergy & Skin Clinic	8/12/1999	4100 SW 109th Beaverton 97005	First Name Partner #2
America's Doolhouse Company	8/20/1999	2301 N. Watermain Rd City ZIP	Old Attorney, P.C.
Racings Farm	10/22/2001	Address SW Alpine Road WL 97068	First Name Spouse (auth. rep.)
Racings Farm, LLC	10/22/2001	Address SW Alpine Rd WL 97068	First Name Spouse
Auto/Truck Specialties, Inc.	5/17/2002	Address SW Advance Road Town ZIP	Partner #3
Estates Shrunkn, LLC	3/7/2003	xxxxx SW Heather Road #330 Small Town ZIP	New Attorney
High-End Dollars CStateStateation	4/10/2003	Address SW Alpine Road First Namet Linn 97068	New Attorney
Tails & Paws	5/6/2004	Address SW Main #100 Town, State ZIP	James New Partner
Regional CollectState Cars LLC	12/12/2005	n/a	Partner #3
Regional TendonCars LLC	12/12/2005	Links to "Regional TendonCars LLC"...	Partner #3
Creative Transactions, Inc.	4/3/2006	n/a	Regional CollectState Cars LLC

Item Listing Method

- Logical starting point
- Very easy to modify
- Provides a trail of investigation
- Leads to other evidence
- Simple for the “court,” jury, judge, etc.

Item Listing - Beginning

PARTIES

Bank Statement Activity

Sorted by "Bank & Account Number"

Source: Bank Statement Deposits & Withdrawals of \$500.00 or more.

Stmnt Date	Trans Date	Bank	Acct#	Acct Name	Deposit \$ Amount	Withdrawal \$ Amount	Comment/Source	Comment
6/15/04	5/20/04	BOA-WA	763xxxxx	BW	20,000.00		unknown source	perhaps from joint acct?
11/16/04	11/1/04	BOA-WA	763xxxxx	BW		871.66	cashiers check	
12/15/04	12/1/04	BOA-WA	763xxxxx	BW		1,764.89	cashiers check	
12/15/04	12/15/04	BOA-WA	763xxxxx	BW	2,500.00		maintenance	
2/15/05	2/10/05	BOA-WA	763xxxxx	BW		2,500.00	cashiers check	
4/15/05	4/4/05	BOA-WA	763xxxxx	BW		961.80	withdrawal	
3/15/05		BOA-WA	763xxxxx	BW			no activity	
1/18/05		BOA-WA	763xxxxx	BW			no activity	
10/18/04		BOA-WA	763xxxxx	BW			no activity	
9/16/04		BOA-WA	763xxxxx	BW			no activity	
8/16/04		BOA-WA	763xxxxx	BW			no activity	
7/16/04		BOA-WA	763xxxxx	BW			no activity	
5/16/05		BOA-WA	763xxxxx	BW			no activity	
6/15/05	5/19/05	BOA-WA	763xxxxx	BW	2,500.00		maintenance	
6/15/05	6/3/05	BOA-WA	763xxxxx	BW		3,000.00	cashiers check	
					25,000.00	9,098.35		
8/23/04	8/13/04	BB&T Florida	1452xxxxx	EO/BW	40,000.00		unknown source	Wachovia
11/22/04	11/22/04	BB&T Florida	1452xxxxx	EO/BW	263,632.67		Estate Title of St. Augustine	
1/24/05	1/14/05	BB&T Florida	1452xxxxx	EO/BW	4,679.40		EQUIP Medical	
3/23/05	3/21/05	BB&T Florida	1452xxxxx	EO/BW	-	4,679.40	no activity	
10/24/05	9/29/05	BB&T Florida	1452xxxxx	EO/BW	-	309,197.66	close account	
9/22/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
8/22/05		BB&T Florida	1452xxxxx	EO/BW	-		statement is missing	
7/22/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
6/22/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
5/20/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
4/22/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
3/23/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
2/18/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
12/22/04		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
10/22/04		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
9/23/04		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
					308,312.07	313,877.06		
11/22/04	10/29/04	BB&T Florida	1452xxxxx	EO/BW	16,342.37		First Independent	
3/23/05	3/11/05	BB&T Florida	1452xxxxx	EO/BW	5,019.25		EQUIP Medical	
3/23/05	3/21/05	BB&T Florida	1452xxxxx	EO/BW	3,664.34		EQUIP Medical	
3/23/05	3/21/05	BB&T Florida	1452xxxxx	EO/BW	4,679.40		EQUIP Medical	
4/22/05	4/5/05	BB&T Florida	1452xxxxx	EO/BW		5,000.00	EO	
5/20/05	5/9/05	BB&T Florida	1452xxxxx	EO/BW		24,867.16	close account	to Key Bank # ...5275
2/18/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
1/24/05		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
12/22/04		BB&T Florida	1452xxxxx	EO/BW	-		no activity	
					29,705.36	29,867.16		
9/28/05	4/12/05	First Indep.	4000xxxxx	BW	3,000.00		IRA account	
9/30/04	7/15/04	First Indep.	4021xxxxx	BW	2,500.00		unknown source	maintenance?
9/30/04	8/15/04	First Indep.	4021xxxxx	BW	5,187.55		EQUIP Medical	
9/30/04	9/15/04	First Indep.	4021xxxxx	BW	4,139.31		EQUIP Medical	
11/14/04	10/12/04	First Indep.	4021xxxxx	BW	5,511.12		EQUIP Medical	
11/14/04	11/13/04	First Indep.	4021xxxxx	BW		16,342.37	withdrawal	
3/14/05		First Indep.	4021xxxxx	BW			missing statements	
2/14/05		First Indep.	4021xxxxx	BW			missing statements	
1/14/05		First Indep.	4021xxxxx	BW			missing statements	
12/14/04		First Indep.	4021xxxxx	BW			missing statements	
4/15/05	4/5/05	First Indep.	4021xxxxx	BW	6,025.34		missing statements	DDA inquiry
4/15/05	4/12/05	First Indep.	4021xxxxx	BW		3,000.00	missing statements	DDA inquiry
4/15/05	4/15/05	First Indep.	4021xxxxx	BW		4,029.42	close account	
					23,363.32	23,371.79		

Flagging and Tracing

PARTIES

EQUIP Medical Checks Paid to BW

Source: EQUIP Medical

Check #	Date	Payee	\$ Amount	1099	1040	Date Dep	Bank	Acct #	Bank per BW	Comment	Note
12187	9/3/03	BW	2,000.00				Note 4	153651xxxxxx	US Bank	joint account	4
12256	10/6/03	BW	2,750.00				Note 4	153651xxxxxx	US Bank	joint account	4
12309	11/6/03	BW	3,355.11				Note 4	153651xxxxxx	US Bank	joint account	4
12346	12/2/03	BW	4,042.08	\$ 12,147	\$ 12,147		Note 4	153651xxxxxx	US Bank	joint account	4
12409	1/6/04	BW	3,443.68				Note 4	153651xxxxxx	US Bank	joint account	4
12475	2/9/04	BW	2,252.40			2/13/04	US Bank	153555xxxxxx	US Bank		
12604	2/28/04	BW	5,555.77				Note 4	32770xxxxx	BOA-FL	missing statement	4
12612	3/3/04	BW	4,140.75				Note 4	32770xxxxx	BOA-FL	missing statement	4
12611	3/3/04	BW	2,000.00			3/15/04	US Bank	153555xxxxxx	US Bank		
12673	4/2/04	BW	4,592.85				Note 4	32770xxxxx	BOA-FL	missing statement	4
12672	4/2/04	BW	2,000.00			4/9/04	US Bank	153555xxxxxx	US Bank		
12722	5/3/04	BW	2,625.16				US Bank	153555xxxxxx	US Bank		
12723	5/3/04	BW	5,232.98				Note 4	32770xxxxx	BOA-FL	missing statement	4
12780	6/4/04	BW	4,006.94				Note 4	32770xxxxx	BOA-FL	missing statement	4
12779	6/4/04	BW	2,000.00				US Bank	153555xxxxxx	US Bank		
12836	7/7/04	BW	2,569.62				Note 4	4021xxxxx	First Indep.	unable to match	4
12835	7/7/04	BW	2,000.00				US Bank	153555xxxxxx	US Bank		
12872	8/3/04	BW	2,758.51				US Bank	153555xxxxxx	US Bank		
12873	8/3/04	BW	5,187.55			8/15/04	First Indep.	4021xxxxx	First Indep.		
12921	9/2/04	BW	2,000.00				US Bank	153555xxxxxx	US Bank		
12922	9/2/04	BW	4,139.31			9/15/04	First Indep.	4021xxxxx	First Indep.		
12972	10/5/04	BW	1,960.00				US Bank	153555xxxxxx	US Bank		
12973	10/5/04	BW	5,511.12			10/12/04	First Indep.	4021xxxxx	First Indep.		
13013	11/2/04	BW	2,000.00				US Bank	153555xxxxxx	US Bank		
13014	11/2/04	BW	8,055.93			11/10/04	BOA Florida	54889xxxxx	BOA-FL		
13072	12/3/04	BW	2,857.69				US Bank	153555xxxxxx	US Bank		
13073	12/3/04	BW	5,116.81	\$ 82,007	\$ 27,897		Note 4	763xxxxx	BOA-WA	unable to match	2,4,5
13123	1/4/05	BW	4,679.40			1/14/05	BB&T Florida	1452xxxxx	BOA-FL		
13124	1/4/05	BW	2,185.92			1/13/05	US Bank	153555xxxxxx	US Bank		
13174	2/3/05	BW	2,000.00			2/7/05	US Bank	153555xxxxxx	US Bank		
13175	2/3/05	BW	3,664.34			3/21/05	BB&T Florida	1452xxxxx	BOA-FL		
13223	3/1/05	BW	2,007.77			3/10/05	US Bank	153555xxxxxx	US Bank		
13225	3/1/05	BW	5,019.25			3/11/05	BB&T Florida	1452xxxxx	BOA-FL		
13278	4/4/05	BW	2,000.00			4/5/05	US Bank	153555xxxxxx	US Bank		
13279	4/4/05	BW	6,025.34			4/5/05	First Indep.	4021xxxxx	First Indep.		
13334	5/3/05	BW	3,784.92			5/13/05	First Indep.	18000xxxxx	First Indep.		
13335	5/3/05	BW	4,540.87			5/13/05	First Indep.	18000xxxxx	First Indep.		
13368	6/2/05	BW	2,000.00				Note 4	153555xxxxxx	US Bank	missing statement	3, 4
13369	6/2/05	BW	2,954.09			7/7/05	Key Bank	47342829xxxxxx	Key Bank		
13421	6/30/05	BW	2,000.00				Note 4	153555xxxxxx	US Bank	missing statement	4
13422	6/30/05	BW	5,372.14			7/7/05	Key Bank	47342829xxxxxx	Key Bank		

Note

1. This schedule lists checks to BW per EQUIP Medical with yearly totals compared to 1099's. Also, traced deposit to bank statements.
2. This check for \$5,116.81 shows endorsement by Bank of America clearly on the back but does not show up in either BOA account.
3. The last US Bank statement we have in our possession is for May, 2005.
4. Missing statement or unable to match deposit.
5. The total of the check amounts highlighted in yellow equals \$27,897.44, the amount reported on Schedule C for 2004
6. A total of 10 accounts were used in the period for depositing EQUIP Medical checks.

Proof-of-Cash

- Foot all schedules
- Investigate unusual time lags between the receipt, recording and depositing of collections
- Use original documents, not copies
- Examine documentation
- Obtain the bank statements for the month following the period under investigation and perform tracing steps (validate outstanding items)

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Proof-of-Cash

- Traces “reported” receipts and disbursements to bank statement(s)
- Relatively simple to prepare
- Excellent validation tool
- Intuitively understood
- Start with annual, “drill-down” to monthly
- Does not allow for entries to *Plug the Balance*

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Example Proof-of-Cash (Annual)

PROOF OF CASH WORKSHEET/DOCUMENTATION				
Period ended: _____				
<u>Description</u>	<u>Beginning of Fiscal Year</u> <u>Bank Reconciliation</u> <u>(June 30, 2001)</u>	<u>Fiscal year receipts</u>	<u>Fiscal year disbursed</u>	<u>End of Fiscal Year</u> <u>Bank Reconciliation</u> <u>(June 30, 2002)</u>
<u>Balance per Bank:</u>	(1) _____	(1) _____	(1) _____	(1) _____
Deposits in transit:				
June 2001	(2a) _____ +	(2a) _____ -		() _____
June 2002	* _____	(2b) _____		(2b) _____ +
Outstanding Checks:				
per list 6-30-2001	(3a) _____ -		(3a) _____	
per list 6-30-2002			(3b) _____ +	(3b) _____ -
<u>ADJUSTED BALANCE</u>	(4) _____	(4) _____	(4) _____	(4) _____
<u>Balance per Books:</u>	(5) _____	(5) _____	(5) _____	(5) _____
June Service charge:			(6) _____ +	(6) _____ -
NSF Checks returned:			(7) _____ -	(7) _____ -
Bank transfers, errors in recording, other adjustments		(8) _____ + -	(8) _____ + -	(8) _____ + -
Interest posted, by bank:		(9) _____ +		(9) _____ +
<u>ADJUSTED BALANCE</u> (same as line 4)	(10) _____	(10) _____	(10) _____	(10) _____
	*shaded areas should not	need an entry		**

Actual Proof-of-Cash (Monthly)

EXAMPLE TARGET COMPANY

Proof of Cash

Bank of America Account No. XXXXXX-XXXXX

	Line	Begin 12/31/03	Received 2004	Disbursed 2004	End 12/31/04	Proof	Difference
Balance per Bank:	1	\$ 184,256	\$ 676,073,010	\$ (676,106,648)	\$ 150,618	\$ 143,000	\$ 7,618
Less Transfers to/from Sweep Account #4XXXXXXXXXXXXX			(22,910,848)	10,771,464			-
Less Transfers to/from Master XXXXXXXXXXXXX			(3,155,662)	19,269,718			-
Less "Sweep credits or debits" per statement			(591,928,329)	596,668,006			-
Less Transfers to/from XXX Ltd. XXXXXXXXXXXXXXXXX			-	2,487,765			-
Deposits in transit:			-				-
Begin (computed, do not have actual)	2a	639,240	(639,240)				-
End	2b		21,114	-	21,114	21,114	-
Outstanding Checks:			-				-
Begin (computed, do not have actual)	3a	(826,589)		826,589			-
End	3b			(79,726)	(79,726)	(79,726)	0
							-
ADJUSTED BALANCE	4	\$ (3,093)	\$ 57,460,046	\$ (46,162,832)	\$ 92,006	\$ 84,388	\$ 7,618
							0
Balance per Books:	5	\$ (3,093)	\$ 675,015,076	\$ (675,497,228)	\$ 84,388	\$ 84,388	\$ -
Less Transfers to/from Sweep Account			(614,829,975)	607,432,665			-
Less Transfers to/from Master XXXXXXXXXXXXX			(3,155,662)	19,269,718			-
Less Transfers to/from XXX Ltd. XXXXXXXXXXXXXXXXX			-	2,487,765			-
Service charge:	6		-	-			-
NSF Checks returned:	7		-	-			-
Bank transfers, errors in recording, other adjustmer	8		11,254	(7,164)	7,618		7,618
"SURPRISE"			-	565,543			-
Interest posted, by bank:	9		(2,396)	-			-
ADJUSTED BALANCE	10	\$ (3,093)	\$ 57,038,297	\$ (45,748,700)	\$ 92,006	\$ 84,388	\$ 7,618
(same as line 4)							0
Difference		0.01	\$ 421,749	\$ (414,131)	\$ 7,618	\$ (0)	\$ 7,618
Transfers to/from AFFILIATE			\$ 67,495	\$ 9,809,541			

Notes

- February beginning balance per reconciliation does not tie to ending balance prior month. Difference \$4,090.05
- Missing page 5 of the March 2004 BoA XXXXXXXXXXXXXXXXXXXX statement.
- Beginning in May, 2004 sweep credits and debits appear on the checking account and format of bank statements changed.
- Credit of \$7,164 per bank on 5/10/05 & debit of \$7,164 on 5/6/05 not shown in XXX disbursements. Transactions wash.
- Beginning in June transactions in and out of funds sweep account no longer appear on checking account statements.
- A sweep debit of \$2,936,986.86 appears as a sweep credit on July 1 - technically a sweep in transit but not tracked that way by XXX on bank reconciliations.
- Do not have the Dec. checking account statement. Pages from internet show debits and credits. Balance column not readable.

Account Description

Bank of America Account No. XXXXXX-XXXXX
 NEW BANK Checking
 Bank of America FundSweep Statements (Account No. XXXXXXXXXXXXX)
 Bank of America Master Settlement Account No. XXXXX-XXXXX

Proof of Cash Exercise

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Timeline/Event Analysis

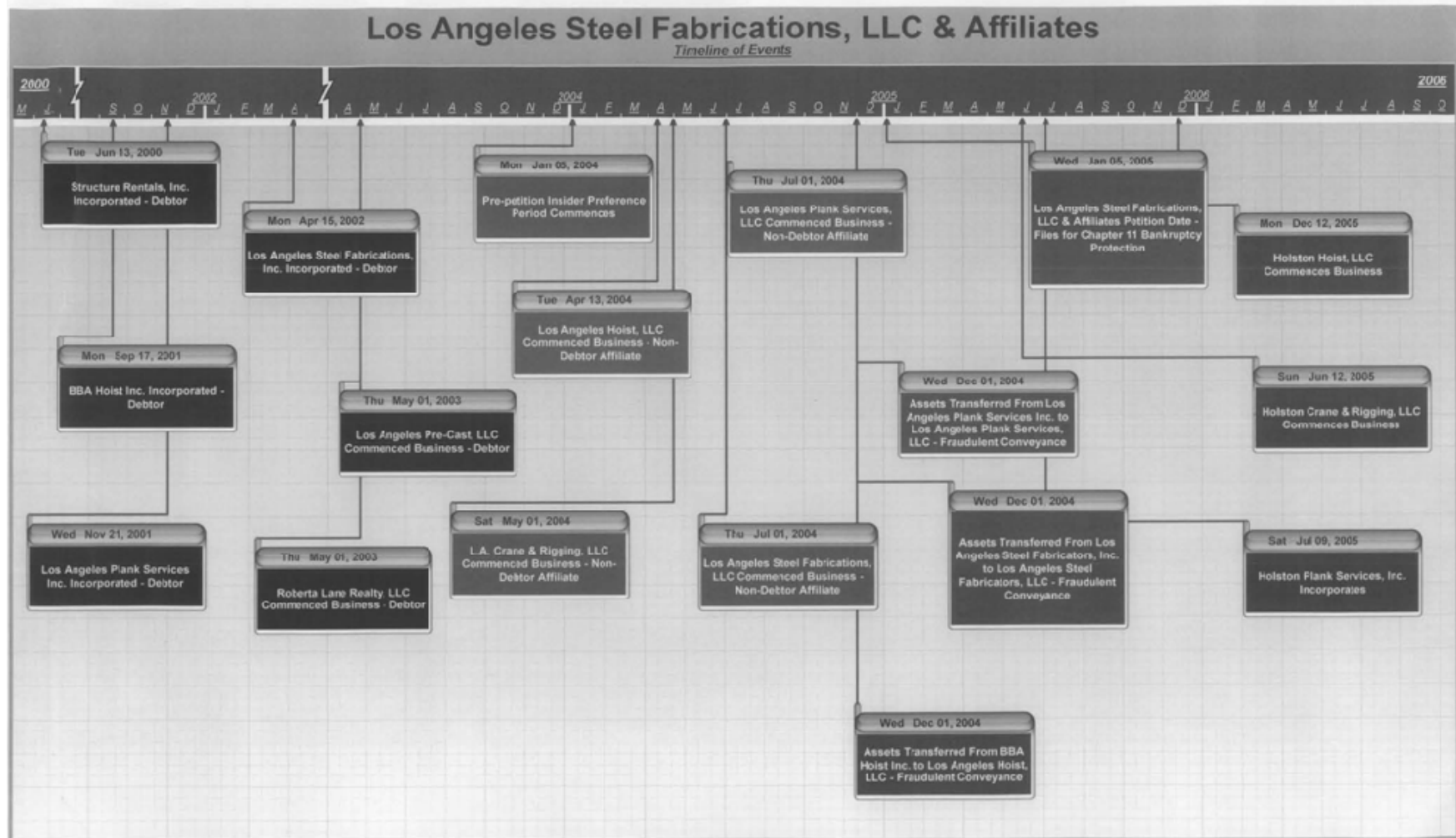
- Critical for all forensic accounting engagements (litigation, investigations, etc.)
- Assist with shaping of relevant facts and circumstances

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Timeline Analysis (con't)

	Caption	Date	Description	Icon	Color
✓	Structure Rentals, Inc. Incorporated - Debtor	06/13/2000			Blue
✓	BBA Hoist Inc. Incorporated - Debtor	09/17/2001			Blue
✓	Los Angeles Plank Services Inc. Incorporated -	11/21/2001			Blue
✓	Los Angeles Steel Fabrications, Inc. Incorporated - Debtor	04/15/2002			Blue
✓	Los Angeles Pre-Cast, LLC Commenced Business - Debtor	05/01/2003			Blue
✓	Roberta Lane Realty, LLC Commenced Business - Debtor	05/01/2003			Blue
✓	Pre-petition Insider Preference Period Commences	01/05/2004			Cyan
✓	Los Angeles Hoist, LLC Commenced Business - Non-Debtor Affiliate	04/13/2004			Magenta
✓	L.A. Crane & Rigging, LLC Commenced Business - Non-Debtor Affiliate	05/01/2004			Magenta
✓	Los Angeles Steel Fabrications, LLC Commenced Business - Non-Debtor Affiliate	07/01/2004			Magenta
✓	Los Angeles Plank Services, LLC Commenced Business - Non-Debtor Affiliate	07/01/2004			Magenta
✓	Assets Transferred From BBA Hoist Inc. to Los Angeles Hoist, LLC - Fraudulent Conveyance	12/01/2004			Purple
✓	Assets Transferred From Los Angeles Plank Services Inc. to Los Angeles Plank Services, LLC - Fraudulent Conveyance	12/01/2004			Purple
✓	Assets Transferred From Los Angeles Steel Fabricators, Inc. to Los Angeles Steel Fabricators, LLC - Fraudulent Conveyance	12/01/2004			Purple
✓	Los Angeles Steel Fabrications, LLC & Affiliates Petition Date - Files for Chapter 11 Bankruptcy Protection	01/05/2005			Green
✓	Holston Crane & Rigging, LLC Commences Business	06/12/2005			Brown
✓	Holston Plank Services, Inc. Incorporates	07/09/2005			Brown
✓	Holston Hoist, LLC Commences Business	12/12/2005			Brown

Timeline Analysis (con't)



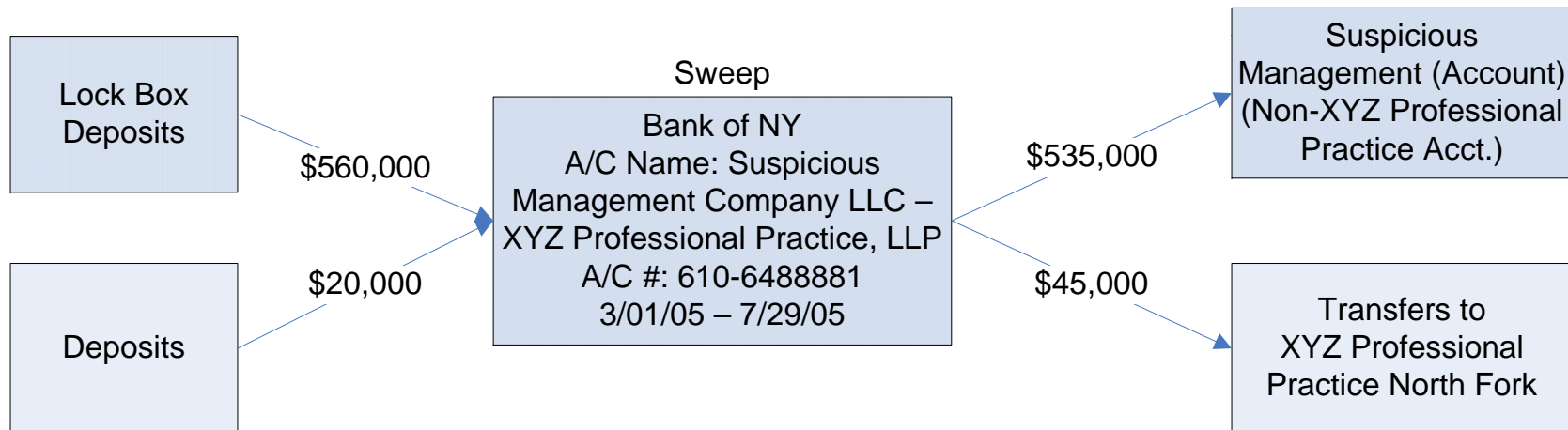
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

Bank of NY

A/C Name: Suspicious Management Company LLC – XYZ Professional Practice, LLP

A/C #: 610-6488881



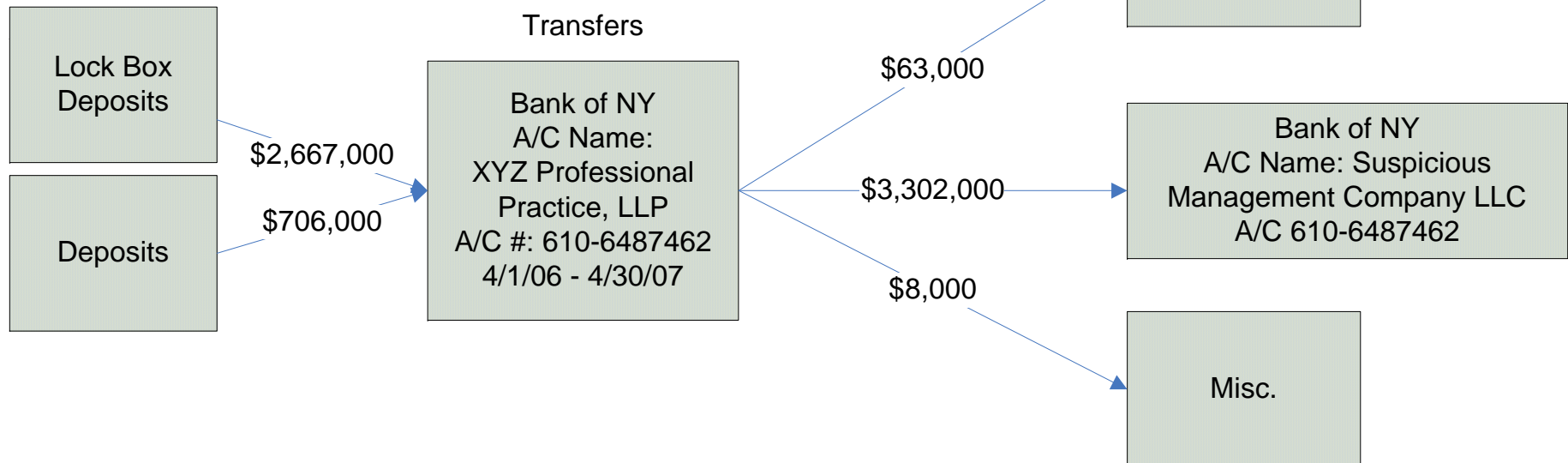
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

Bank of NY

A/C Name: XYZ Professional Practice, LLP

A/C #: 610-6487462



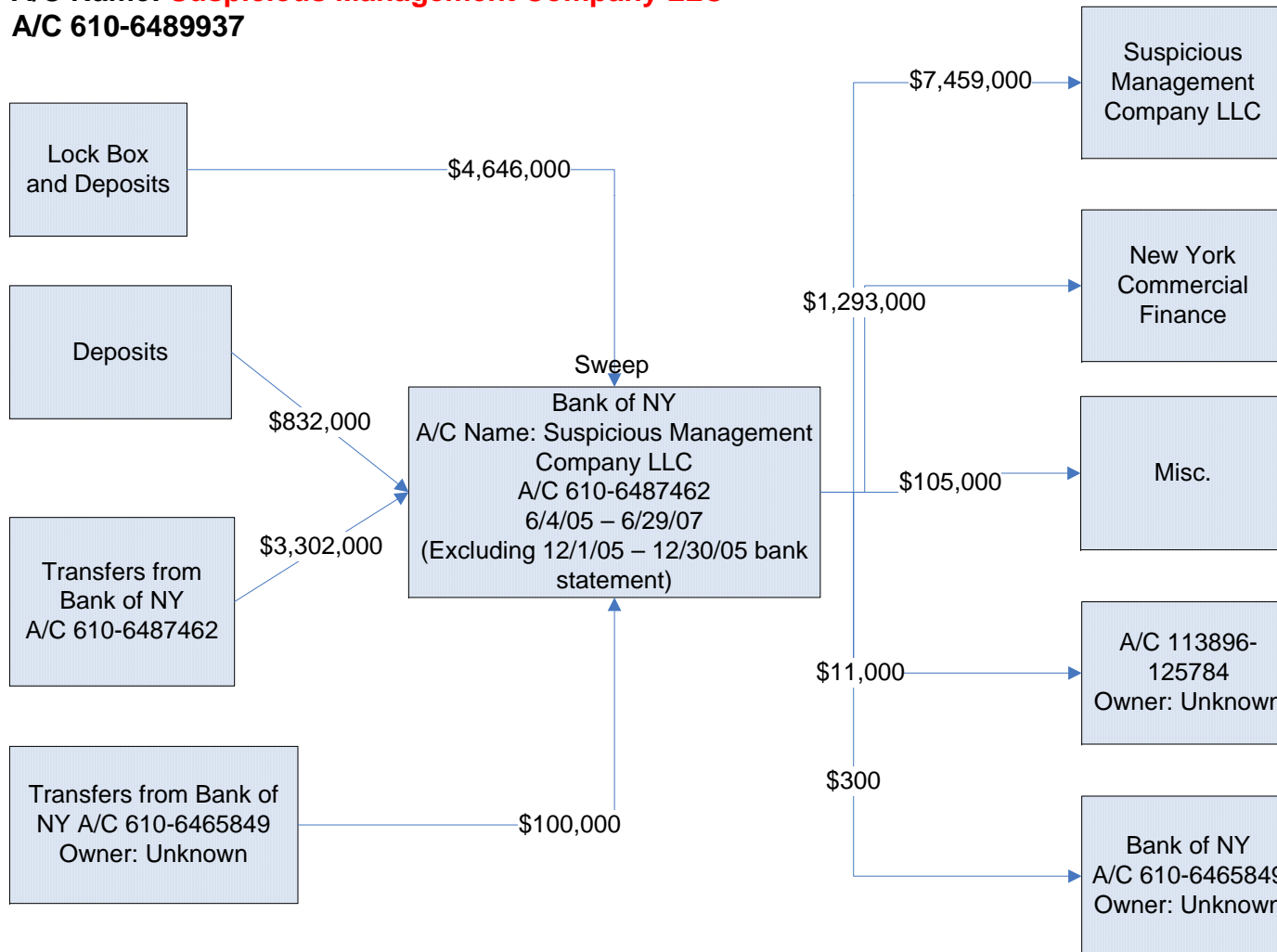
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

Bank of NY

A/C Name: **Suspicious Management Company LLC**

A/C 610-6489937



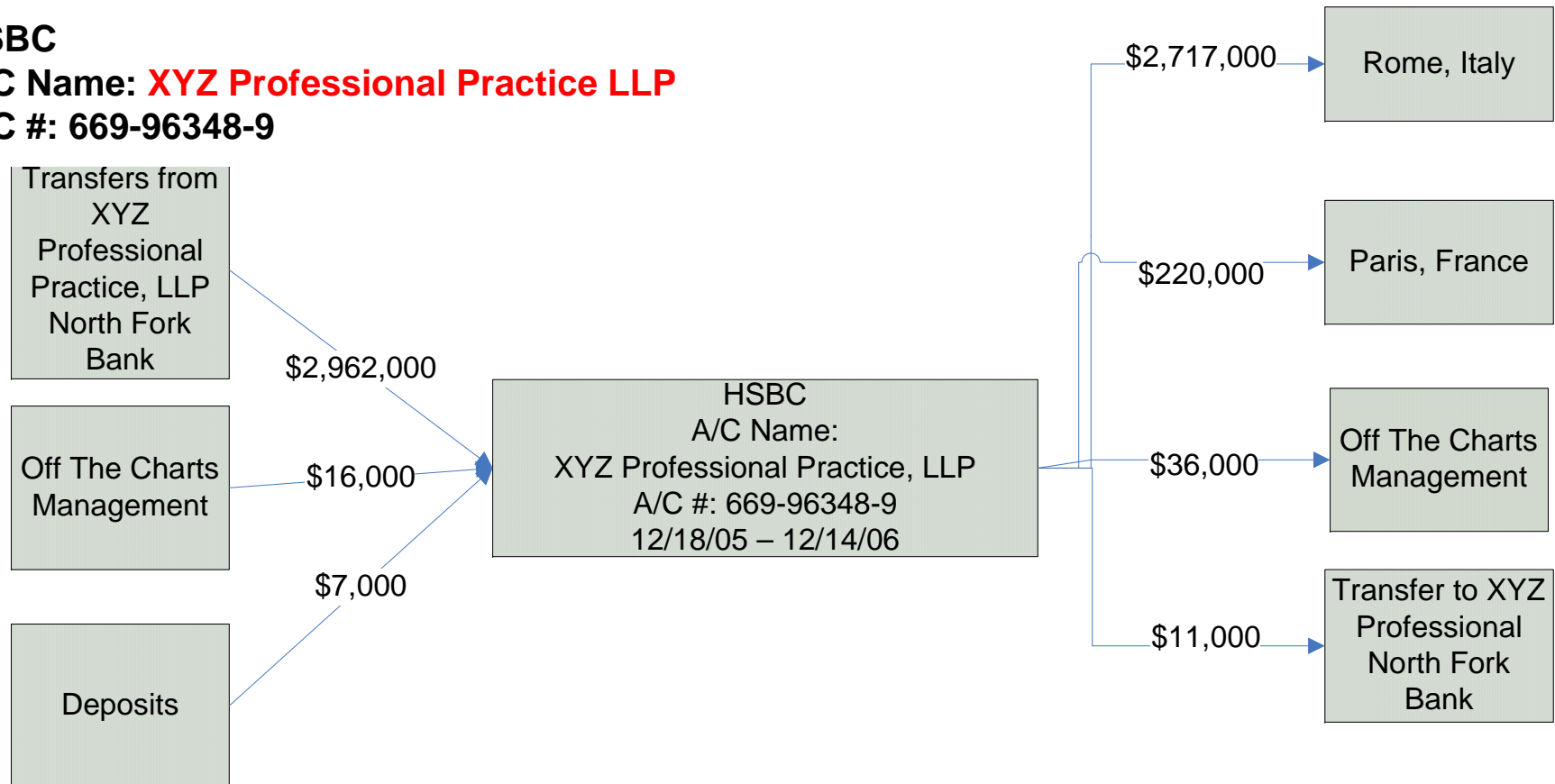
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

HSBC

A/C Name: **XYZ Professional Practice LLP**

A/C #: 669-96348-9



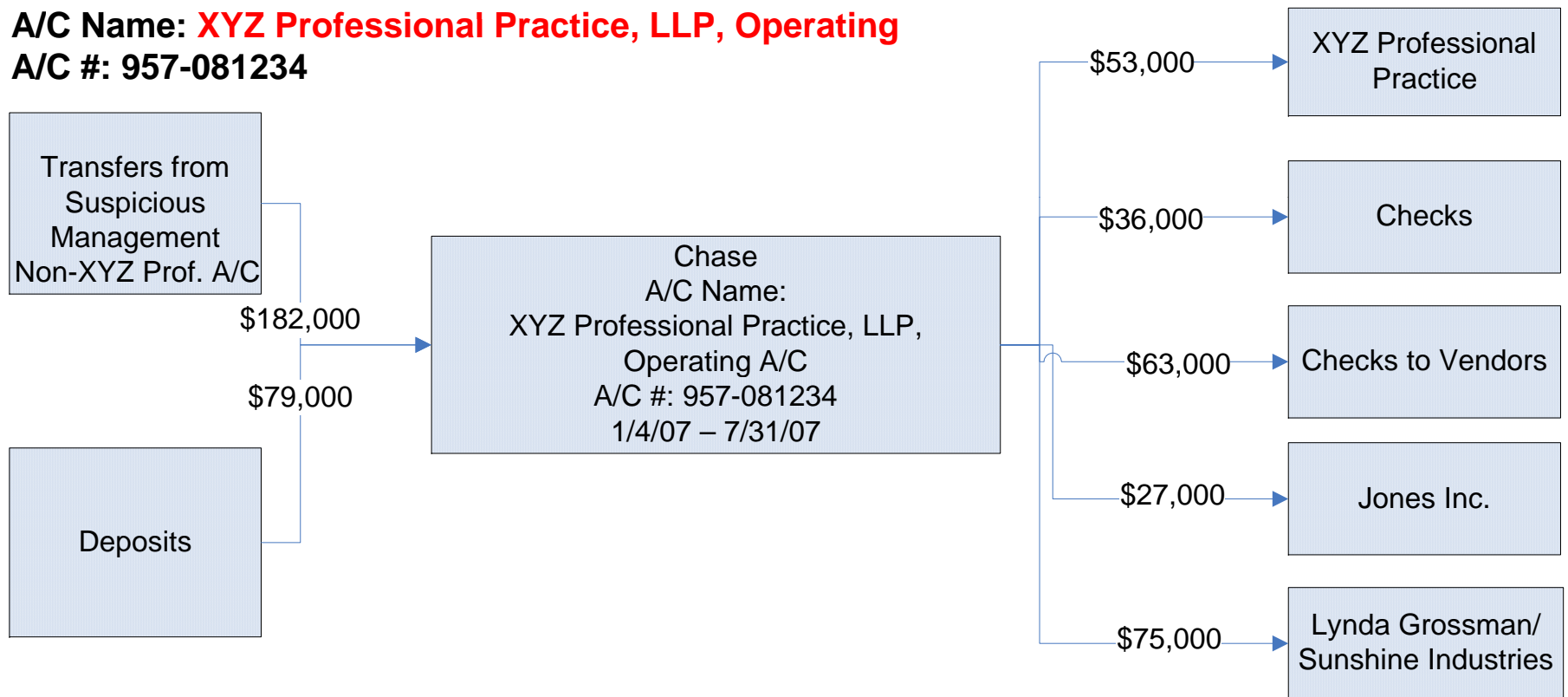
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

Chase

A/C Name: **XYZ Professional Practice, LLP, Operating**

A/C #: 957-081234



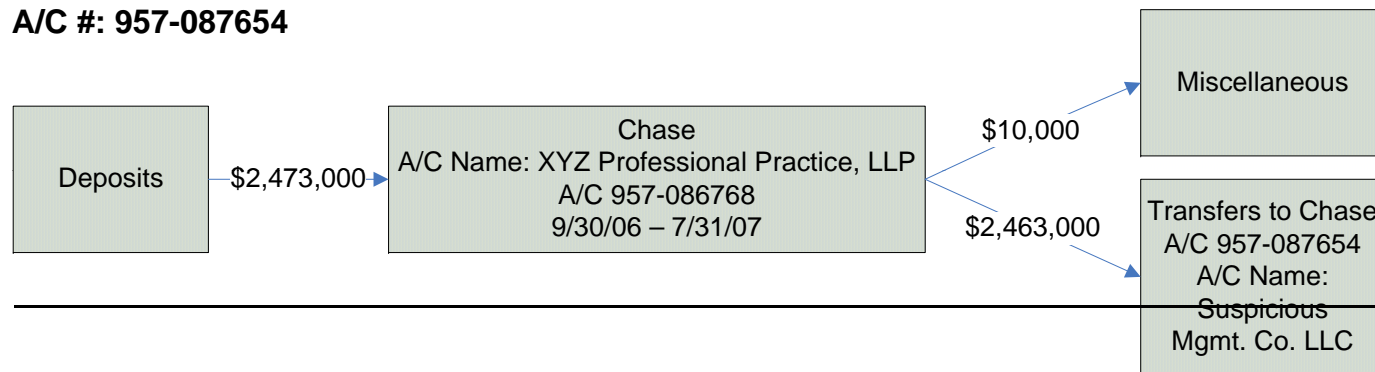
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

Chase

A/C Name: **XYZ Professional Practice, LLP**

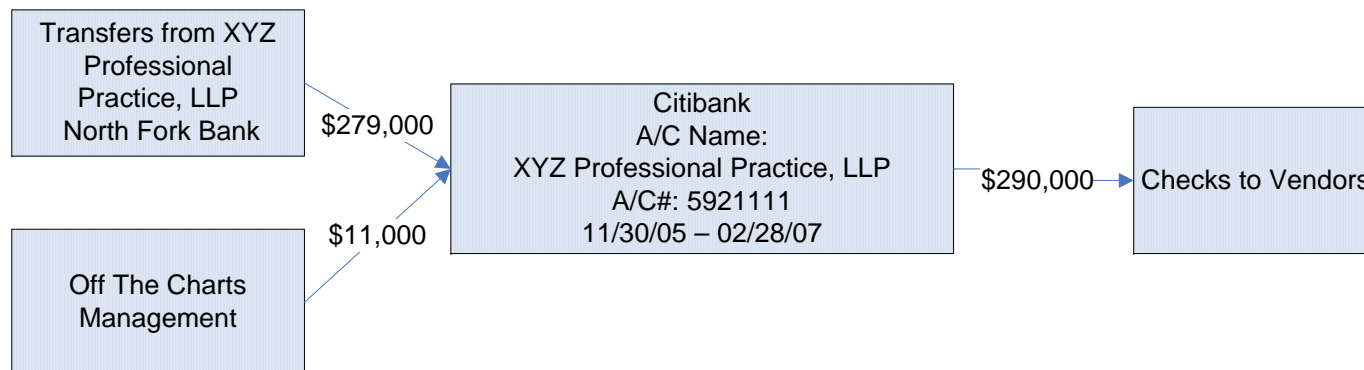
A/C #: 957-087654



Citibank

A/C Name: **XYZ Professional Practice, LLP**

A/C#: 592111



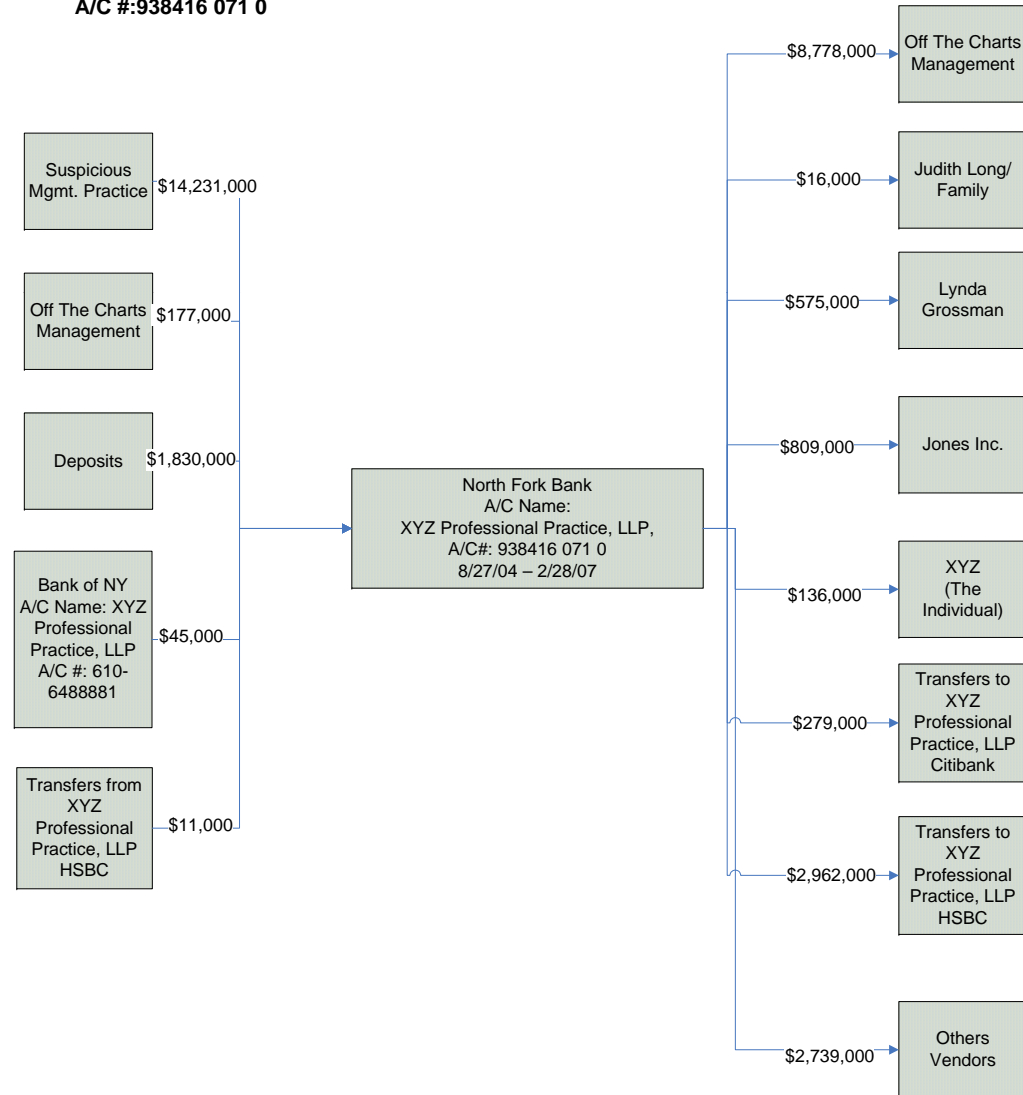
XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts

North Fork Bank

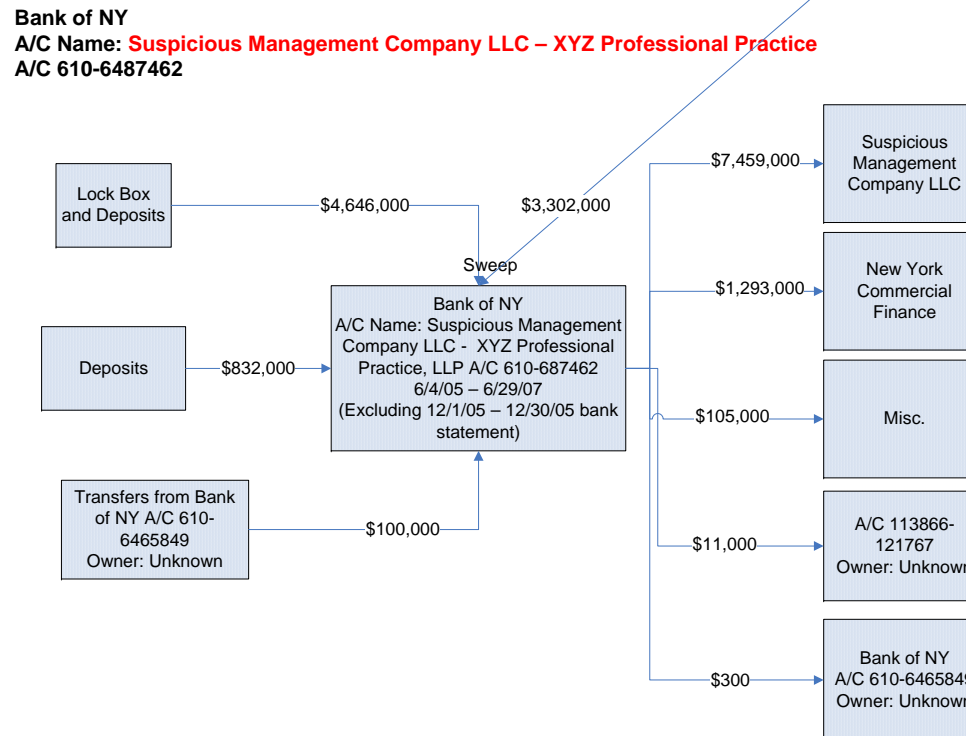
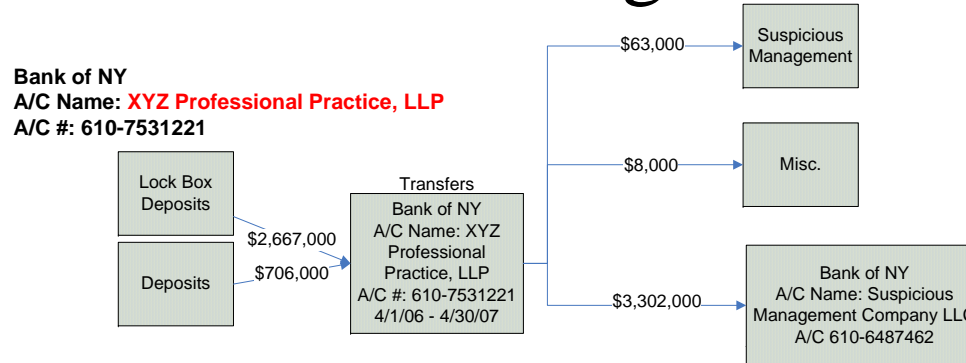
A/C Name: **XYZ Professional Practice, LLP**

A/C #:938416 071 0



XYZ Professional Practice, LLP

Flow Chart of Funds Through Bank Accounts



Report Card on Documents Not Provided to Plaintiffs
Evaluation of Selected Exhibits for Relevancy

Jones v. Taub

Level of Relevance Legends: *Level 1- Not Relevant
*Level 2- Relevant - But Provided to Plaintiffs' through other means
*Level 3- Relevant - Not provided to Plaintiffs' through other means

Exhibit No.	Document and Description	Conclusions	Level of Relevance*		
			1	2	3
		Scoring Summary	13	23	0
83	<u>Document: Confidentially Agreement between Jones and ABC Corp.</u> <ul style="list-style-type: none"> • This is a confidentiality agreement between a consultant and client. • There is no mention of the plaintiffs either explicitly or implicitly. • The main theme of the confidentiality agreement states that the consultant shall not disclose issues to "third parties" without the consent of the client. 	This confidentiality agreement does not mention the value or potential value of ABC Corp. and is therefore of no relevance.	X		
84	<u>Document: Email</u> From: John Brown To: Louis Taub Cc: Bernard Barrow Dated: March 26, 2004 Subject: ABC Corp. Engagement Letter <ul style="list-style-type: none"> • Brown wishes to discuss several items with Taub including the engagement letter, questions about the ABC Corp. shareholders agreement, questions on the financial statements and to update Taub on the discussions with the Investment Bankers. • Brown states that the "preliminary valuation serves as the basis for their proposal to market the Company." • Brown believes that the best way to have ABC Corp. valued is through the Investment Bankers. • Discusses drawing up confidentiality agreements for the Investment Bankers. • Discusses the risks involved with sharing certain financial information with Robert Moss. Brown believes that Moss could see the favorable margins and try to start a similar division within Robert Moss Inc. 	The contents of the engagement letter along with the decision to engage the Investment Bankers and the decision when to share certain information with Moss has no bearing either directly or indirectly on the value or potential value of ABC Corp.	X		

EXHIBIT 1: THE VALUATION REPORT CARD®
"Tendency" Legend: VL – Very Low L – Low N – Neutral H – High VH – Very High

Pivotal Element	Explanation of Focus and Inquiry	Tendency				
		VL	L	N	H	VH
	<i>Mr. Expert had applied the correct standard, his/her result would have been much higher.)</i>					
<i>Facts and Circumstances</i>	Each report should contain a succinct description of the "facts and circumstances" (e.g. the husband's significant compensation from the business has not been adjusted, significant deferred income taxes). to make sure that an important issue was not overlooked. <i>(Mr. Expert failed to properly adjust for husband's very high compensation from the business when compared to its industry and peer groups. Had Mr. Expert correctly adjusted this item, the result would have been higher.)</i>		X			
<i>Background of the Company</i>	The opposing expert should demonstrate a keen grasp of the nature of the business and its industry, whether it is a nursery, a dog groomer, a wine wholesaler, or any other business. Lack of such understanding can easily lead to a distorted conclusion. This should also include a solid grasp of the people involved in the business and a site visit in most cases. <i>(Mr. Expert failed to account for husband's status as a recognized leader in the industry, who is often asked to speak at national conferences, and routinely obtains contracts outside the bidding process. Also, Mr. Expert failed to address the company's highly trained management team that would enable husband to easily sell the operation without requiring his continual involvement. Had Mr. Expert correctly accounted for this item, the result would have been much higher.)</i>	X				
<i>Financial Analysis</i>	This element should be an objective and detailed financial analysis of the company's history, and it should demonstrate the opposing expert's capability in assessing financial trends and patterns. <i>(Mr. Expert indicated that there was "no need" to conduct a financial analysis</i>	X				

FINANCIAL STATEMENT ANALYSIS

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FINANCIAL STATEMENT ANALYSIS

- Indirect Methods
 - Pattern Recognition
 - “Eyeball”
 - Expectations Based Analysis
- Direct Methods
 - Detailed Scrutiny
 - “Top-Down” Approach

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FINANCIAL STATEMENT ANALYSIS Indirect Methods

- Exploratory in Nature
- Identify Areas Requiring Further Examination
- Lack Specificity to Support Conclusions

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FINANCIAL STATEMENT ANALYSIS

Indirect Methods

Expectations Based Analysis

- Financial records should be consistent with general understanding of the company and its operations
- Ex. Would expect to have audited financial statements for publicly traded companies

See Expectations Based Analysis Example

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FINANCIAL STATEMENT ANALYSIS

Direct Methods

- Horizontal Analysis
- Vertical Analysis
- Trending Analysis
- Common-Sizing
- Ratio Analysis
- Statistical Analysis
- Benford's Law
- Other

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RATIO ANALYSIS

- Liquidity – Indicate the Company's ability to meet its current obligations
- Coverage – Indicate the degree to which a company has "covered" its leverage requirements
- Leverage – Indicate the degree to which a company's capital structure is financed with debt
- Operating – Measure the efficiency at which a company is utilizing its assets
- Working Capital – Measure the efficiency at which a company manages its working capital

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Ratio Analysis

- Class Exercise
- Cash Flow Ratios
- Sample Financial Analysis

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TOBIN'S Q

- Compares the market value of a firm to the replacement cost of its assets
- Higher Tobin's Q = higher expectation of firm's growth
- Can be influenced by market hype and intangible assets
- Approximation of Tobin's Q¹ is as follows:

$$\frac{\text{Equity Market Value} + \text{PS}^* + \text{Debt}^{**}}{\text{Total Assets}}$$

*PS = liquidated value of preferred stock

**Debt = LTD + Current Liabilities – Current Assets




¹Chung and Pruitt, "A Simple Approximation of Tobin's Q," *Financial Management*, vol. 23, no. 3, Autumn 1994.

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Financial Ratios – Overall Assessment

	Median Qtl											1998-2001					
	RMA Curr Yr	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007			Better	Worse		
LIQUIDITY RATIOS:																	
Current Ratio	1.2	1.05	0.93	1.00	0.97	0.9	1.1	1.1	0.9	0.9	1.0						
Quick (Acid-Test) Ratio	0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.3	0.3						
Revenue/Accounts Receivable	78.3	83.0	124.0	93.1	89.5	93.8	83.9	67.5	80.3	92.6	61.4						
Average Collection Period	4.7	4.4	2.9	3.9	4.1	3.9	4.4	5.4	4.5	3.9	5.9						
Inventory Turnover	14.6	9.2	9.6	9.7	10.5	10.0	10.0	9.6	9.0	9.3	9.3						
Days' Inventory	25.0	39.7	38.0	37.6	34.8	36.5	36.5	38.0	40.6	39.2	39.2						
COGS/Payables	19.1	18.2	18.2	16.9	21.6	18.7	17.8	20.8	16.9	16.2	15.1						
Days' Payables	19.1	20.1	20.1	21.6	16.9	19.5	20.5	17.5	21.6	22.5	24.2						
Revenue/Working Capital	81.0	161.5	-103.5	9046.8	-311.9	-124.0	65.8	160.2	-64.8	-59.3	309.3						
COVERAGE RATIOS:																	
Times Interest Earned	3.9	1.2	1.4	1.2	1.4	2.5	2.6	1.9	2.1	1.3	1.1						
NI+Non-Cash Expenditures / Current L.T. Debt	4.8	0.6	0.6	1.0	0.8	1.0	1.6	1.8	1.5	1.3	1.5						
LEVERAGE RATIOS:																	
Fixed Assets/Tangible Worth	1.7	4.0	4.2	5.5	5.1	3.6	4.4	5.1	6.2	N/A	N/A						
Debt-to-Tangible Net Worth	2.1	5.2	5.6	7.4	6.9	4.7	7.2	8.8	10.4	N/A	N/A						
Debt-to-Equity	2.1	4.1	4.2	4.6	4.5	3.4	3.9	3.7	3.6	N/A	N/A						
OPERATING RATIOS:																	
Gross Profit Margin	26.00%	28.9%	28.8%	29.2%	29.6%	31.0%	30.6%	31.7%	32.8%	32.5%	31.5%						
EBT/Tangible Worth	22.60%	9.2%	15.2%	12.6%	16.7%	42.3%	53.5%	55.3%	80.6%	N/A	N/A						
EBT/Total Assets	6.30%	1.4%	2.2%	1.4%	2.0%	7.0%	5.9%	4.9%	N/A	2.1%	0.6%						
Fixed Asset Turnover	9.1	3.5	3.7	3.6	3.8	4.1	4.9	5.1	4.7	5.1	5.7						
Total Asset Turnover	4.5	2.2	2.2	2.2	2.3	2.4	2.4	2.3	2.2	2.3	2.5						
EXPENSE TO REVENUE RATIOS:																	
% Depn., Deprtn., Amort./Revenue	1.50%	1.9%	1.9%	1.8%	1.9%	1.7%	1.7%	1.5%	1.6%	1.7%	1.5%						
% Officer's &/or Owner's Compensation/Revenue	0.00%	0.3%	0.3%	0.3%	0.3%	0.3%	0.2%	0.2%	0.2%	0.1%	0.0%						
Cash Flow Ratios:																	
Operating Cash Flows (OCF)		N/A	0.4	0.2	0.3	0.3	(0.1)	0.3	0.3	0.2	0.3						
Cash Interest Coverage		N/A	3.2	1.8	2.4	3.6	1.3	2.6	3.3	2.1	2.2						
Cash Flow to Total Debt		N/A	0.2	0.1	0.1	0.2	(0.0)	0.1	0.2	0.1	0.1						
Risk Management Association, Philadelphia, PA 2003																	
RMA SIC Code is 4451, Supermarkets and Other Grocery (except Convenience) Stores																	
<div><div></div><div>Should increase</div><div>Should decrease</div><div>Should remain same</div></div>																	
ANNUAL STATEMENT STUDIES (TM) RMA THE RISK MANAGEMENT ASSOCIATION (TM) and the RMA Logo are trademarks of the Risk Management Association. RMA owns the copyright in the ANNUAL STATEMENT STUDIES (TM) data. The data is used under license from RMA.																	
<div><div>Better</div><div>8</div><div>33.3%</div><div>6</div><div>25.0%</div><div>Worse</div><div>9</div><div>37.5%</div><div>17</div><div>70.8%</div><div>Same</div><div>7</div><div>29.2%</div><div>1</div><div>4.2%</div><div>24</div><div>100.0%</div><div>24</div><div>100.0%</div></div>																	

Risk Management Association, Philadelphia, PA 2003
RMA SIC Code is 4451, Supermarkets and Other Grocery (except Convenience) Stores

 Should increase
 Should decrease
 Should remain same

Better	8	33.3%	6	25.0%
Worse	9	37.5%	17	70.8%
Same	7	29.2%	1	4.2%
	24	100.0%	24	100.0%

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Preliminary Analysis – “Surprises”

- Shareholders’ Equity section
 - Reconciliation yielded discrepancies
- Quarter-to Prior Year Quarter Changes
- Year-to-Year Changes

XYZ Historical Balance Sheets

Source: Audited Financial Statements

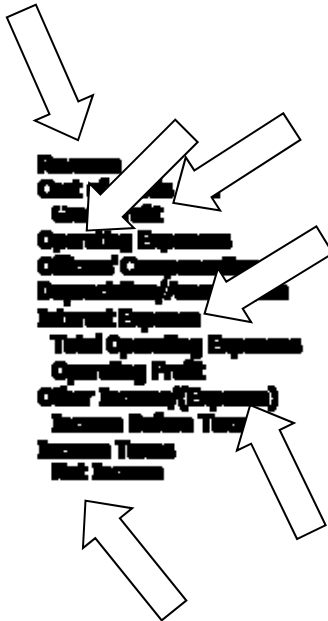
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ASSETS										
Cash	5,891,851	9,895,399	7,398,829	9,899,141	18,267,837	18,612,365	9,791,278	9,871,255	9,594,321	9,335,833
Accounts Receivable	2,798,882	2,112,593	3,833,713	3,333,889	3,438,594	4,886,189	5,334,836	4,881,143	4,572,918	7,772,786
Inventory	17,881,288	18,334,838	28,787,347	21,186,385	22,272,893	23,672,161	25,789,465	27,883,835	30,885,898	34,888,241
Other Current Assets	1,334,733	1,383,838	1,888,511	2,288,786	2,132,889	2,188,575	2,688,688	2,388,882	3,713,573	4,812,371
Total Current Assets	27,887,722	22,157,877	33,885,428	25,828,881	28,882,313	28,811,438	28,811,438	28,811,438	28,811,438	28,811,438
Fixed Assets	83,478,872	71,838,327	78,478,188	82,888,383	78,382,294	88,818,888	78,334,241	78,334,241	83,828,838	83,188,134
Net Intangible	4,144,277	5,828,788	8,841,334	8,274,882	8,887,782	13,182,821	18,238,188	24,838,388	28,888,473	48,333,288
Other Non-Current	8,388,424	7,822,273	9,884,333	8,448,813	8,828,838	12,787,888	25,187,882	15,722,882	18,853,888	8,822,888
Non-Operating Assets	0	0	0	0	0	7,282,388	7,282,388	7,282,388	7,282,388	0
Total Assets	185,383,888	117,875,375	128,818,517	135,835,359	134,583,389	143,583,182	155,688,898	171,522,518	185,588,282	188,582,258
LIABILITIES & EQUITY										
Accounts Payable	9,873,888	18,281,718	11,814,573	28,388,276	11,894,461	13,282,847	11,838,336	14,838,834	17,884,886	21,835,144
Short Term Notes Payable	2,888,888	5,888,888	5,588,888	4,888,888	2,888,888	3,888,888	7,088,888	18,888,888	12,288,888	13,175,888
Current Portion of LT Debt	8,888,733	11,348,838	8,721,828	9,588,823	11,787,886	8,837,737	8,228,874	8,848,385	7,791,788	5,272,384
Other Current Liabilities	8,818,883	8,877,217	8,817,876	13,133,388	15,812,187	12,885,188	16,288,172	17,138,882	18,888,881	15,418,784
Total Current Liabilities	28,588,718	34,888,885	28,854,177	38,888,813	48,712,884	38,888,813	48,288,882	58,148,881	58,588,827	58,888,222
Long Term Debt	38,387,838	38,578,833	87,882,888	88,833,421	33,387,288	78,888,238	72,388,541	73,382,777	81,318,218	83,182,838
Other Non-Current Liabilities	5,378,817	8,384,733	8,713,828	7,288,286	7,818,523	8,284,838	8,778,488	8,548,832	8,778,148	8,873,783
Non-Operating Liabilities	0	0	0	0	0	0	0	0	0	0
Total Liabilities	85,888,883	94,882,588	188,772,883	111,141,388	84,888,478	114,885,288	122,575,812	138,885,388	155,882,782	158,887,788
Total Equity	28,712,883	22,442,842	23,888,484	24,488,838	38,372,888	28,887,874	33,188,336	37,537,388	28,818,448	31,884,437
Total Liabilities & Equity	185,383,888	117,875,375	128,818,517	135,835,359	134,583,389	143,583,182	155,688,898	171,522,518	185,588,282	188,582,258

Balance Sheet Conclusions:

- Large sums into “soft” assets
- “Hard” assets declined

XYZ Historical Income Statements

Source: Audited Financial Statements



	1999	1999	2000	2001	2002	2003	2004	2005	2006	2007
Revenue	231,838,406	261,882,889	282,894,839	316,134,725	323,887,281	341,388,318	368,434,835	375,711,488	423,435,188	477,275,874
Cost of Sales	184,781,383	186,482,885	208,852,816	222,411,831	223,585,886	236,788,383	246,838,118	232,374,618	285,787,387	326,878,839
Gross Profit	46,956,913	75,399,774	74,042,023	93,722,894	100,301,395	104,600,005	121,596,716	143,336,870	137,647,801	150,396,995
Operating Expenses	52,332,327	58,776,888	66,338,848	76,886,288	78,483,788	84,387,118	82,285,288	86,832,885	112,382,318	128,835,348
Offices' Compensation	888,888	788,127	888,888	881,832	888,124	888,888	888,235	788,485	321,241	8
Depreciation/Amortization	4,436,514	4,838,288	5,237,725	5,822,788	5,482,678	5,731,128	5,516,884	6,832,832	7,818,348	7,318,448
Interest Expense	6,234,828	6,381,316	7,235,885	7,282,788	6,117,288	5,485,816	8,438,888	8,888,321	12,157,838	13,115,888
Total Operating Expenses	63,884,778	71,835,388	79,888,348	90,888,344	90,885,888	96,223,182	107,888,114	112,888,188	132,881,735	159,381,887
Operating Profit	2,814,328	3,818,288	2,888,888	3,828,888	9,288,328	8,888,788	7,488,732	18,448,778	5,375,818	21,828
Other Income/(Expense)	(1,388,328)	(1,388,885)	(1,148,388)	(814,814)	187,488	485,827	178,884	(27,316)	(1,888,816)	1,888,288
Income Before Taxes	1,426,000	2,429,403	1,740,500	2,714,074	9,475,816	9,374,615	7,667,548	18,421,462	3,487,002	1,884,136
Income Taxes	384,242	1,116,877	388,788	1,828,347	3,281,788	4,388,381	2,238,513	4,138,187	1,128,888	381,888
Net Income	1,041,758	1,312,526	1,351,712	885,727	6,194,028	4,986,234	5,429,035	14,283,275	2,358,114	1,502,248

Income Statement Conclusions:

- Solid gross profit
- Very heavy debt load
- Heavy losses in entity investments
- Heavy debt restructuring
- Heavy losses in store open/close

XYZ Historical Cash Flow Statements Source:

Audited Financial Statements

Increase/(Decrease) in Cash
Cash Provided by (Used for) Operations:
 Net Income/(Loss)
 Total Cash Provided by (Used for) Operations:
Cash Provided by (Used for) Investing Activities:
 Total Cash Provided by (Used for) Investing Activities:
Cash Provided by (Used for) Financing Activities:
 Total Cash Provided by (Used for) Financing Activities:
 Total Increase/(Decrease) in Cash
Cash Balance at Beginning of Year
Cash Balance at End of Year

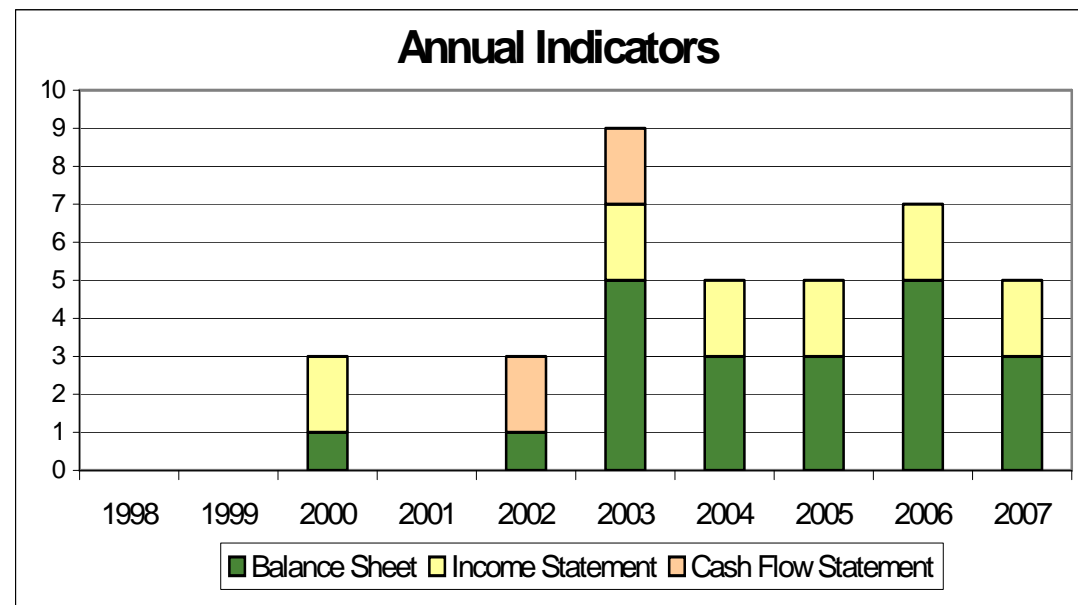
1999	2000	2001	2002	2003	2004	2005	2006	2007
1,439,666	1,254,839	1,695,469	6,174,979	4,111,999	5,420,310	6,280,273	2,756,936	702,330
12,763,518	5,371,528	9,248,889	12,427,953	-2,502,077	10,937,989	16,990,295	11,706,653	15,281,057
-12,399,436	-15,263,142	-10,062,696	-1,742,227	-1,352,425	-12,197,730	-20,451,465	-16,653,699	-17,170,674
3,040,825	8,135,899	2,473,095	-9,438,830	4,219,970	438,514	2,741,127	5,382,132	1,738,951
3,404,907	-1,755,715	1,659,288	1,246,896	365,468	-821,227	-720,043	435,086	-150,666
5,691,661	9,096,568	7,340,853	9,000,141	10,247,037	10,612,505	9,791,278	9,071,235	9,506,321
9,096,568	7,340,853	9,000,141	10,247,037	10,612,505	9,791,278	9,071,235	9,506,321	9,355,655

Cash Flow Statement Conclusions:

- Operating cash impacted 2003
- Few fixed assets 2002 & 2003
- Only financing outflow in 2002

Annual Financial Statement Indicators

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Balance Sheet			1		1	5	3	3	5	3
Income Statement			2			2	2	2	2	2
Cash Flow Statement					2	2				
Sum	0	0	3	0	3	9	5	5	7	5



Overall Scoring – 1998-2007

	<u>Grade</u>
• Balance Sheet	C-
– Intangible assets not productive	
– Inefficient use of long-term debt	
• Income Statement	B-
– Strong gross profit	
– Heavy interest expense	
– Expenses not managed	
• Cash Flow Statement	D
– Inefficient capital structure	
• Overall Financial Condition	C-
– Long-term to “fix”	

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FINANCIAL STATEMENT MANIPULATION

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Cash Realization Ratio (**CRO**)

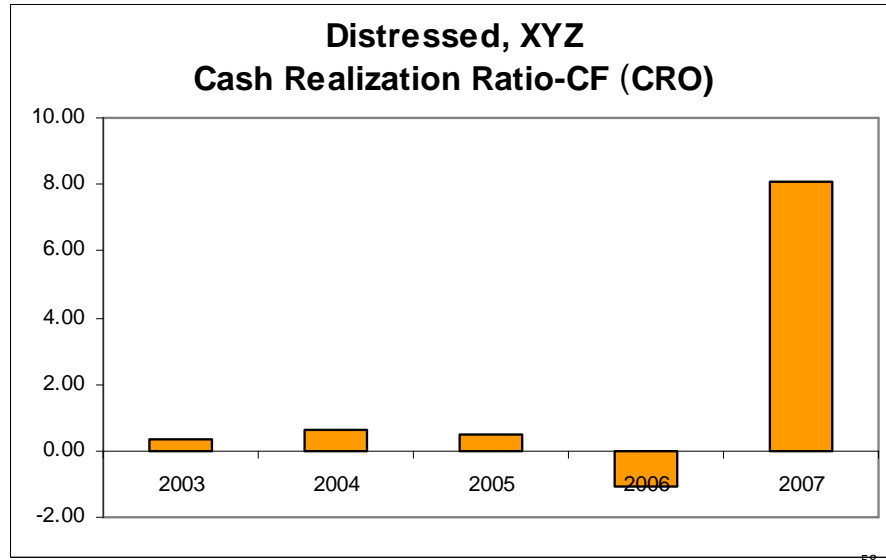
Operating Cash / Net Income.

- Measures operating cash flow to net income
- Should be relatively stable and likely less than 1.0

57

Cash Realization Ratio (CRO)

Operating Cash / Net Income.



Asset Quality Index (AQI)

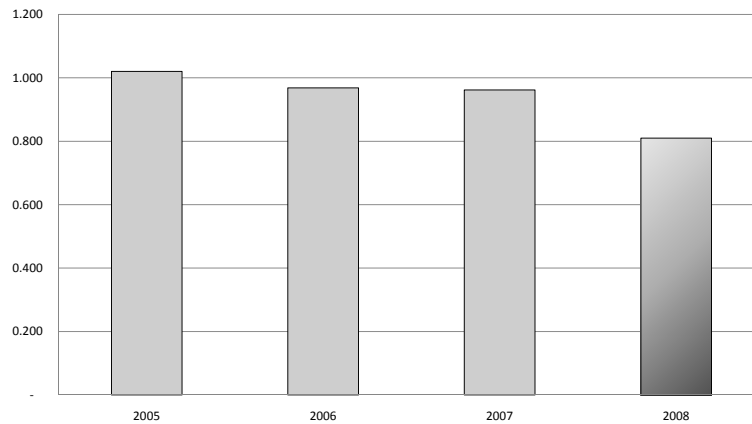
$$\frac{1 - ((\text{Current Assets}_t + \text{PPE}_t) / \text{Total Assets}_t)}{1 - ((\text{Current Assets}_{t-1} + \text{PPE}_{t-1}) / \text{Total Assets}_{t-1})}$$

- AQI measures non-current assets, other than PPE, to total assets
- AQI greater than 1.0
 - Increase in cost deferral?
 - Increase in intangible assets from acquisitions?

Asset Quality Index (AQI)

$$\frac{1 - ((\text{Current Assets}_t + \text{PPE}_t) / \text{Total Assets}_t)}{1 - ((\text{Current Assets}_{t-1} + \text{PPE}_{t-1}) / \text{Total Assets}_{t-1})}$$

AQI



60

Depreciation Index (DI)

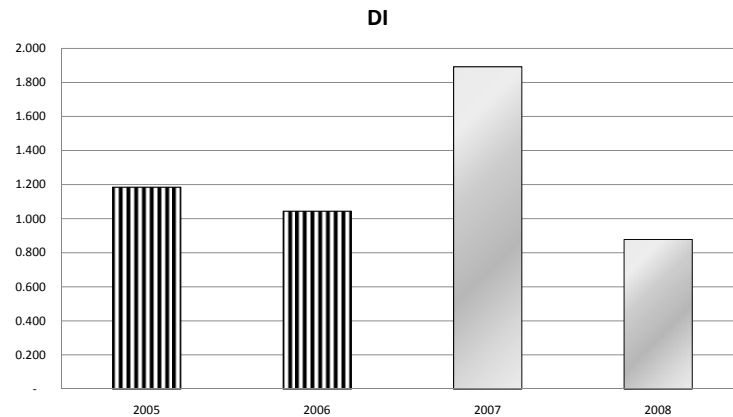
$$\frac{\text{Depreciation}_{t-1} / (\text{Depreciation}_{t-1} + \text{Net PPE}_{t-1})}{\text{Depreciation}_t / (\text{Depreciation}_t + \text{Net PPE}_t)}$$

- Measures rate of depreciation in prior year to rate of depreciation in current year
- Greater than 1.0
 - Depreciation rate slowed
 - Change in estimated useful lives or methods

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Depreciation Index (DI)

$$\frac{\text{Depreciation}_{t-1} / (\text{Depreciation}_{t-1} + \text{Net PPE}_{t-1})}{\text{Depreciation}_t / (\text{Depreciation}_t + \text{Net PPE}_t)}$$



62

Days Sales in Receivables Index (DSRI)

$$(\text{Receivables}_t / \text{Sales}_t) / (\text{Receivables}_{t-1} / \text{Sales}_{t-1})$$

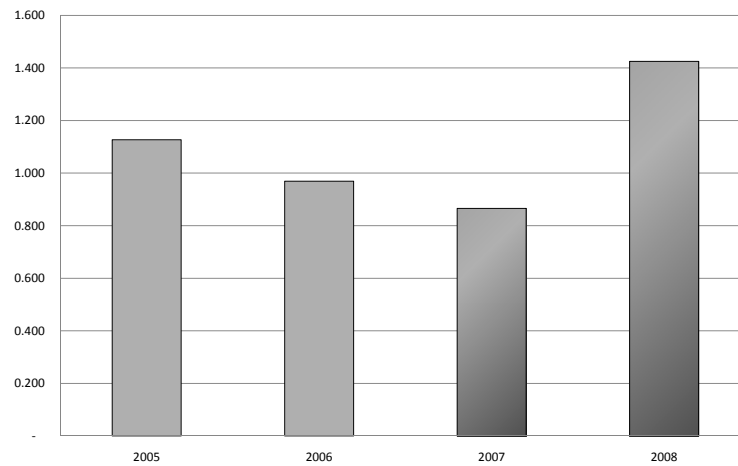
- Measures days sales in receivables for current year v. prior year
- Should remain relatively stable, hence approx 1.0

63

Days Sales in Receivables Index (DSRI)

$$(\text{Receivables}_t / \text{Sales}_t) / (\text{Receivables}_{t-1} / \text{Sales}_{t-1})$$

DSRI



64

Sales Growth Index (SGI)

$$\text{Sales}_t / \text{Sales}_{t-1}$$

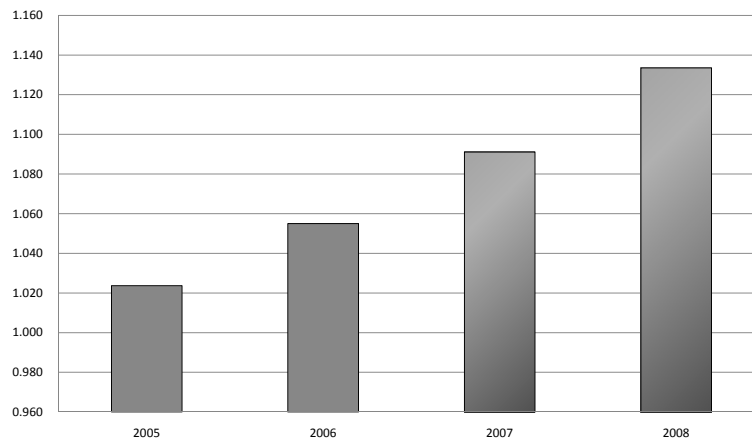
- Compares current year sales to prior year sales
- Significant variations could indicate manipulation

65

Sales Growth Index (SGI)

$$\text{Sales}_t / \text{Sales}_{t-1}$$

SGI



66

SGA Expenses Index (SGAEI)

$$\frac{\text{SGAE}_t / \text{Sales}_t}{\text{SGAE}_{t-1} / \text{Sales}_{t-1}}$$

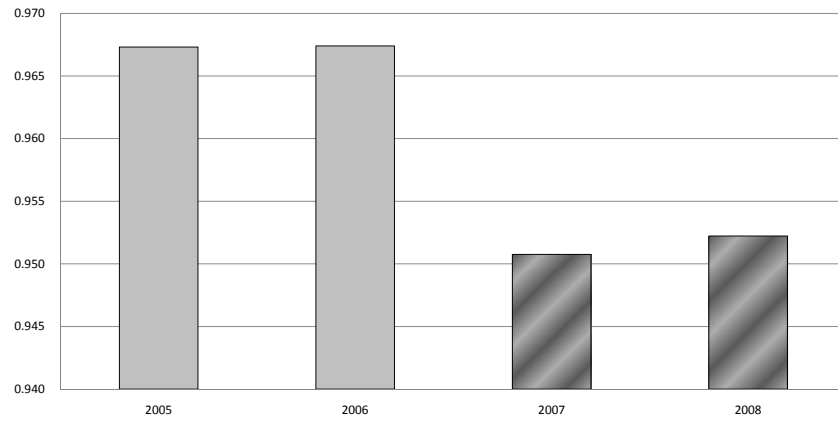
- Compares ratio of selling and general administrative expenses to sales for current year v. prior year
- Should remain relatively stable, 1.0

67

SGA Expenses Index (SGAEI)

$$\frac{SGAE_t / Sales_t}{SGAE_{t-1} / Sales_{t-1}}$$

SGAIE



Earnings Manipulation Tests - Annual

- Asset Quality Index
- Total Accruals to Total Assets Index
- Days' Sales in Receivables Index
- Inventory Index
- Sales Growth Index
- Gross Margin Index

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Earnings Manipulation Tests - Quarter

- Comparison of Revenue & Gross Margin
- Asset Quality Index
- Total Accruals to Total Assets Index
- Days' Sales in Receivables Index
- Inventory Index
- Sales Growth Index
- Gross Margin Index

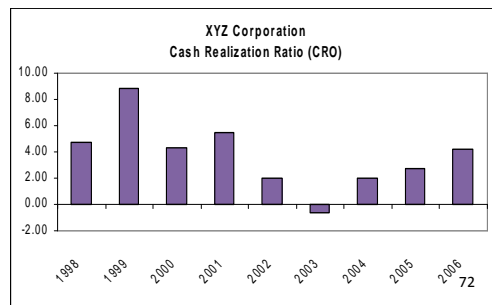
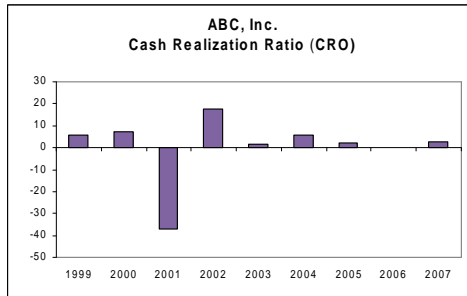
70

EARNINGS MANIPULATION

- Earnings Manipulation Exercises
 - AQI
 - TATA
 - SGI
 - Inventory Index
 - MGI

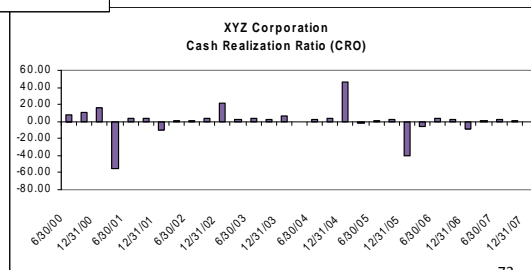
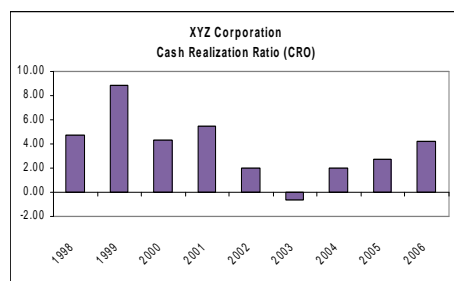
71

Good Co. or Bad Co.? - CRO



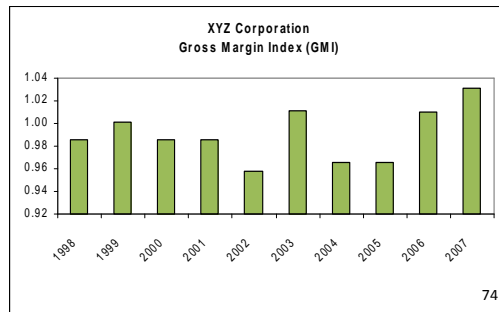
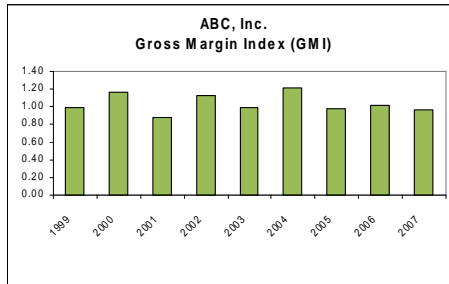
72

XYZ Quarterly

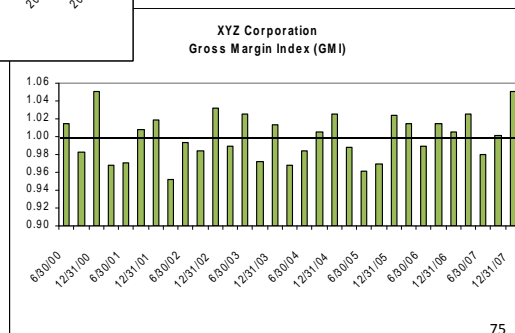
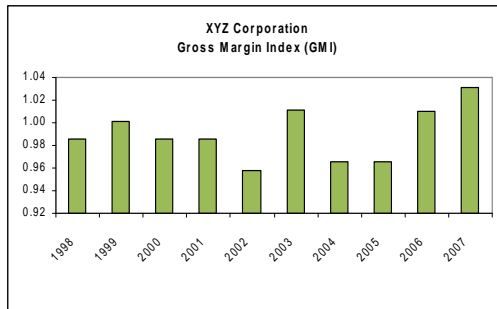


73

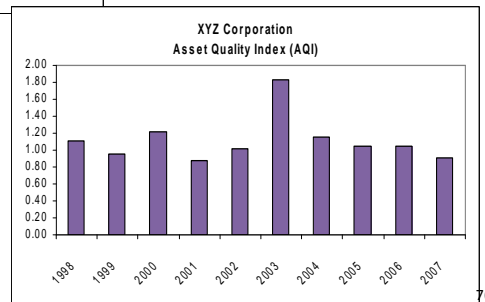
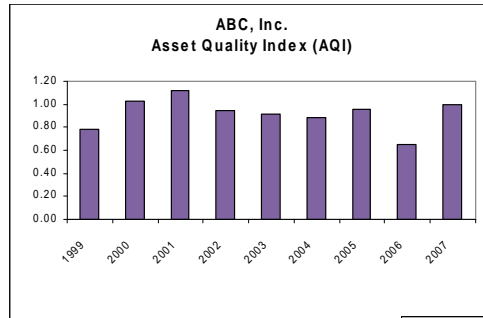
Good Co. or Bad Co.? - GMI



XYZ Quarterly

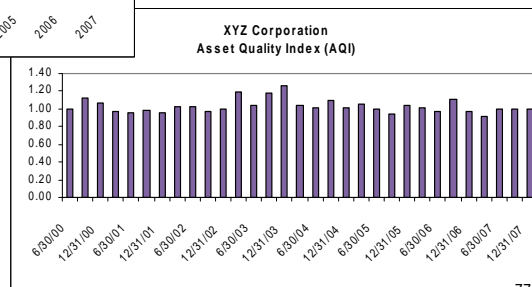
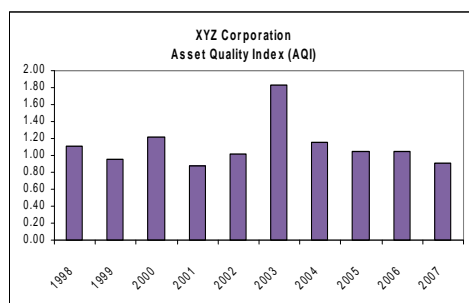


Good Co. or Bad Co.? - AQI



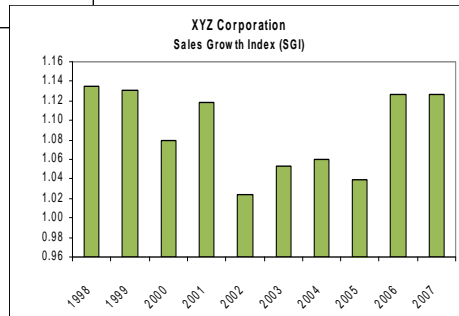
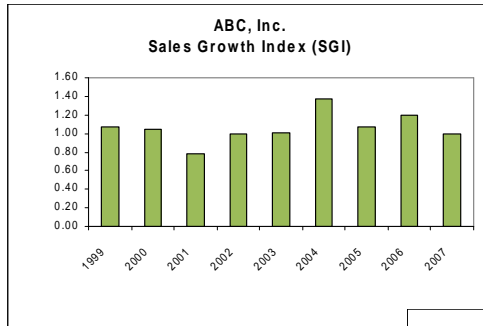
76

XYZ Quarterly



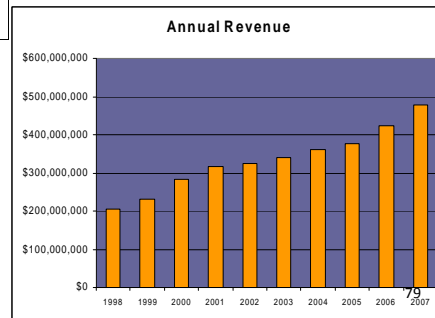
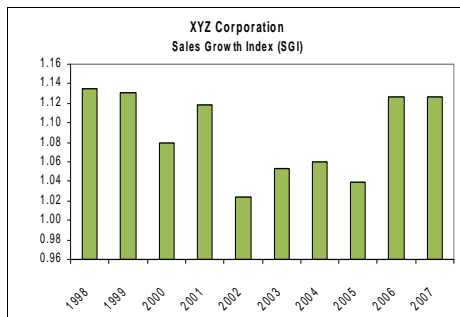
77

Good Co. or Bad Co.? - SGI



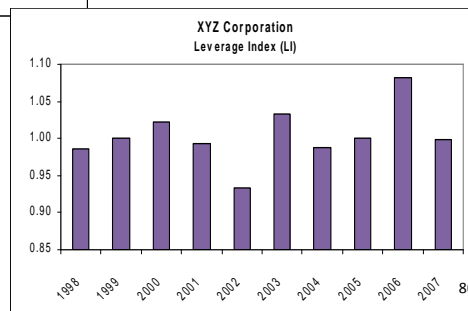
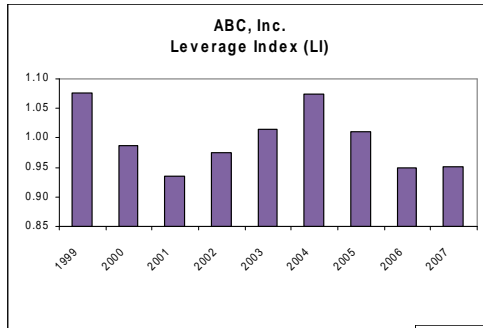
78

XYZ Quarterly



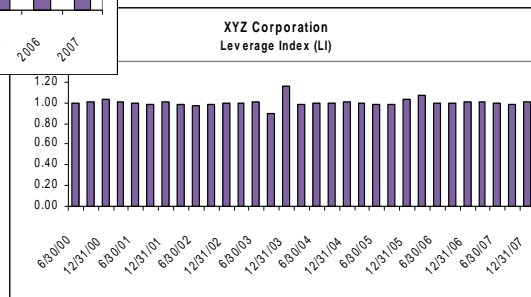
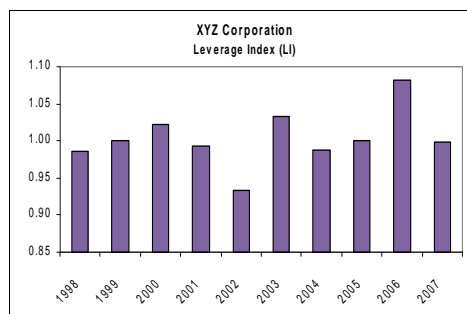
79

Good Co. or Bad Co.? - LI



80

XYZ Quarterly



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Entry-Level “Concept”

- ***WPN***
 - ***Words***
 - ***P***ictures
 - ***N***umbers

Key Indicators...

- ❑ **\$102,034,100** The total cash disbursed by SUSPECT-X for operating expenses, furniture and equipment and ownership interests during its existence.
- ❑ **\$91,154,854** The total cash that investors and lenders tendered to SUSPECT-X during its existence. Note that SUSPECT-X never produced a positive operating cash flow during its existence, thus operating cash does not apply.
- ❑ **\$165,475** The “book” balance of SUSPECT-X’s various bank accounts as of the date of the financial statements, January 24, 2002.
- ❑ **\$15,300** The total amount paid and categorized by SUSPECT-X as Investor Relations expense during its existence.
- ❑ **11,000** The estimated number of inter- and intrabank transfers among the various SUSPECT-X bank accounts.
- ❑ **5,248** The estimated number of individual investors identified as placing funds with SUSPECT-X during its existence. The total reflects 5,069 SUSPECT-X investors, 54 Znetix investors and 125 Cascade investors.
- ❑ **\$3,910** The amount of interest earned by SUSPECT-X on the \$102,034,100 that passed through management’s hands.
- ❑ **130** The estimated number of automobiles, boats, other watercraft, trucks, motorcycles, trailers and a fire truck purchased by SUSPECT-X during its existence.
- ❑ **23** The number of entities formed during the existence of SUSPECT-X, including “C” corporations, LLCs, sole proprietorships, PLLCs, etc.
- ❑ **6** The number of years of SUSPECT-X’s existence, i.e. beginning in 1995 through the Report date.
- ❑ **5** The number of people named in the original TRO.
- ❑ **2** The number of foreign countries where SUSPECT-X had an entity and still holds one or more bank accounts, i.e. Nevis and the Bahamas.
- ❑ **0** The number of income tax returns filed by SUSPECT-X management for its 23 entities throughout its 6 years of existence.

Indictment Matrix

SUSPECT Fraud Analysis May 1, 2006												Possible Counts								
										RCW 9A.56.320		RCW 9.35.020		RCW 9A.83.020						
DATE	CHECK #	Original Payee Original Classification / Altered Classification	Carbon	Altered Payee	Check Amount		Overstated	\$ Thresholds		Allegation	Financial Fraud	Forgery	Identity Theft	Money Laundering	Alteration Description					
					Altered	Original		> \$250.00	> \$1,500.00						Changed Payee Amount Verbiage For	Description				
Checks from DENTAL CLINIC, P.C.																				
01.18.2003	6021	Airgas	VOID	MS SUBJECT	\$ 850.00	\$ 850.00		\$ 850.00		X	X	X		X	Y	Y	Y	Forgery		
05.23.2003	6335	Party	Dental Supplies/Reimbursement xmas gifts staff	VOID	MS SUBJECT	850.00	850.00	850.00		X	X	X		X	Y	Y	Y	Forgery		
06.09.2003	6374	Party Florist	None listed/Reimbursement office supply, stamps, Costco	VOID	MS SUBJECT	900.00	900.00	900.00		X		X		X	Y	Y	Y	Forgery		
06.24.2003	6404	The People	None listed/ Company Florist - food, etc	VOID	MS SUBJECT	1,295.50	1,295.50	1,295.50		X		X		X	Y	Y	Y	Forgery		
07.08.2003	6428	Centerpulse	None Listed/ Health Ins Reimbursement	VOID	MS SUBJECT	1,500.00	1,500.00	1,500.00		X		X		X	Y	Y	Y	Forgery		
08.20.2003	6558	Osteohealth	None listed/ Reimb - office equipment	VOID	MS SUBJECT	850.00	850.00	850.00		X		X		X	Y	Y	Y	Forgery		
09.03.2003	6575	CFCU	None listed/ Reimb-office supplies	CFCU	MS SUBJECT	4,500.00	1,500.00	3,000.00	4,500.00	X	X			X	Y	Y	Y	Altered post-signature		
09.18.2003	6630	Centerpulse	Visa Print/ Reimb - IRA 2002	VOID	MS SUBJECT	1,850.00			1,850.00	X		X		X	Y	Y	Y	Forgery		
11.02.2003	6750	Airgas	None Listed/ Health Ins Reimbursement	VOID	MS SUBJECT	950.00	53.17	896.83	950.00	X	X			X	Y	Y	Y	Altered post-signature		
11.18.2003	6799	Osteomed	none listed/reimb Staples	VOID	MS SUBJECT	950.00	1,440.00	950.00		X		X		X	Y	Y	Y	Forgery		
12.22.2003	6878	Phone Supply Company	None listed/ Reimb- Xmas Cert	VOID	MS SUBJECT	960.00		960.00	960.00	X	X		X	X	Y	Y	Y	Forgery		
01.14.2004	6941	USAA Life Ins.	None listed/Reimb-xmas food	VOID	MS SUBJECT	1,250.00	1,250.00	1,250.00		X	X		X	X	Y	Y	Y	Forgery		
01.22.2004	6954	Florist	Dental Supply/Reimb-Staples & Costco	VOID	MS SUBJECT	975.00	975.00	975.00		X	X	X	X	X	Y	Y	Y	Forgery		
02.06.2004	6986	Regence BCBG of OR	Reimb-Costco	VOID	MS SUBJECT	1,500.00	1,500.00		1,500.00	X	X	X		X	Y	Y	Y	Forgery		
02.27.2004	7058	Travel Agency	Nob Hill Travel	MS SUBJECT	2,000.00	2,000.00		2,000.00		X	x	X		X	Y	Y	Y	Forgery/Altered post-signature		
03.10.2004	7083	Other Dental Clinic	Meet w/ Dr./Reimb for tickets	VOID	MS SUBJECT	2,000.00	2,000.00	2,000.00		X	X	X		X	Y	Y	Y	Forgery		
04.02.2004	7148	Dell Preferred Acct	Reimb-office supplies	VOID	MS SUBJECT	2,500.00	125.00	2,375.00	2,500.00	X	X	X	X	X	Y	Y	Y	Forgery		
05.06.2004	7220	Verizon Wireless	Dental Supply/Reimb-office supplies	VOID	MS SUBJECT	2,500.00	34.06	2,465.92	2,500.00	X	X	X	X	X	Y	Y	Y	Forgery		
06.06.2004	7268	Florist	Dental Supply/Reimb-office supplies	VOID	MS SUBJECT	2,500.00	650.00	1,850.00	2,500.00	X	X	X	X	X	Y	Y	Y	Forgery		
06.29.2004	7351	Osteomed	Osteomed	MS SUBJECT	2,428.08	428.08	2,000.00	2,428.08		X	X		X	X	Y	Y	Y	Altered post-signature		
07.08.2004	7394	Other Dental Clinic	Dental Supplies/ Reimb - dental society dinner, dinner & gift Dr.	VOID	MS SUBJECT	2,500.00	0.00	2,500.00	2,500.00	X		X	X	X	Y	Y	X	Forgery		
07.23.2004	7425	Dental Clinic	Reimb Clinic Supplies	VOID	MS SUBJECT	2,500.00	0.00	2,500.00	2,500.00	X	X	X	X	X	Y	Y	Y	Forgery		
08.24.2004	7528	MS SUBJECT	Reimb Costco/Staples	MS SUBJECT	MS SUBJECT	2,303.00	303.00	2,000.00	2,303.00	X	X		X	X	Y	Y	Y	Altered Post-signature		
09.24.04	7615	Blairco	Reimb clinic party, monthly storage July & August	MS SUBJECT	MS SUBJECT	2,000.00	2,000.00	2,000.00		X	X		X	X	Y	Y	Y	Altered post-signature		
09.28.2004	7618	Party	Reimb table & chairs	Party	MS SUBJECT	2,000.00	200.00	1,800.00	2,200.00	X	X		X	X	Y	Y	Y	Altered post-signature		
10.21.2004	7678	GAC	McDonald Gift Cert Clinic/ Reimb for McDonald Gift Cert Clinic	GAC	MS SUBJECT	988.53	88.53	900.00	988.53	X	X		X	X	Y	Y	Y	Altered post-signature		
11.03.2004	7748	Ms. Party	Inv #226775	VOID	MS SUBJECT	2,650.00	0.00	2,650.00	2,650.00	X	X		X	X	Y	X	Y	Altered post-signature		
11.10.2004	7761	Ferji	Reimb for clinic furniture	VOID	MS SUBJECT	1,850.00	0.00	1,850.00	1,850.00	X	X	X	X	X	Y	Y	Y	Forgery/Altered post signature		
12.06.2004	7805	Dell Preferred	Reimb - comp tables	VOID	MS SUBJECT	2,500.00	0.00	2,500.00	2,500.00	X	X	X	X	X	Y	Y	Y	Forgery/Altered post signature		
12.15.2004	7848	Costco	/ Reimb office Chairs/table	MS SUBJECT	MS SUBJECT	2,000.00	2,000.00	2,000.00		X	X		X	X	Y	Y	Y	Altered post signature		
01.10.2005	7913	Washington Mutual	/ Open house supplies	VOID	MS SUBJECT	4,000.00	0.00	4,000.00	4,000.00	X	X	X	X	X	Y	Y	Y	Forgery		
02.09.05	7955	Qwest	Voided on carbon/ Reimb comp by Visa	MS SUBJECT	MS SUBJECT	3,200.00	19.767	3,180.24	3,200.00	X		X	X	X	Y	Y	Y	Forgery		
03.11.2005	8051	Qwest Dex Media	/ Reimb office supplies	VOID	MS SUBJECT	4,000.00	174.09	3,825.91	4,000.00	X		X	X	X	Y	Y	Y	Forgery		
04.01.2005	8130	MS SUBJECT	/ Reimb Office Equip	MS SUBJECT	MS SUBJECT	2,082.99	92.99	2,000.00	2,082.99	X	X			X	Y	Y	Y	Altered post signature		
Reimb comp supplies					\$ 67,893.10		\$ 23,059.44	\$ 43,253.90												
Sub Totals - Checks																				
Transfers from DENTAL CLINIC, P.C. to MS SUBJECT Credit Card																				
01.02.2003/??		Transfer from checking to credit card: 9985899			2,000.00			2,000.00			X		X	X						
01.29.2003		Transfer from checking to credit card: 9985899			3,000.00			3,000.00			X		X	X						
td		Transfer from checking to credit card: 9985899			3,000.00			3,000.00			X		X	X						
Sub Totals - Checking Account to Credit Card					\$ 8,000.00		\$ -	\$ -												
TOTAL					\$ 75,893.10		\$ 23,059.44	\$ 43,253.90	\$ 10,819.03	\$ 65,074.07										

Law Enforcement: Indictment Matrix

										Possible Counts																
										RCW 9A.56.320		RCW 9.35.020		RCW 9A.83.020												
										\$ Thresholds		Alteration		Financial Fraud		Forgery		Identity Theft		Money Laundering		Alteration Description				
DATE	CHECK	Original Payee		Carbon	Altered Payee		Check Amount		Overstated													Changed				
	#	Original Classification / Altered Classification					Altered	Original											Payee	Amount	Verbiage	"For"	Description			
Checks from DENTAL CLINIC, P.C.																										
01.16.2003	6021	Airgas		VOID	MS SUBJECT	\$ 850.00	\$ 850.00		\$ 850.00		X	X	X			X	Y	Y	Y	Y	Forgery					
Dental Supplies/Reimbursement xmas gifts staff																										
05.23.2003	6335	Party		VOID	MS SUBJECT	850.00	850.00		850.00		X	X	X			X	Y	Y	Y	Y	Forgery					
None listed/Reimbursement office supply, stamps, costco																										
06.08.2003	6374	Party Florist		VOID	MS SUBJECT	900.00	900.00		900.00		X		X			X	Y	Y	Y	Y	Forgery					
None listed/ Company Picnic - food, etc																										
06.24.2003	6404	The People		VOID	MS SUBJECT	1,295.50	1,295.50		1,295.50		X		X			X	Y	Y	Y	Y	Forgery					
None Listed/ Health Ins Reimbursement																										
07.08.2003	6428	Centerpulse		VOID	MS SUBJECT	1,500.00	1,500.00		1,500.00		X		X			X	Y	Y	Y	Y	Forgery					
None listed/ Reimb - office equipment																										

Date – Event (Prepared by) - Bates	Documents	Implications
This introductory section contains evidence pertaining to the SUSPECT-E transaction (except where indicating otherwise). It is provided for reference since defendant has indicated that SUSPECT-A was structured and transacted similarly to the SUSPECT-E transaction. Consequently, it can be used as a benchmark.		
August 10, 2000 – Email regarding SUSPECT-A tax reorganization (SUSPECT-C) – MA1586	Contains: “... <u>The preferred interest should have a value equal to the contribution to SUSPECT-A of approximately \$12.9 million....</u> ” <i>Big CPA Firm will then opine on the value of the preferred interest and we will complete the execution of the agreement.”</i> (emphasis added)	Indicates target-driven value.
September 9, 2000 – Email (SUSPECT-C) – MA1599	Contains: “ <i>What we would like from you (sic) appraisal opinion is something to the effect that (i) the value of the assets contributed in exchange for the preferred were worth approximately \$13 million...</i> ”	Indicates target-driven value
September 11, 2000 – Hand-written notes (SUSPECT-D) – MA1610	Contains: “ <i>letter – value of pref is \$13 say this in letter.</i> ”	Indicates target-driven value
November 28, 2001 – Fax from SUSPECT-C to SUSPECT-D (SUSPECT-C) – MA544-7	Conveys Big CPA Firm Professional Services Agreement dated March 8, 2001	Backdated attempt to circumvent the CREDITOR bankruptcy filing of <u>March 9, 2001</u> .
Limited Appraisal Report	Preferred Series B Units Interest in PARENT, LLC; 12/7/01 ; CD7120-7146	\$831,000; this amount was transacted BEFORE it was calculated, above! ...Opinion of ‘ <u>fair terms</u> ’..., 11% for Preferred B.
Limited Appraisal Report	SUSPECT & Sons, Inc., as of 10/10/00, dated 12/17/01 ; CD7097-7119	\$831,000; Capitalized stream applied to NTA

Entry-Level “Concept”

- **WPN**
 - **Words**
 - ***Pictures***
 - **Numbers**

87

Pictures...



88

Is this cash “lockbox” secure?



89

[illegible]



93



LARGE VARIETY OF MERCHANDISE



Union County Live Stock Show cont



The L Street Warehouse is the first operating facility for Soldiers in a Box. It is here where the boxes are assembled and then stored until shipped to distributors. Shopping carts are filled with a variety of merchandise which is then packed into boxes and documented for the manifest.

This warehouse is 8,000 square feet with plans to expand another 12,000 square feet by summer.



Pendleton Store Items



Entry-Level “Concept”

- **WPN**
 - **Words**
 - **Pictures**
 - **Numbers**

97

Translate “data into pictures”
&
“Opinions into sound bites.”

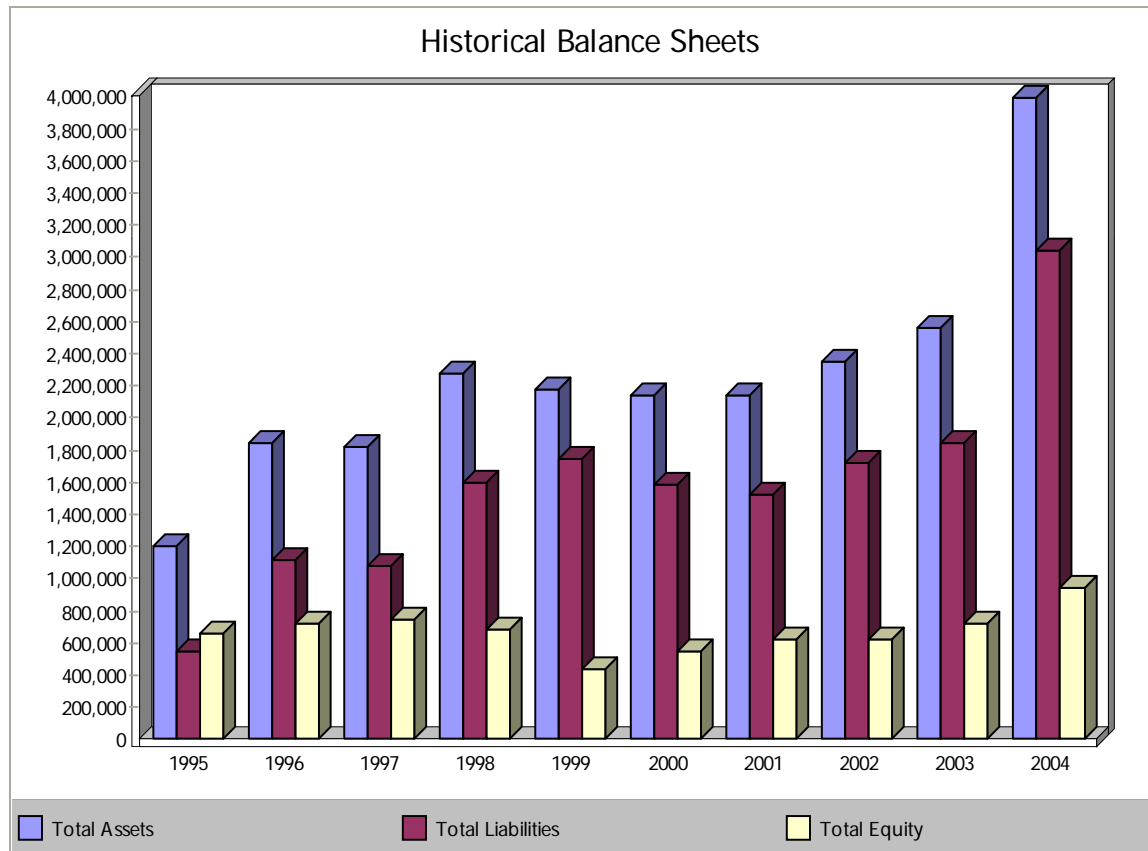
“Dominant, deliberate and declining.”

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Example Balance Sheet

	2004	2003	2002	2001	2000	1999	1998	1997	1996
ASSETS									
Cash	49,864	217,425	295,085	515,575	242,268	207,808	321,789	514,604	958,572
Accounts Receivable	3,478,610	1,784,463	1,710,553	1,260,194	1,556,638	1,540,093	1,669,359	976,507	446,189
Inventory	0	0	0	0	0	0	0	0	0
Other Current Assets	246,618	378,397	154,869	159,205	75,818	143,698	95,732	150,371	275,253
Total Current Assets	3,775,092	2,380,285	2,160,507	1,934,974	1,874,724	1,891,599	2,086,880	1,641,482	1,680,014
Fixed Assets	213,964	186,851	192,191	212,191	261,815	291,685	195,303	176,776	166,922
Net Intangible	0	0	0	0	0	0	0	0	0
Other Non-Current	0	0	0	0	0	0	0	0	0
Non-Operating Assets	0	0	0	0	0	0	0	0	0
Total Assets	<u>3,989,056</u>	<u>2,567,136</u>	<u>2,352,698</u>	<u>2,147,165</u>	<u>2,136,539</u>	<u>2,183,284</u>	<u>2,282,183</u>	<u>1,818,258</u>	<u>1,846,936</u>
LIABILITIES & EQUITY									
Accounts Payable	1,785,235	971,126	1,008,839	1,007,173	1,106,364	782,508	744,508	759,731	827,449
Short Term Notes Payable	104,863	89,298	91,811	107,602	96,619	137,265	102,474	125,321	84,146
Current Portion of LT Debt	500,000	100,000	248,205	0	500	255,315	50,000	0	0
Other Current Liabilities	579,563	688,143	369,618	390,010	327,301	475,738	668,708	146,291	144,117
Total Current Liabilities	2,969,661	1,848,567	1,718,473	1,504,785	1,530,784	1,650,826	1,565,690	1,031,343	1,055,712
Long Term Debt	69,753	1,375	7,118	22,577	60,185	95,972	28,919	43,299	65,043
Other Non-Current Liabilities	0	0	0	0	0	0	0	0	0
Non-Operating Liabilities	0	0	0	0	0	0	0	0	0
Total Liabilities	3,039,414	1,849,942	1,725,591	1,527,362	1,590,969	1,746,798	1,594,609	1,074,642	1,120,755
Total Equity	949,642	717,194	627,107	619,803	545,570	436,486	687,574	743,616	726,181
Total Liabilities & Equity	<u>3,989,056</u>	<u>2,567,136</u>	<u>2,352,698</u>	<u>2,147,165</u>	<u>2,136,539</u>	<u>2,183,284</u>	<u>2,282,183</u>	<u>1,818,258</u>	<u>1,846,936</u>

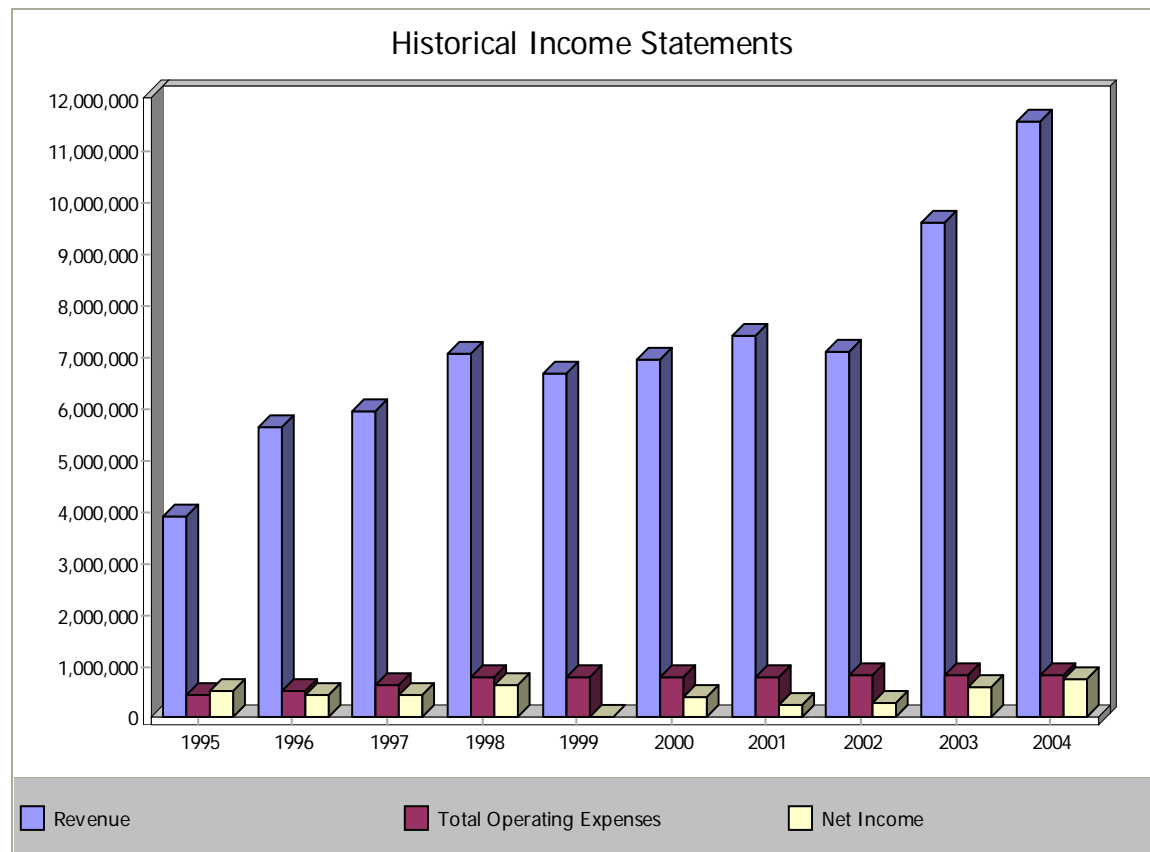
Visual Balance Sheet



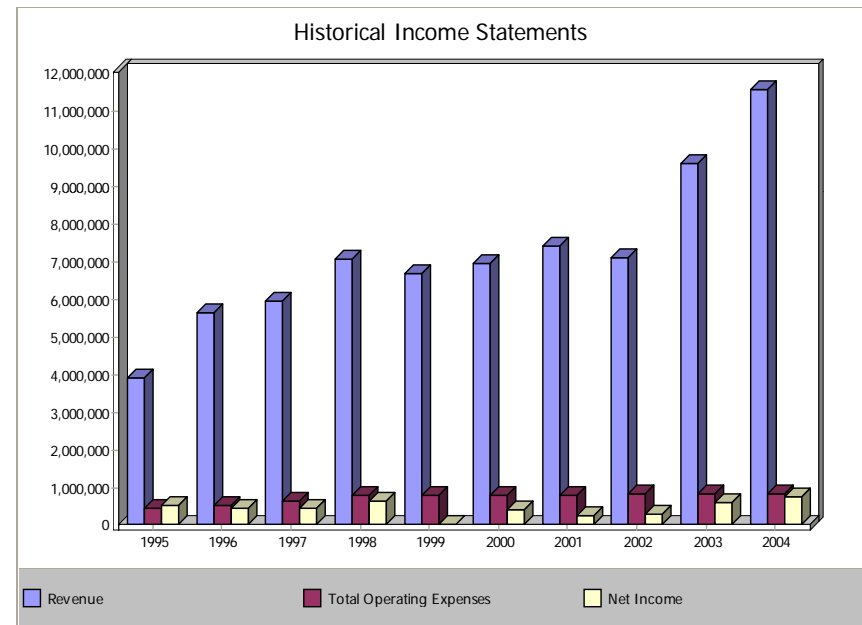
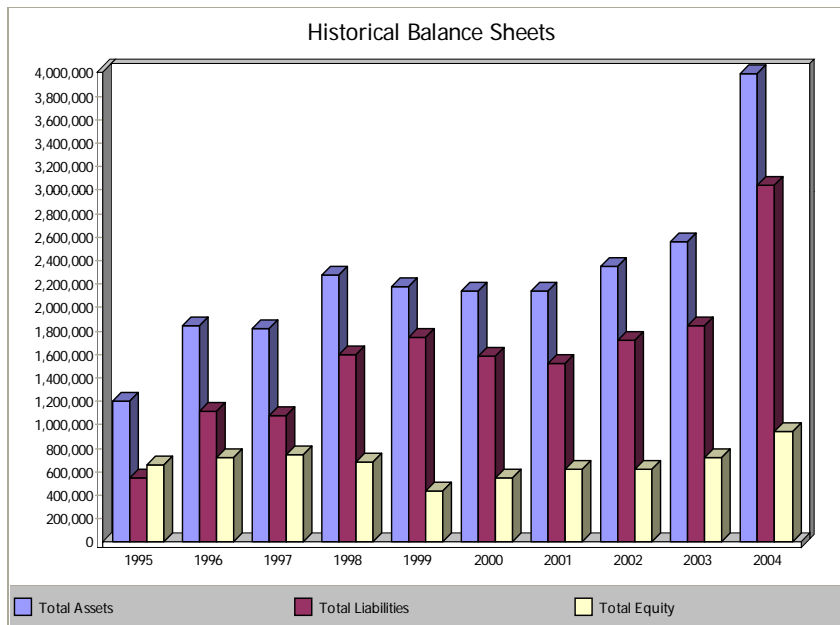
Example Income Statement

	2004	2003	2002	2001	2000	1999	1998	1997	1996
Revenue	11,555,862	9,597,248	7,115,191	7,408,080	6,952,089	6,677,074	7,062,412	5,959,745	5,649,363
Cost of Goods Sold	9,996,523	8,164,604	5,971,627	6,358,403	5,765,815	5,844,555	5,681,643	4,892,856	4,709,492
Gross Profit	1,559,339	1,432,644	1,143,564	1,049,677	1,186,274	832,519	1,380,769	1,066,889	939,871
Operating Expenses	763,038	661,411	648,862	595,597	577,534	725,716	607,463	455,604	343,862
Officers' Compensation	49,920	156,880	174,688	160,018	160,000	44,787	160,000	150,000	150,000
Depreciation/Amortization	7,302	8,585	8,298	10,740	13,326	10,895	7,286	6,045	4,272
Interest Expense	23,330	13,402	13,576	30,690	29,111	20,872	7,171	13,159	7,998
Total Operating Expenses	843,590	840,278	845,424	797,045	779,971	802,270	781,920	624,808	506,132
Operating Profit	715,749	592,366	298,140	252,632	406,303	30,249	598,849	442,081	433,739
Other Income/(Expense)	52,649	6,100	8,998	14,745	11,494	(774)	19,862	16,129	23,109
Income Before Taxes	768,398	598,466	307,138	267,377	417,797	29,475	618,711	458,210	456,848
Income Taxes	0	0	0	0	0	0	0	0	0
Net Income	768,398	598,466	307,138	267,377	417,797	29,475	618,711	458,210	456,848

Visual Income Statement



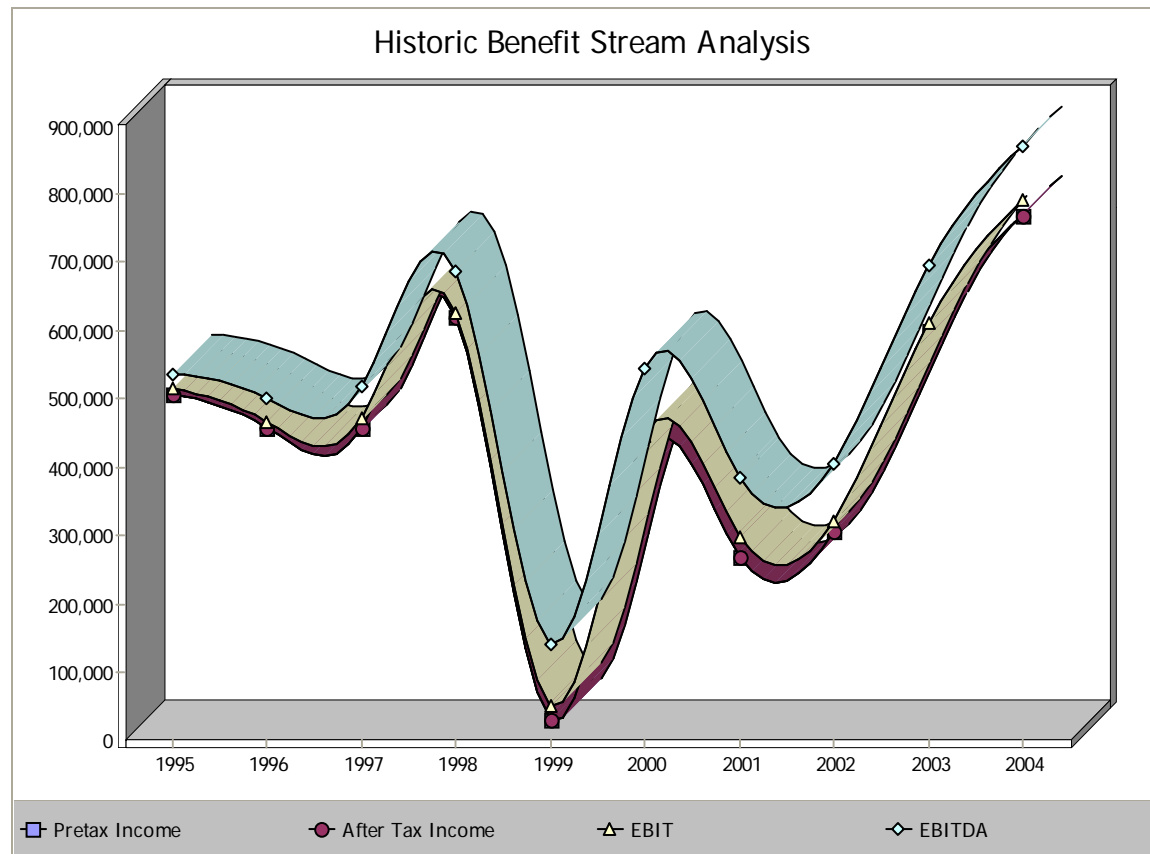
Side-by-Side Comparison



Cash Flow Statement

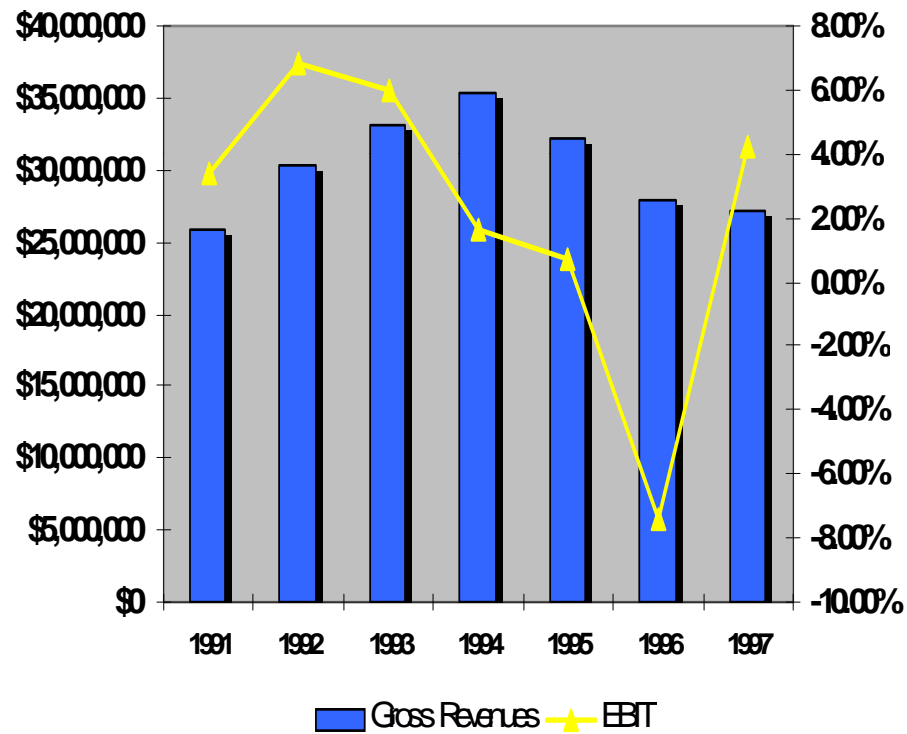
	Year Ending 9-30-04	Year Ending 9-30-03	Year Ending 9-30-02	Year Ending 9-30-01	Year Ending 9-30-00	Year Ending 9-30-99	Year Ending 9-30-98	Year Ending 9-30-97	Year Ending 9-30-96
Increase/(Decrease) in Cash									
Cash Provided by (Used for) Operations:									
Net Income/(Loss)	768,398	598,466	307,138	267,377	417,797	29,475	618,711	458,210	456,848
COGS Depreciation	69,153	74,448	75,591	77,080	85,188	79,565	53,865	41,886	32,674
Depreciation	7,302	8,585	8,298	10,740	13,326	10,895	7,286	6,045	4,272
Amortization	0	0	0	0	0	0	0	0	0
(Increase)/Decrease in Accounts Receivable	-1,694,147	-73,910	-450,359	296,444	-16,545	129,266	-692,852	-530,318	479,029
(Increase)/Decrease in Other Current Assets	131,779	-223,528	4,336	-83,387	67,880	-47,966	54,639	124,882	-113,371
(Increase)/Decrease in Other Non-Current Assets	0	0	0	0	0	0	0	0	0
Increase/(Decrease) in Current Liabilities	721,094	278,299	-34,517	-25,499	134,773	-120,179	484,347	-24,369	581,546
Increase/(Decrease) in Long-Term Liabilities	69,753	0	0	0	0	0	0	0	0
Increase/(Decrease) in Other Liabilities	0	0	0	0	0	0	0	0	0
Total Cash Provided by (Used for) Operations:	73,332	662,360	-89,513	542,755	702,419	81,056	525,996	76,336	1,440,998
Cash Provided by (Used for) Investing Activities:									
Net (Additions to)/Disposal of Fixed Assets - Net	-103,568	-77,693	-63,889	-38,196	-68,644	-186,842	-79,678	-57,785	-81,600
Net (Additions to)/Disposal of Intangible Assets - Net	0	0	0	0	0	0	0	0	0
Total Cash Provided by (Used for) Investing Activities:	-103,568	-77,693	-63,889	-38,196	-68,644	-186,842	-79,678	-57,785	-81,600
Cash Provided by (Used for) Financing Activities:									
Net Additions to/(Reductions in) Notes Payable	398,625	-153,948	232,746	-38,108	-290,602	272,368	35,620	-21,744	-5,289
Net Investment in/(Distribution of) Common Stock	0	0	0	0	0	0	0	0	0
Net Investment in/(Distribution of) Retained Earnings	-535,950	-508,379	-299,834	-193,144	-308,713	-280,563	-674,753	-440,775	-395,537
Total Cash Provided by (Used for) Financing Activities:	-137,325	-662,327	-67,088	-231,252	-599,315	-8,195	-639,133	-462,519	-400,826
Total Increase/(Decrease) in Cash	-167,561	-77,660	-220,490	273,307	34,460	-113,981	-192,815	-443,968	958,572
Cash Balance at Beginning of Year	217,425	295,085	515,575	242,268	207,808	321,789	514,604	958,572	0
Cash Balance at End of Year	49,864	217,425	295,085	515,575	242,268	207,808	321,789	514,604	958,572

Decomposing the Income Statement

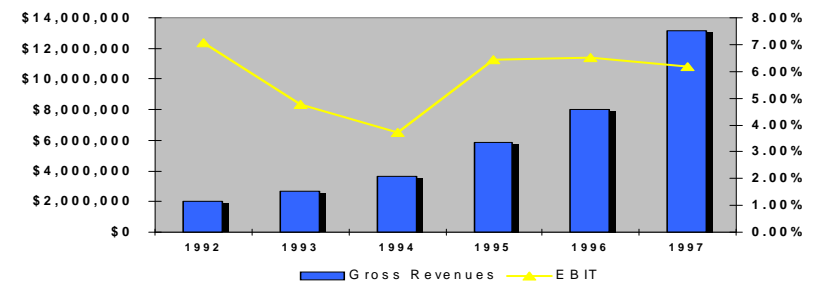


Example Cash Flow Test

EBIT to Revenues - Historical



EBIT to Revenues - Historical



***Financial Statement Anomalies Hyperlinked Visuals
Section***

107



Surprises in Shareholders' Equity

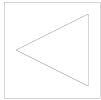
	1998	1999	2000	2001	2002	2003	2004	2005	2006
Beginning Shareholders' Equity	17,625,872	20,712,633	22,442,842	23,038,484	24,491,959	30,372,869	29,097,974	33,109,336	37,537,189
Net Income/(Loss)	1,023,765	1,439,666	1,254,839	1,695,469	6,174,979	4,111,999	5,420,310	6,280,273	2,756,936
Dividends Paid Preferred Stock							(990,000)	(1,320,000)	(552,333)
Dividends Paid Common Stock							(540,000)	(720,000)	(360,000)
Preferred Stock									
-Preferred Stock Issued - 1999			8,000,000						
-Retirement of GECC Stock Warrants - 1999			(8,100,000)						
-Preferred Stock Issued Series A-2						9,500,000			
-Preferred Stock Issued Series B						7,000,000			
-Retirement of GECC Stock Warrants									
-Preferred Stock Redeemed						(8,000,000)			
-Redemption of Preferred Stock Issued Series A-2									(9,500,000)
Common Stock									
-Stock Plan Shares Issued						111,462			
-Stock Plan Shares Redeemed						(139,502)			
-Stock Plan Shares Forfeited						(11,056)			
-Redemption of Common Stock						(1,428,450)			
-Exchanged For Class C Stock						1,428,450			
-Redemption/Exchange of Common Stock									
-Redemption of Common Stock						(50,000)			
-Common Class D Issued						12,000,000			
-Redemption of Class C Stock						(522,955)			
-Redemption of Class C Stock							(92,065)		
-Common Class B Issued									79,147
Additional Paid in Capital									
-Stock Plan Shares Issued	10,374	10,374	10,374	10,374	10,374				
-Stock Plan Compensation Charge	102,803	147,471	150,089	235,160	274,604				
Retained Earnings									
-Retained earnings - Stock Plan Shares Redeemed						(210,486)			
-Retained earnings - Redemption of Common Stock						(2,581,653)			
-Retained earnings - S"Quasi-Reorganization"						(38,450,000)			
-Retained earnings - Redemption of Class C Common Stock						(573,384)			
-Quasi-Reorganization Adjustment						16,448,849			
-Retained earnings - Redemption of Class C Common Stock							(13,373)		
-Retained earnings - Redemption of Class B Common Stock								(242,838)	
-Retained earnings - Redemption of Class B Common Stock									(599,699)
Other Change in Equity									
Change in Investment Valuation Allowance	1,949,820	132,698	(719,660)	(487,528)	(229,046)	91,831	226,491	430,418	555,200
Treasury Stock Purchased					(350,000)				
Treasury Stock Sold									
Change in Accounting Method									
Prior Period Adjustments									
Other Restatements, Net									
Ending Shareholders' Equity	20,712,634	22,442,842	23,038,484	24,491,959	30,372,870	29,097,974	33,109,337	37,537,189	29,916,440
Per Balance Sheets	20,712,633	22,442,842	23,038,484	24,491,959	30,372,869	29,097,974	33,109,336	37,537,189	29,916,440
Difference	1	0	0	0	1	0	1	0	0
Ending Balance Per 98/97 Balance Sheet	20,712,633								
Ending Balance Per 99/98 Balance Sheet	20,712,633	22,442,842							
Ending Balance Per 00/99 Balance Sheet		22,442,842	23,038,484						
Ending Balance Per 01/00 Balance Sheet			23,038,484	24,491,959					
Ending Balance Per 02/01 Balance Sheet				24,491,959	30,372,869				
Ending Balance Per 03/02 Balance Sheet					22,372,869	29,097,974			
Ending Balance Per 04/03 Balance Sheet						29,097,974	33,109,336		
Ending Balance Per 05/04 Balance Sheet							33,109,336	37,537,189	
Ending Balance Per 06/05 Balance Sheet								37,537,189	29,916,440
Difference	0	0	0	0	8,000,000	0	0	0	0
Ending Shareholders' Equity Per Balance Sheets	20,712,634	22,442,842	23,038,484	24,491,959	30,372,870	29,097,974	33,109,337	37,537,189	29,916,440
Retained Earnings Per Financial Statements	15,293,073	16,732,739	17,987,578	19,683,047	25,858,825	21,254,676	0	3,876,937	7,874,372
Difference	5,419,561	5,710,103	5,050,906	4,808,912	4,514,045	7,843,298	33,109,337	33,660,252	22,042,068

12 Quarters Ended Dec. 31, 2002

	Quarter Ending 3-31-00	Quarter Ending 6-30-00	Quarter Ending 9-30-00	Quarter Ending 12-31-00	Quarter Ending 3-31-01	Quarter Ending 6-30-01	Quarter Ending 9-30-01	Quarter Ending 12-31-01	Quarter Ending 3-31-02	Quarter Ending 6-30-02	Quarter Ending 9-30-02	Quarter Ending 12-31-02
Assets:												
Cash												
Checking	3,810,026	5,418,978	9,148,781	7,152,049	6,468,023	6,485,947	8,369,525	8,857,291	8,779,319	6,607,025	7,778,859	9,971,837
Marketable Securities	211,506	282,352	336,169	188,804	169,138	116,625	125,186	142,850	140,415	252,245	245,125	275,200
Total Cash	4,021,532	5,701,330	9,484,950	7,340,853	6,637,161	6,602,573	8,494,711	9,000,141	8,919,734	6,859,270	8,023,984	10,247,037
Accounts Receivable	2,003,334	3,276,798	3,107,192	3,037,713	2,892,843	3,550,153	4,260,794	3,531,609	3,429,989	3,117,140	2,772,743	3,460,584
Inventory	19,947,036	20,728,680	20,412,782	20,707,347	22,165,699	23,593,296	22,446,236	21,186,395	21,878,733	22,303,420	22,224,827	22,272,693
Other Current Assets	1,598,765	1,408,784	1,503,734	1,999,510	1,865,514	2,410,656	2,180,896	2,208,786	1,919,156	1,887,477	2,513,597	2,132,998
Total Current Assets	27,570,667	31,115,591	34,508,658	33,085,424	33,561,217	36,156,678	37,382,637	35,926,901	36,147,612	34,167,307	35,535,151	38,103,312
Fixed Assets - Net	71,377,379	70,497,888	73,992,368	78,479,188	80,222,350	81,918,009	82,959,473	82,986,383	81,852,692	80,875,361	80,946,804	79,502,294
Other Assets												
Intangible Assets - Net	5,698,866	6,190,743	8,844,571	4,002,643	8,445,201	8,249,051	8,477,467	8,274,062	8,204,972	8,145,882	8,076,792	8,007,702
Other Non-Current Assets												
Investments	3,927,320	4,034,487	4,690,948	8,641,354	4,002,643	4,002,643	4,002,643	3,671,052	4,371,052	4,368,775	4,502,772	4,647,881
Reorganization value in excess of amounts allocated												
Deferred Taxes	1,042,301	1,045,186	1,065,062	924,531	926,807	929,083	931,359	662,671	664,946	667,222	647,298	649,574
Other Assets	2,471,108	2,092,144	1,773,920	4,677,377	4,589,369	4,471,377	4,262,558	4,115,089	3,939,744	3,982,181	3,892,080	3,622,576
Total Other Non-Current Assets	7,440,729	7,171,817	7,529,930	14,243,262	9,518,819	9,403,103	9,216,509	8,448,813	8,975,742	9,018,178	8,842,150	8,920,031
Total Other Assets	13,139,595	13,362,561	15,374,500	18,245,905	17,964,020	17,652,154	17,693,976	16,722,875	17,180,714	17,164,050	16,918,942	16,927,733
Total Assets	112,087,641	114,975,840	124,875,527	129,810,517	131,747,587	135,726,841	138,036,086	135,636,159	135,181,018	132,206,728	133,400,897	134,533,339
Liabilities and Equity:												
Accounts Payable	11,671,876	15,115,267	20,878,581	14,988,286	15,661,144	18,678,299	17,646,303	17,151,901	14,795,227	18,392,225	15,627,922	18,092,777
Notes Payable	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	5,000,000	3,000,000	4,000,000	5,000,000	-	2,000,000	2,000,000
Current Portion - LTD	11,335,832	11,394,932	11,602,487	6,721,929	7,527,848	8,062,973	8,794,074	8,944,105	9,151,908	9,381,500	9,825,854	11,767,006
Accrued Liabilities	3,860,715	4,362,251	5,851,510	5,282,526	4,775,897	4,800,592	5,511,133	5,742,520	4,908,172	5,214,868	6,292,773	5,826,129
Other Current Liabilities	638,531	920,236	1,201,965	563,436	507,907	697,727	1,096,548	542,363	1,037,170	1,804,055	2,802,268	2,127,751
Total Current Liabilities	32,506,954	36,792,686	44,534,542	33,054,177	35,497,491	37,214,896	36,048,058	36,380,889	36,392,477	34,792,648	36,348,817	40,713,653
Long Term Liabilities												
Notes Payable	50,742,176	48,463,053	49,093,778	67,002,033	66,520,284	67,678,544	69,348,883	67,494,945	65,493,173	62,207,106	59,794,379	55,527,283
Deferred Income Taxes	6,367,471	6,427,824	6,548,227	6,715,823	6,824,977	6,934,218	7,046,384	7,268,266	7,339,933	7,407,294	7,411,689	7,919,523
Deferred Gain Sale/Leaseback												
Total Liabilities	89,616,801	91,673,563	100,176,546	106,772,033	108,842,752	111,827,658	112,443,305	111,144,200	109,225,583	104,407,048	103,554,895	104,160,469
Equity												
Preferred Stock Series A-2												
Preferred Stock Series B												
Common Stock Class C												
Common Stock Class D												
Common Stock, no par value	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Minority Interest in Other Entities												
Add'l Paid-In Capital	4,573,221	4,573,221	4,583,595	4,633,685	4,633,686	4,633,684	4,644,059	4,879,218	4,879,217	4,879,219	4,539,594	4,814,197
Investment Valuation Allowance	1,036,882	1,053,319	1,152,789	317,222	317,222	317,222	317,222	(170,306)	(170,306)	(170,306)	(170,306)	(369,352)
Retained Earnings, Beginning	16,732,739	16,760,937	17,575,738	18,862,596	17,987,577	17,853,927	18,848,276	20,531,501	19,683,046	21,146,524	22,990,767	25,376,724
Net Income	28,198	814,801	1,286,858	(875,019)	(133,650)	994,349	1,883,225	(848,455)	1,463,478	1,844,243	2,385,957	481,301
Common Dividend Paid												
Preferred Dividend Paid												
Stock Redemptions												
Quasi Reorganization Adjustment												
Unlocated/Undisclosed Differences												
Retained Earnings, Ending	16,760,937	17,575,738	18,862,596	17,987,577	17,853,927	18,848,276	20,531,501	19,683,046	21,146,524	22,990,767	25,376,724	25,858,025
Total Equity	22,471,040	23,302,277	24,698,980	23,038,484	22,904,835	23,899,183	25,592,782	24,401,950	25,955,435	27,799,680	29,846,012	30,372,870
Total Liabilities and Equity	112,087,641	114,975,840	124,875,527	129,810,517	131,747,587	135,726,841	138,036,086	135,636,159	135,181,018	132,206,728	133,400,897	134,533,339
Validation Control Totals												
Assets Minus Liabilities & Equity	-	0	0	(0)	(0)	0	(0)	(0)	(0)	(0)	(0)	(0)
Annual Net Income per Above				1,254,838				1,695,469				6,174,979
Annual Net Income per Annual Audited Financials				1,254,839				1,695,469				6,174,979
Total Assets & Total Liabilities & Equity per Annual BS				129,810,517				135,636,159				134,533,339
Unlocated/Undisclosed Differences												

16 Quarters Ended Dec. 31, 2006

	Quarter Ending 3-31-03	Quarter Ending 6-30-03	Quarter Ending 9-30-03	Quarter Ending 12-31-03	Quarter Ending 3-31-04	Quarter Ending 6-30-04	Quarter Ending 9-30-04	Quarter Ending 12-31-04	Quarter Ending 3-31-05	Quarter Ending 6-30-05	Quarter Ending 9-30-05	Quarter Ending 12-31-05	Quarter Ending 3-31-06	Quarter Ending 6-30-06	Quarter Ending 9-30-06	Quarter Ending 12-31-06
Assets:																
Cash																
Checking	7,776,881	7,558,049	6,830,071	10,586,806	7,820,748	9,015,392	8,740,854	9,752,318	6,527,976	6,166,135	6,154,879	9,050,680	6,326,520	7,168,670	1,218,370	9,484,246
Marketable Securities	255,210	21,010	21,800	25,900	28,225	30,355	34,328	38,960	17,975	16,940	19,925	20,375	21,100	23,500	15,750	22,075
Total Cash	8,032,091	7,579,059	6,851,871	10,612,706	7,857,973	9,045,747	8,783,982	9,791,278	6,545,951	6,183,075	6,174,804	9,071,235	6,347,620	7,192,170	1,234,120	9,506,321
Accounts Receivable	2,405,461	3,108,785	3,651,006	4,055,189	2,908,081	3,179,266	3,531,103	5,354,956	4,619,415	4,123,471	3,754,616	4,681,143	3,379,979	3,454,530	3,902,209	4,572,910
Inventory	22,215,478	23,337,233	24,109,894	23,672,161	24,048,008	26,054,146	26,041,768	25,709,465	26,304,071	27,312,853	26,850,545	27,993,935	29,859,217	31,098,291	31,371,534	30,665,649
Other Current Assets	1,647,677	1,330,079	3,396,072	2,160,575	2,534,623	4,263,147	2,636,063	2,680,688	3,010,366	3,041,543	4,439,762	3,122,610	4,207,260	5,221,760	5,943,104	5,778,106
Total Current Assets	34,390,707	35,355,156	38,008,813	40,511,431	37,148,085	42,542,306	40,992,916	43,536,387	40,479,823	40,650,942	41,219,727	44,868,923	43,594,076	46,955,751	42,451,027	50,522,986
Fixed Assets - Net	81,404,953	84,582,935	64,998,927	69,918,680	69,654,463	69,558,619	70,654,216	70,554,241	70,484,293	70,334,932	74,319,780	79,566,514	79,829,836	83,851,554	85,250,339	80,964,125
Other Assets																
Intangible Assets - Net	11,261,380	13,017,197	12,946,107	20,446,162	20,372,235	22,297,363	26,567,042	26,490,667	26,937,068	27,330,779	27,262,724	31,877,828	31,802,273	32,104,201	38,147,091	38,059,035
Other Non-Current Assets																
Investments	5,274,725	5,407,345	5,768,988	7,380,802	8,058,013	8,391,625	8,598,814	10,150,792	10,319,457	10,476,745	9,255,874	10,801,945	11,313,345	11,902,627	12,073,277	11,888,469
Reorganization value in excess of amounts allocated																
Deferred Taxes	371,900	326,847	1,135,944	332,923	336,133	340,468	344,098	310,898	311,171	309,731	309,694	308,606	308,711	309,124	309,124	
Other Assets	3,425,262	3,231,984	3,186,283	4,994,164	4,843,418	4,716,870	4,778,580	4,645,962	5,647,101	5,371,975	5,122,113	4,930,057	5,016,925	4,763,973	4,464,218	4,166,585
Total Other Non-Current Assets	9,071,887	8,966,176	10,061,215	12,707,889	13,237,564	13,448,993	13,721,462	15,107,652	16,277,729	16,158,451	14,687,671	16,040,608	16,638,981	16,975,724	16,876,619	16,053,084
Total Other Assets	20,333,267	21,983,373	23,036,322	33,153,071	33,609,799	35,746,356	40,289,534	41,598,319	43,214,797	43,489,230	41,950,395	47,918,436	48,441,254	49,079,925	55,023,710	54,112,119
Total Assets	136,128,927	141,921,464	126,044,062	143,583,182	140,422,967	147,947,281	151,935,666	155,688,947	154,178,913	154,475,104	157,469,902	172,353,873	171,865,166	179,696,230	182,725,076	185,599,230
Liabilities and Equity:																
Accounts Payable	16,720,770	19,742,748	17,168,752	17,691,609	15,727,465	18,035,672	21,505,208	19,440,377	15,919,315	15,918,898	19,429,637	19,518,008	17,329,792	22,859,793	20,868,226	23,195,146
Notes Payable	4,000,000	4,000,000	7,500,000	3,000,000	3,000,000	6,000,000	7,000,000	7,000,000	9,000,000	9,000,000	10,000,000	9,000,000	9,000,000	9,938,000	8,000,000	12,200,000
Current Portion - LTD	13,422,419	12,704,931	12,152,510	6,037,797	6,977,300	7,040,066	6,220,588	622,074	7,467,047	6,335,949	6,409,500	8,040,395	9,280,510	8,318,716	7,866,114	7,791,760
Accrued Liabilities	4,800,181	5,247,253	6,586,215	5,635,356	4,732,425	4,478,410	6,191,171	12,140,891	6,271,143	5,535,388	7,402,110	8,708,697	8,271,214	7,635,422	9,822,595	9,742,834
Other Current Liabilities	1,292,305	963,014	3,340,432	2,962,151	2,077,062	1,643,089	2,467,299	2,059,290	1,963,877	3,837,608	4,392,758	3,636,926	2,834,461	3,721,103	2,666,687	
Total Current Liabilities	40,235,675	42,657,946	46,767,909	35,326,913	32,514,242	37,197,267	38,394,266	41,280,602	40,077,334	38,764,112	37,078,855	50,668,848	47,518,442	51,586,422	50,078,008	55,598,427
Long-Term Liabilities																
Notes Payable	56,806,168	58,890,531	33,885,266	70,863,356	69,706,133	70,708,240	73,732,534	72,528,541	72,388,503	72,414,643	73,855,412	75,202,777	87,499,252	89,994,439	92,988,808	91,310,219
Deferred Income Taxes	8,007,514	8,093,974	7,955,357	8,294,939	8,249,944	8,363,884	8,593,445	8,770,469	8,554,152	8,406,361	8,288,368	8,855,058	8,752,088	8,891,699	8,888,051	8,776,146
Deferred Gain Sale/Leaseback			2,178,544													
Total Liabilities	104,849,357	109,642,451	90,767,076	114,485,208	110,470,319	116,269,391	118,710,245	122,579,612	121,019,989	119,575,116	119,222,635	134,816,883	143,769,782	150,472,560	151,934,877	155,682,792
Equity																
Prefereed Stock Series A-2		8,000,000	8,000,000	9,500,000	9,500,000	9,500,000	9,500,000	9,500,000	9,500,000	9,500,000	9,500,000	9,500,000	-	-	-	-
Prefereed Stock Series B				7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000	7,000,000
Common Stock Class C				905,495	905,495	905,495	813,430	813,430	813,430	813,430	813,430	813,430	813,430	813,430	813,430	813,430
Common Stock Class D				12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000	12,000,000
Common Stock, no par value	100,000	1,378,044	1,478,451													
Minority Interest in Other Entities																
Add'l Paid-In Capital	4,803,934															
Investment Valuation Allowance	(399,352)	(399,352)	(399,352)	(307,521)	(307,521)	(307,521)	(307,521)	(81,031)	(81,031)	(81,031)	(81,031)	340,387	340,387	340,387	340,387	904,587
Retained Earnings, Beginning	25,858,025	26,774,989	23,300,321	26,197,887	0	854,674	2,579,916	4,219,512	3,876,936	3,926,525	5,667,589	9,034,868	7,874,373	7,853,120	9,183,706	10,548,435
Net Income	1,141,601	1,563,807	3,122,205	(1,715,614)	854,674	2,235,242	2,162,969	167,425	569,589	2,273,549	3,884,773	(437,638)	572,579	1,667,075	1,946,441	(1,429,159)
Common Dividend Paid							(540,000)	(540,000)	(540,000)	(540,000)	(540,000)	(540,000)	(540,000)	(540,000)	(540,000)	(540,000)
Prefereed Dividend Paid	(224,638)	(440,277)	(673,915)	(2,581,653)		(330,000)	(660,000)	(990,000)	(330,000)	(660,000)	(990,000)	(1,320,000)	(412,333)	(552,333)	(552,333)	(552,333)
Stock Redemptions		(210,486)	(210,486)	(39,233,870)			(13,373)	(13,373)		(22,465)	(29,980)	(242,838)	(1,499)	(17,988)	(599,700)	
Quasi Reorganization Adjustment				16,448,849												
Unlocated/Undisclosed Differences		(4,378,711)	659,762	884,401			510,000	1,033,372		510,000	1,042,486	1,559,981		593,832	930,321	912,331
Retained Earnings, Ending	26,774,989	23,300,321	26,197,887	0	854,674	2,579,916	4,219,512	3,876,936	3,926,525	5,667,589	9,034,868	7,874,373	7,853,120	9,183,706	10,548,435	9,119,274
Total Equity	31,279,570	32,279,013	35,276,986	29,097,974	29,952,648	31,677,890	33,225,421	33,109,335	33,158,924	34,899,988	38,267,267	37,537,190	29,065,364	29,425,670	30,790,399	29,916,438
Total Liabilities and Equity	136,128,927	141,921,464	126,044,062	143,583,182	140,422,967	147,947,281	151,935,666	155,688,947	154,178,913	154,475,104	157,469,902	172,353,873	171,865,166	179,696,230	182,725,076	185,599,230
Validation Control Totals																
Assets Minus Liabilities & Equity	(0)	(0)	(0)	(0)	0	(0)	(0)	(0)	0	(0)	(0)	(0)	(0)	(0)	(0)	(0)
Annual Net Income per Above				4,111,999				5,420,310				6,280,273				2,756,936
Annual Net Income per Annual Audited Financials				4,111,999				5,420,310				6,280,273				2,756,936
Total Assets & Total Liabilities & Equity per Annual BS				143,583,182				155,688,948				171,822,519				185,599,232
Unlocated/Undisclosed Differences												831,354				



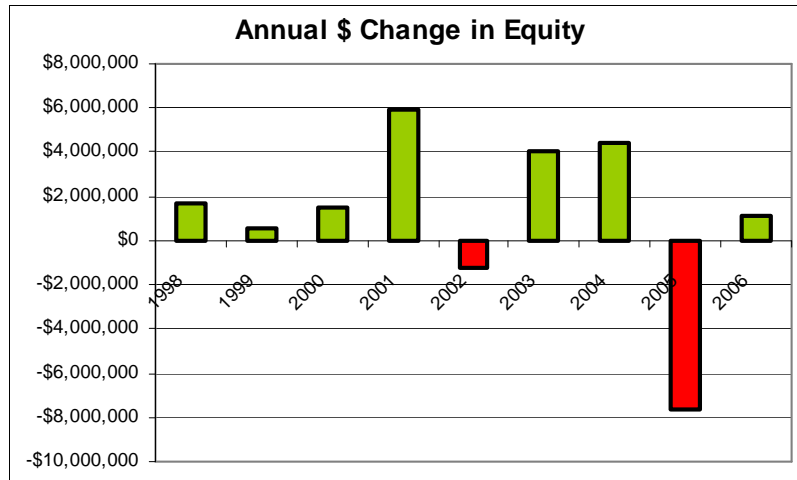
Year-to-Year Discrepancies

As Originally Reported in Audited Financials										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Assets	106,163,098	117,075,375	129,810,517	135,636,159	134,533,339	143,583,182	155,688,948	172,353,872	185,599,232	n/a
Total Liabilities	85,450,465	94,632,533	106,772,033	111,144,200	104,160,470	114,485,208	122,579,612	134,816,683	155,682,792	n/a
Equity	20,712,633	22,442,842	23,038,484	24,491,959	30,372,869	29,097,974	33,109,336	37,537,189	29,916,440	n/a
Revenue	231,630,496	261,982,669	282,684,058	316,134,725	323,807,201	341,198,318	361,434,956	375,711,489	423,455,160	n/a
Net Income	1,023,765	1,439,666	1,254,839	1,695,469	6,174,979	4,111,999	5,420,310	6,280,273	2,756,936	n/a
As Subsequently Reported in Audited Financials										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Assets	106,163,098	117,075,375	129,810,517	135,636,159	134,533,339	143,583,182	155,688,948	171,522,519	n/a	n/a
Total Liabilities	85,450,465	94,632,533	106,772,033	111,144,200	104,160,470	114,485,208	122,579,612	133,985,330	n/a	n/a
Equity	20,712,633	22,442,842	23,038,484	24,491,959	22,372,869	29,097,974	33,109,336	37,537,189	n/a	n/a
Revenue	231,630,496	261,982,669	282,684,058	316,134,725	323,807,201	341,198,318	361,434,956	375,711,489	n/a	n/a
Net Income	1,023,765	1,439,666	1,254,839	1,695,469	6,174,979	4,111,999	5,420,310	6,280,273	n/a	n/a
Differences										
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Total Assets	-	-	-	-	-	-	-	(831,353)	n/a	n/a
Total Liabilities	-	-	-	-	-	-	-	(831,353)	n/a	n/a
Equity	-	-	-	-	(8,000,000)	-	-	-	n/a	n/a
Revenue	-	-	-	-	-	-	-	-	n/a	n/a
Net Income	-	-	-	-	-	-	-	-	n/a	n/a

Balance Sheet Hyperlinked Visuals Section



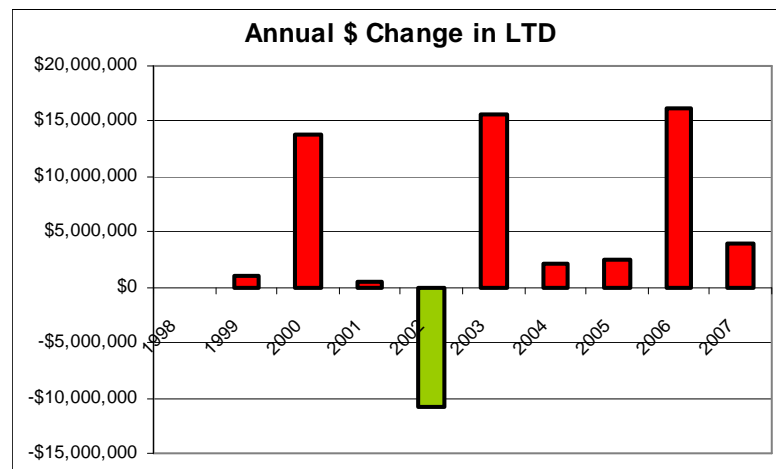
Equity Declined in 2002



113



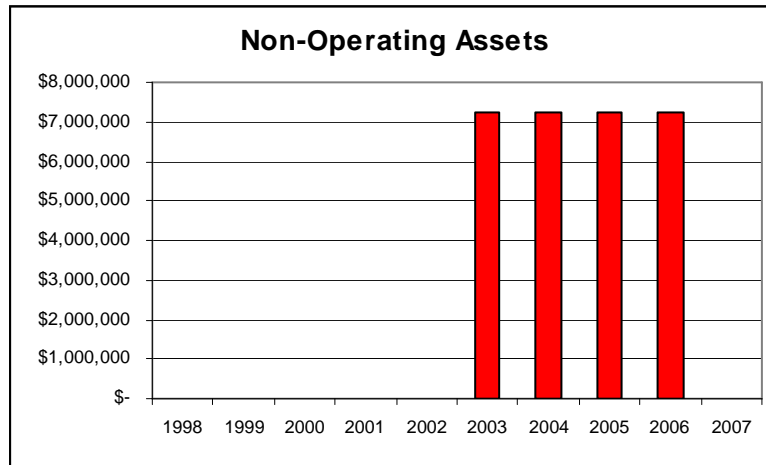
Long-Term Debt Increases



114



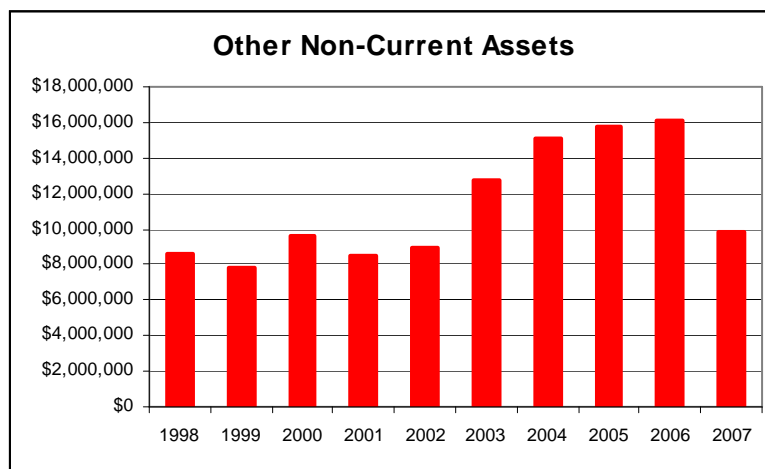
Non-Operating Assets “Appeared”



115



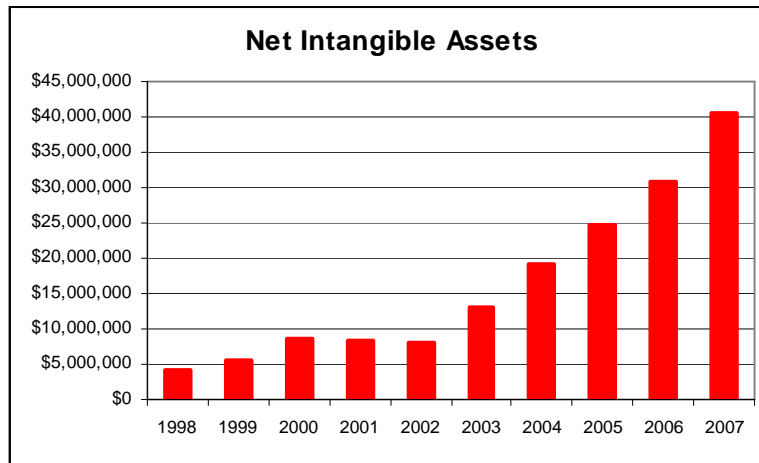
Other Non-Current Assets Increased



116



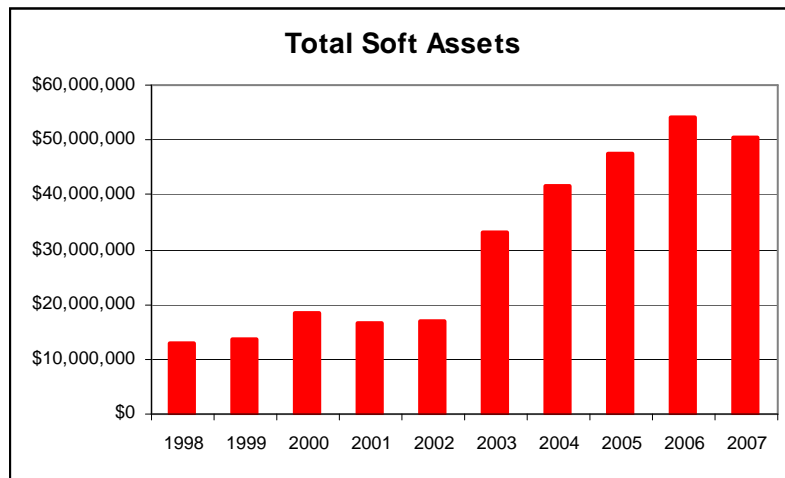
Net Intangible Assets Increased



117



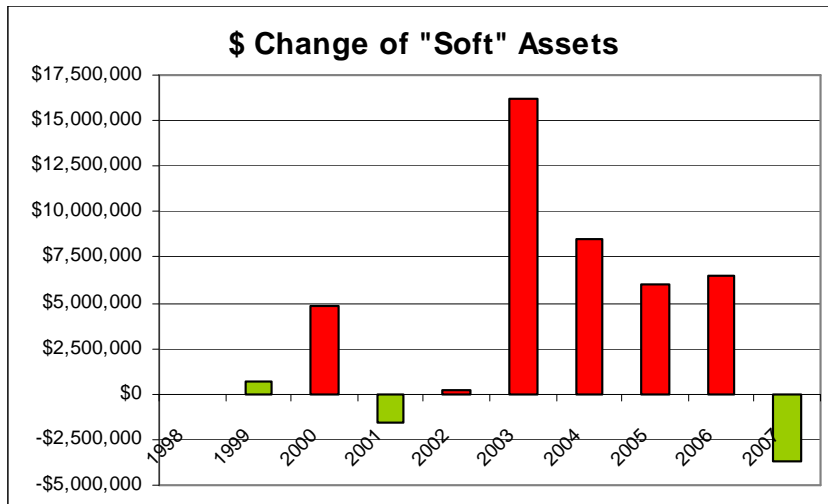
“Soft” Assets Grew Dramatically



118



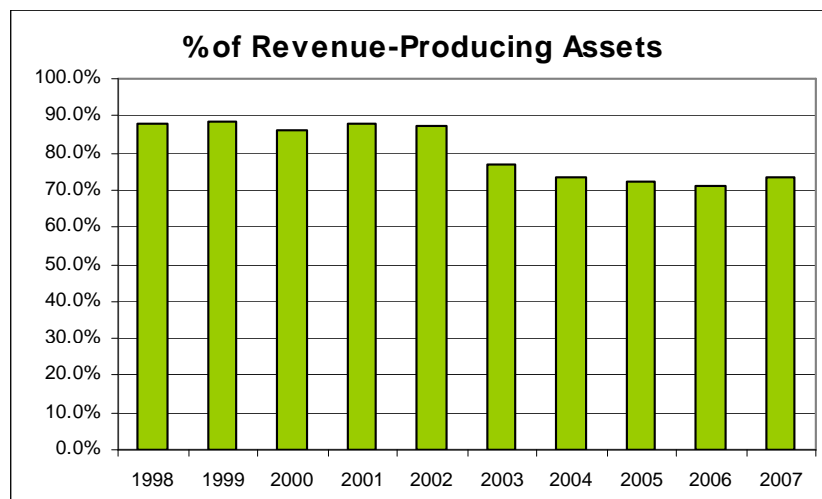
Large Sums into "Soft" Assets



119



Revenue-Producing Assets Declined



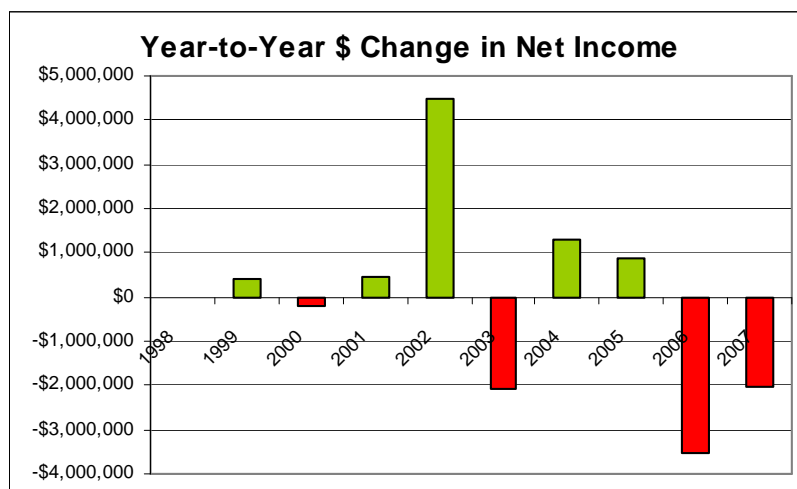
120

Income Statement Hyperlinked Visuals Section

121



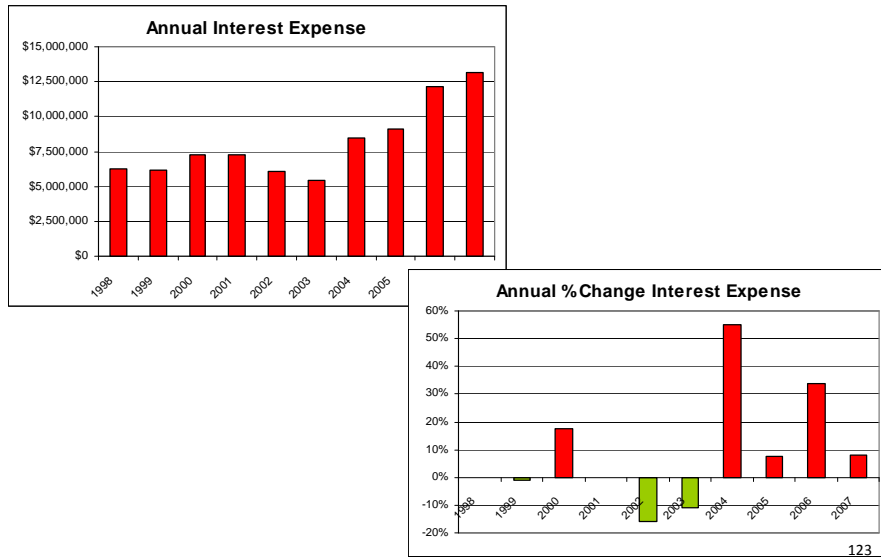
Large Swings in Net Income



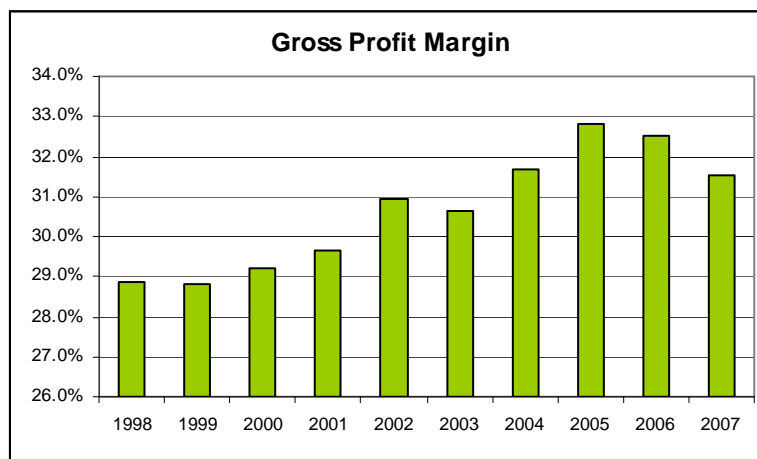
122



Impact of Heavy Debt Load

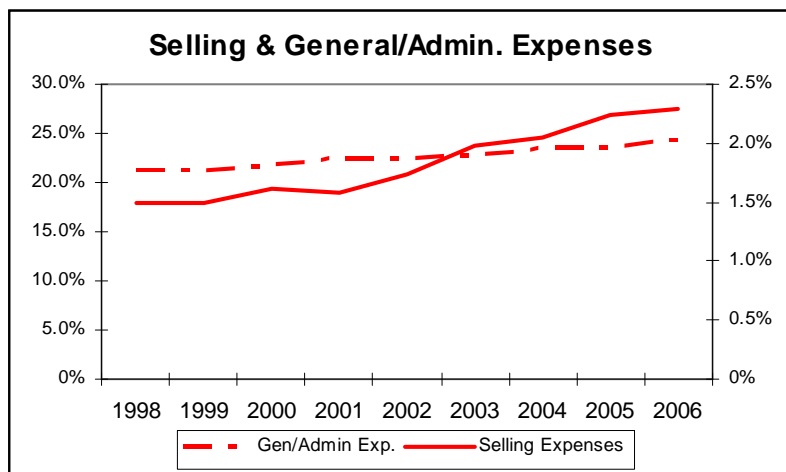


Solid Gross Profit





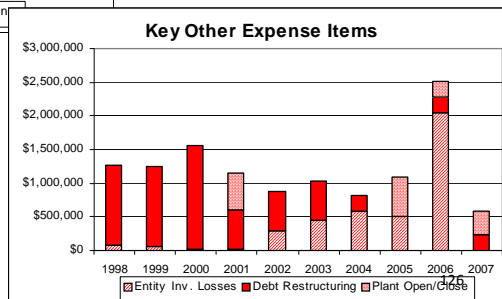
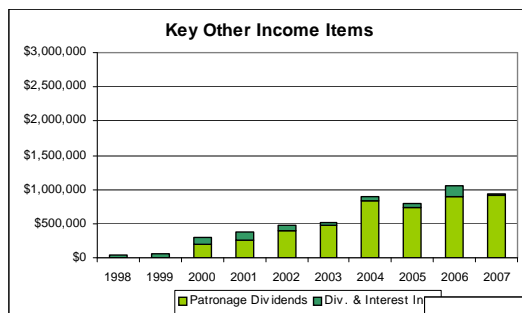
Operating Expenses Increased



125



Other Expenses Exceed Income

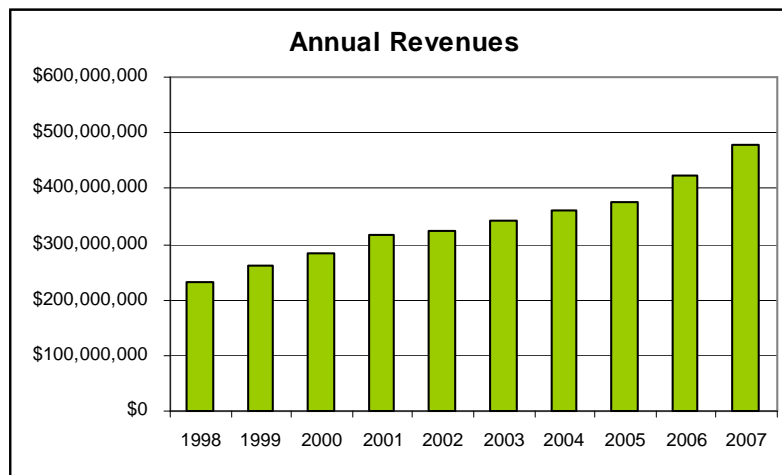


Cash Flow Hyperlinked Visuals Section

127



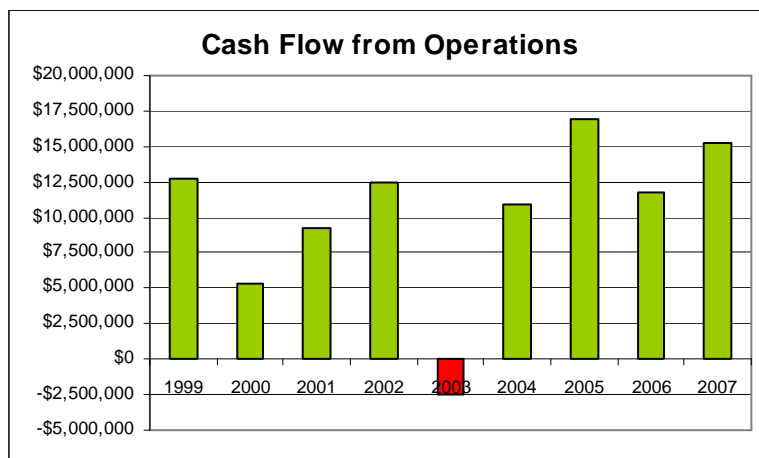
Revenues Increased



128



Cash Earned from Operations



129



Largest Operating Cash Impact

Increase/(Decrease) in Cash

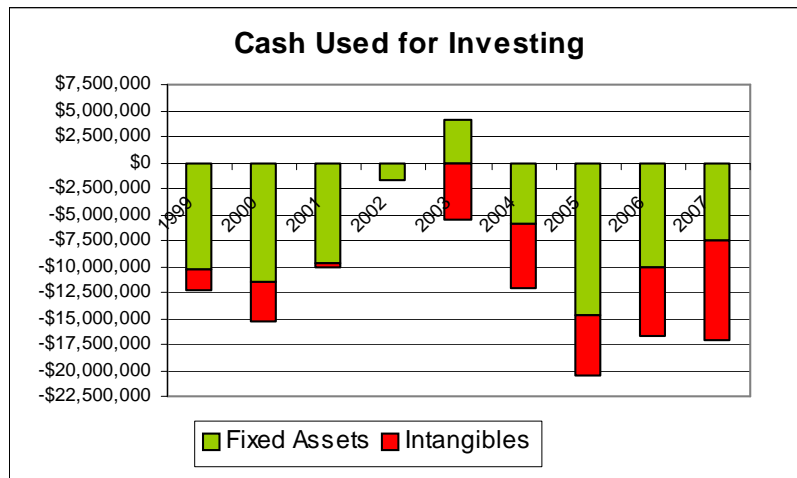
Cash Provided by (Used for) Operations:

	1999	2000	2001	2002	2003	2004	2005	2006	2007
Net Income/(Loss)	1,439,666	1,254,839	1,695,469	6,174,979	4,111,999	5,420,310	6,280,273	2,756,936	702,330
COGS Depreciation (trucks)	0	0	0	0	0	0	0	0	0
Depreciation	4,353,380	4,570,015	5,123,797	5,216,316	5,466,697	5,214,342	5,777,691	6,681,460	7,310,449
Amortization	575,880	657,710	798,996	276,360	284,423	302,342	274,341	328,888	0
(Increase)/Decrease in Accounts Receivable	677,499	-925,120	-493,896	81,025	-615,605	-1,288,767	673,813	108,233	-3,199,876
(Increase)/Decrease in Inventory	-1,423,619	-1,352,489	-479,018	-1,086,328	-1,399,468	-2,037,304	-2,284,470	-2,671,714	-4,317,592
(Increase)/Decrease in Other Current Assets	-39,225	-405,553	-209,275	75,787	-27,526	-520,113	80,826	-1,113,711	-1,198,798
(Increase)/Decrease in Other Non-Current Assets	748,151	-1,772,278	1,155,738	-471,210	-11,040,421	-2,399,763	-624,350	-321,084	13,482,804
Increase/(Decrease) in Current Liabilities	5,445,970	2,993,314	1,104,535	1,509,874	342,458	5,771,412	7,036,188	5,707,951	2,404,181
Increase/(Decrease) in Long-Term Liabilities	0	0	0	0	0	0	0	0	0
Increase/(Decrease) in Other Liabilities	985,816	351,090	552,543	651,157	375,416	475,530	-224,017	229,694	97,559
Total Cash Provided by (Used for) Operations:	12,763,518	5,371,528	9,248,889	12,427,953	-2,502,077	10,937,969	16,990,295	11,706,653	15,281,057

130



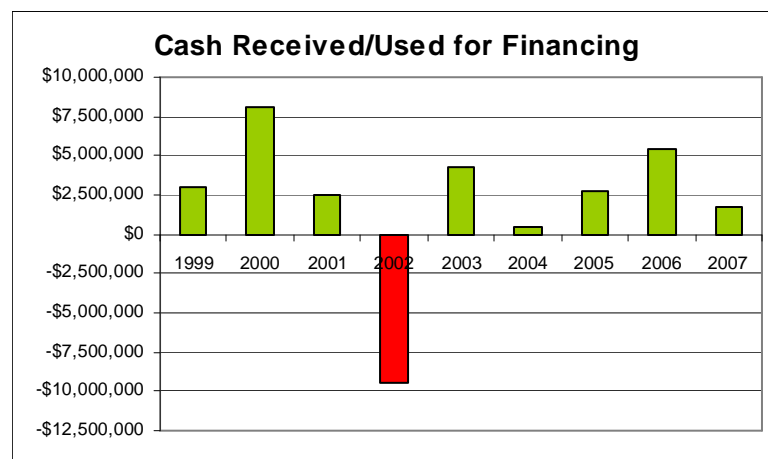
Cash Used for Investing



131



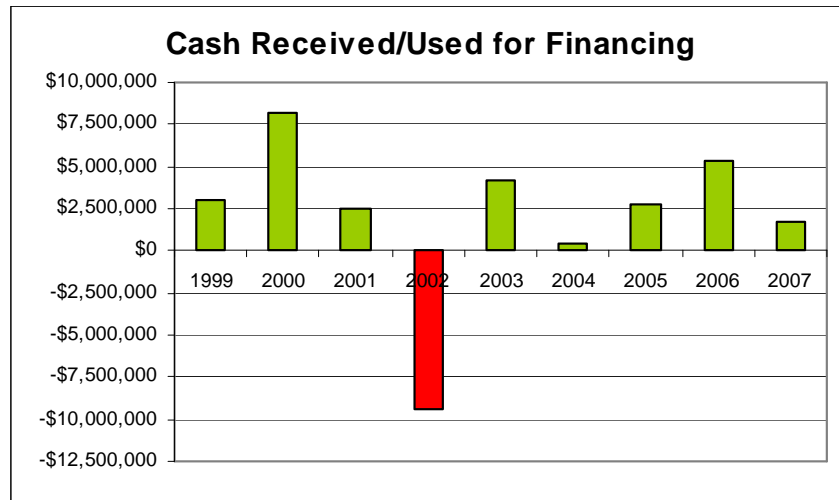
Cash In/Out for Financing



132



Only Cash Out in 2002



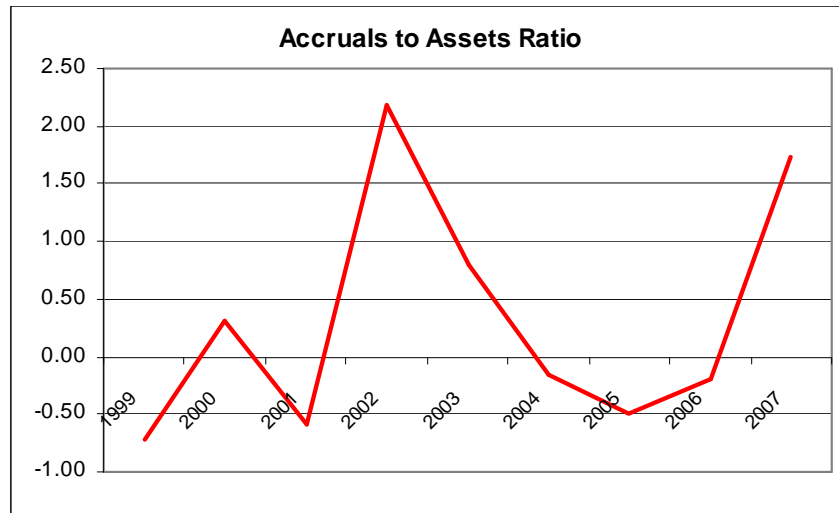
133

Earnings Manipulation Hyperlinked Visuals Section

134



Significant Increase in 2002



135



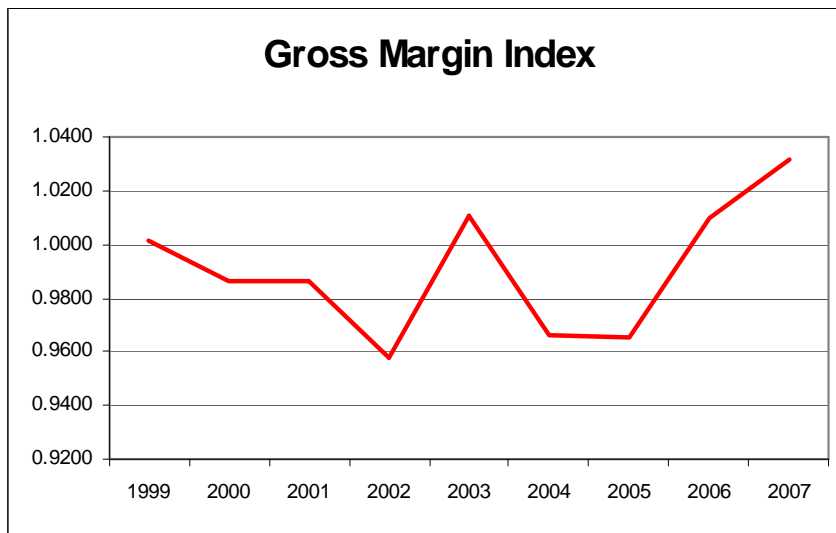
Pattern Contrary to Reported



136



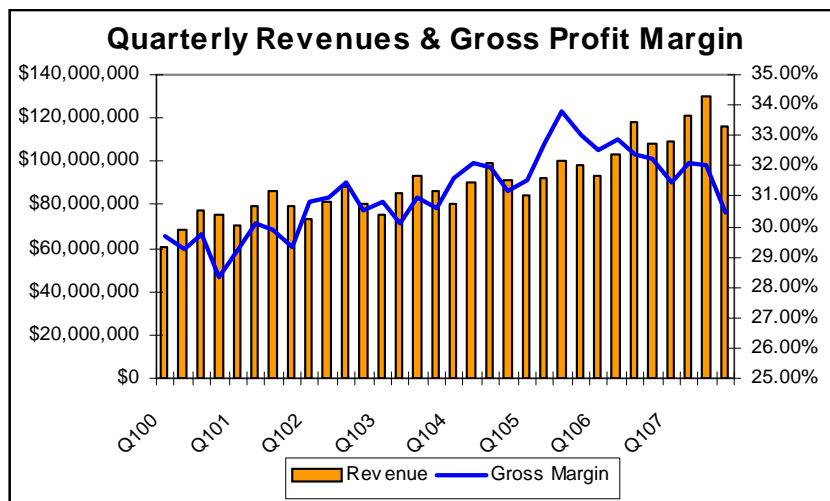
2005 Contrary to Reported



137



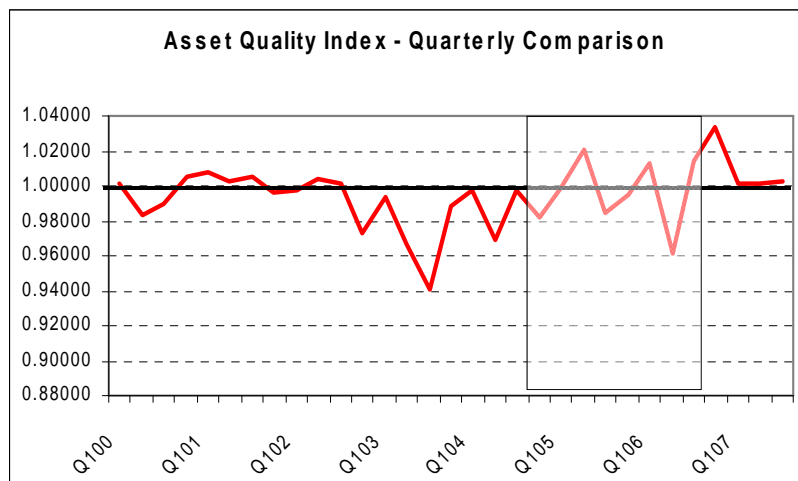
2005 Gross Profit “Spikes” Then Declines



138



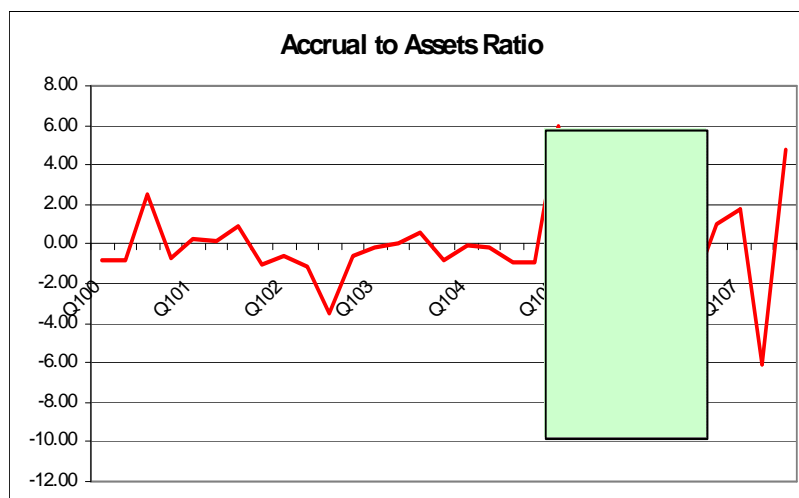
“Normal” Is 1.0



139



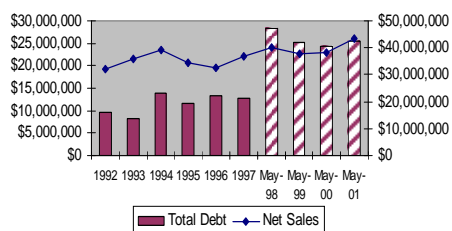
Dramatic Variations in 2005



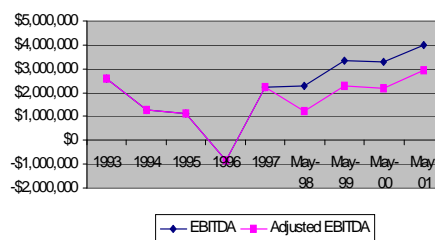
140

Example Cash Flow Test (cont.)

Pre- and Post-Merger Debt and Sales
(5/99 - 5/01 Projected)



Assumed EBITDA Compared to Actual EBITDA
(5/98 - 5/01 Projected)



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Forensic Accounting Academy™

PPTs

Day Four



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1111 Brickyard Road, Suite 200, Salt Lake City, Utah 84106
P: (801) 486-0600 www.nacva.com

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Day 4

Statistics and the Forensic Accountant

Mark S. Warshavsky

can be reached at (516) 364-3390 ext. 121

or via email at

mwarshavsky@gmslhy.com

Gettry Marcus Stern & Lehrer, CPA, P.C.
20 Crossways Park North • Woodbury, NY 11797 • (516) 364-3390
220 Fifth Avenue • New York, NY 10001 • (212) 684-3399

www.gmslhy.com

2

WHAT MAKES STATISTICS UNIQUE IS ITS ABILITY TO QUANTIFY UNCERTAINTY,
TO MAKE IT PRECISE. THIS ALLOWS STATISTICIANS TO MAKE CATEGORICAL
STATEMENTS, WITH COMPLETE ASSURANCE—ABOUT THEIR LEVEL OF
UNCERTAINTY!



3

Introduction

“Three types of lies;

Lies

Damn lies and

Statistics”

Benjamin Disraeli

4

Statistics

The Sample with the Built-in Bias

Statement: “The average Yaleman,
Class of '54,” Time magazine noted once,
commenting on something in the *New York Sun*,
“makes \$125,111 a year.”



5

Statistics (con't)

■ What does this impressive figure mean?

- If you send your boy to Yale you will not have to work in your old age and neither will he?

6

Statistics (con't)

- Suspicious Comment:
 - It is too precise. It sounds too strong.
- Reality:
 - Most people could not tell you what they made down to the dollar so precisely, unless it was all derived from salary.
 - It was probably calculated from what the Yale men said they earned.
 - Even with an honor system, how can we be sure that it works so well after so many decades?
 - Some people when asked will exaggerate their incomes out of vanity, while others will minimize their income as to not to contradict themselves on any other paper.

7

Statistics (con't)

- Thought:
 - It is possible that these two tendencies, to boast and to understate, cancel each other out, but it is unlikely.

8

Statistics (con't)

- Source of the issue: Sampling Procedure
- Problems:
 - Unknown addresses
 - Those that are known many not reply to the questionnaire
 - Death
 - Graduates who did not do so well
 - Do not register for class reunions if only because they cannot afford the trip.
- Conclusion: It is clear that the sample has omitted several groups most likely to depress the average.

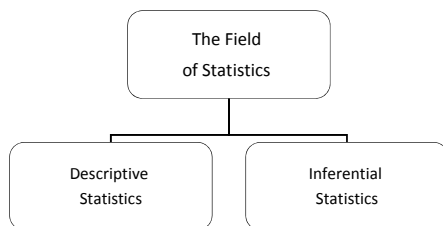
9

Statistics (con't)

- Statistics:
 - A branch of mathematics that describes and reasons from numerical observations or descriptive measures of a sample
 - or*
 - Statistics is the art and science of analyzing, presenting and interpreting data

10

Essential Concept of Statistics



11

1. Descriptive Statistics

1.1 A meaningful way to summarize a collection of data:

- May be presented in tabular, graphic or numerical format
- Used to provide summaries of the information in a data set
- Makes the data easier to interpret

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2. Inferential Statistics

- 2.1 Inferential statistics relate to:
- The process of using data from a sample
 - To make estimates and test hypotheses concerning the characteristics of a population
- 2.2 Inferential statistics uses the following groups:
- Population – is a set of all elements in a particular study
 - Sample – is a subset of the population

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3. The Objective of Statistics

- 3.1 Statistical inference is a logical method by which **relative** truth can be extracted from numerical data:
- Describes sets of numbers or objects
 - Make reasonable inferences about groups based on incomplete and/or limited information
 - Inferences about the characteristics of a parent group by studying a limited amount of data from a smaller group

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3. The Objective of Statistics (con't)

- 3.2 An inference is an educated statistical guess used to solve a particular problem:
- Relates to the degree of probability of a thing being true or that a particular event will occur
 - Statistics are only mathematical estimates

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3. The Objective of Statistics (con't)

- 3.3 Statistics are rarely presented, absent a statement of precision (confidence). These are related issues:
- Precision relates to the probability associated with the estimate and the degree upon which the user can rely on the inference
 - Any statistical study that omits a statement of precision should be scrutinized for bias or prejudice
 - Precision is dependent on:
 - Properly selected sample or samples
 - Correctly applied statistical methods

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3. The Objective of Statistics (con't)

- 3.4 Therefore, to a statistician, precision is used in two contexts:
- the variability of an estimator (e.g. the mean)
- or*
- in regards to the probability of estimating something to within a certain error

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4. Common False Inferences

- 4.1 Statistical analysis is subject to:
- Manipulation
 - Errors in the application of formula, methods and procedures
 - Erroneous or false inferences from incomplete or tainted data
 - Random chance, unanticipated events and unintended consequences

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4. Common False Inferences (con't)

4.2 Arithmetic errors and false inferences are found frequently in published studies:

- The public is conditioned to accept published studies as authoritative, error free and absolute truth
 - Random and systematic errors occur frequently in published surveys and studies
 - Published studies are regularly challenged, recanted and redacted

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4. Common False Inferences (con't)

4.2 Arithmetic errors and false inferences are found frequently in published studies (con't):

- Random Error - fluctuating part of overall error
 - Can be reduced or offset by repetition
 - Ex. Electronic scale producing varying random readings
- Systematic Error - error that is constant in series of repetitions
 - Cannot be reduced by repetition of measurement
 - Ex. Electronic scale producing readings that are consistently 5lbs heavier than actual

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4. Common False Inferences (con't)

4.2 Arithmetic errors and false inferences are found frequently in published studies (con't):

- It is essential to understand the objective, procedures applied and inferences asserted in published studies and surveys
- The limiting conditions published with a study or survey **must** be reviewed
- Adjectives are frequently used to emphasis or de-emphasis small statistical margins

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4. Common False Inferences (con't)

4.3 False Percentages

- Addition of unrelated percentages to achieve a total percentage
- Large percentages based on small data samples
- Percentages presented absent actual numbers



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4. Common False Inferences (con't)

4.4 Fictitious Precision

Precision of an **estimate** does not increase proportionally with the number of decimal places:

- Verify that the degree of precision claimed is warranted by the data
- Percentages should be rounded to significant decimal places
 - 0.123456 rounded to .12 or 12.35%
 - 1.234567 rounded to 1.23
- Numbers should be rounded to significant digits
 - 123,456 rounded to 123,500
 - 123,456,789 rounded to 123,500,000

23

4. Common False Inferences (con't)

4.4 Fictitious Precision (con't)

- However – from a pure statistical viewpoint, precision of an estimator **does** increase with sample size
- Remember! Precision is used in two different ways in statistics



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4. Common False Inferences (con't)

4.5 Faulty Comparisons

- Comparisons are relevant only when made between groups genuinely suitable for comparison
- Statistics of one group can not be used to infer characteristics of an untested and dissimilar group
 - Both groups must be measurable to demonstrate a correlation
 - Publicly traded companies compared with small closely-held companies

25

4. Common False Inferences (con't)

4.6 Improper Sampling

- The most common cause of misleading and false inferences
- Biased and/or non-random sample
 - Exclusive or skewed samples
 - Arbitrary sampling is not random
 - Systematic non-responses or anomalies in sample are not investigated

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5. Descriptive Statistics Methods

5.1 Frequency Distribution – Definition

A tabular summary of data showing the number (frequency) of items in each of several non-overlapping classes is referred to as a frequency distribution.

27

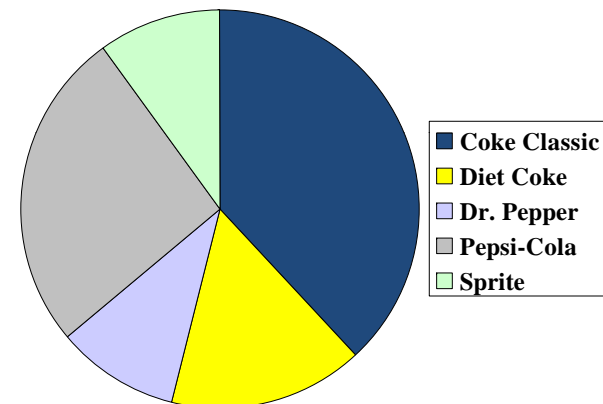
5. Descriptive Statistics Methods

5.2 Examples

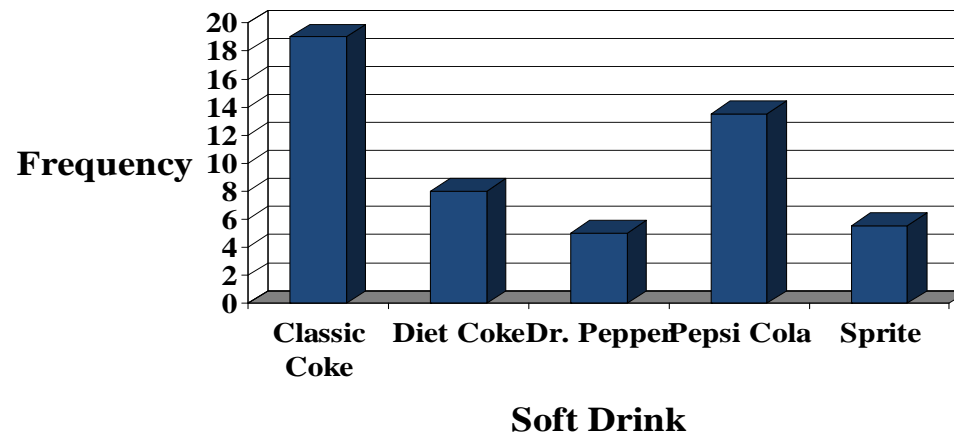
Relative and Percent Frequency Distributions of Soft Drink Purchases

Soft Drink	Relative Frequency	Percent Frequency
Coke Classic	.38	38
Diet Coke	.16	16
Dr. Pepper	.10	10
Pepsi-Cola	.26	26
Sprite	.10	10
Total	1.00	100

Pie Chart of Soft Drink Purchases



Bar Graph of Soft Drink Purchases



6. Measure of Central Tendency

Also known as the measure of location

6.1 Mean – definition and use:

- The average value of the numbers selected; obtained by summing the numbers and dividing by n , where n is how many numbers there are in the collection
- The only measure of central tendency that is sensitive to all values in the distribution

29

6. Measure of Central Tendency (con't)

6.2 Median – by definition:

- The halfway point in the following sense: half of the numbers lie below the median, and half of them lie above it
- Not sensitive to any values in the distribution, only the number of elements

30

6. Measure of Central Tendency (con't)

6.2 Median is preferable when:

- The distribution of quantitative data is *extremely* asymmetrical
- The precise location of the bisected halves of the distribution is material

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6. Measure of Central Tendency (con't)

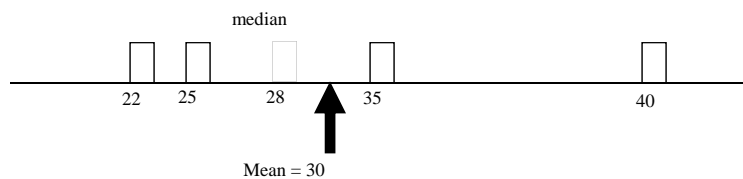
6.2 Median is calculated by:

- Sort the observations in ascending order
- Locate the middle observation
 - For odd number distributions the median is the middle observation
 - For even number distributions the median is the midpoint between the two middle observations
 - Middle observation = $.5(n+1)$; where n is the number of observations

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6. Measure of Central Tendency (con't)

6.3 Calculation of a mean and median



$$\text{Average} = \frac{22 + 25 + 28 + 35 + 40}{5} = \frac{150}{5} = 30$$

33

6. Measure of Central Tendency (con't)

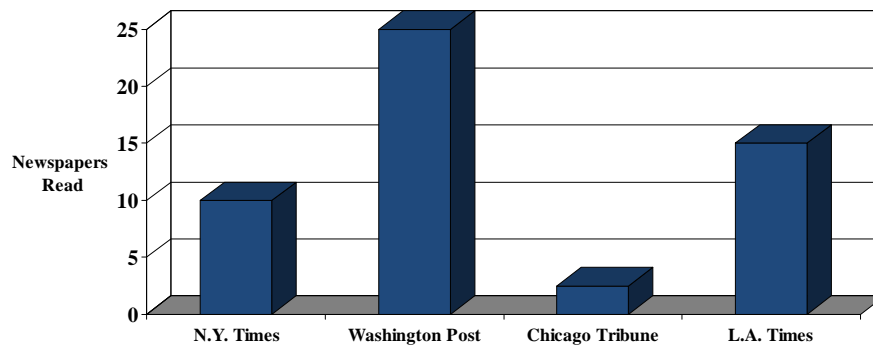
6.4 Mode – definition and use:

- The number that occurs most frequently in a collection of numbers
- The mode is not sensitive to any values only the frequency of specific elements
- Used in situations which preclude the use of the mean or median
 - Data is qualitative and not ordered
 - Identification of the most frequent responses or occurrences are material

34

6. Measure of Central Tendency (con't)

6.5 Calculation of the Mode



35

6. Measure of Central Tendency (con't)

6.6 Some examples of frequency diagrams:

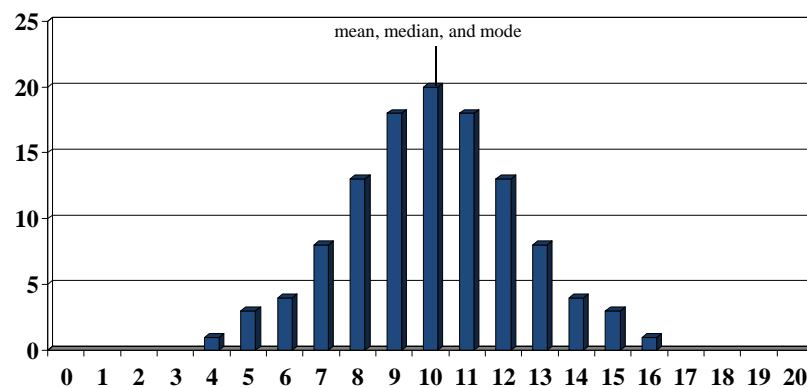
- Normal distribution
- Bimodal Distribution
- Asymmetrical (*with a tail*) – positive and negative skew

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6. Measure of Central Tendency (con't)

6.7 Normal Distribution

The frequency is symmetric with a single mode

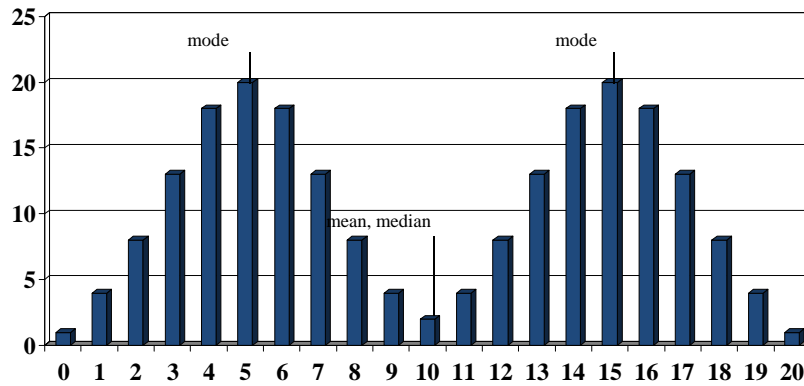


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6. Measure of Central Tendency (con't)

6.8 Bimodal Distribution

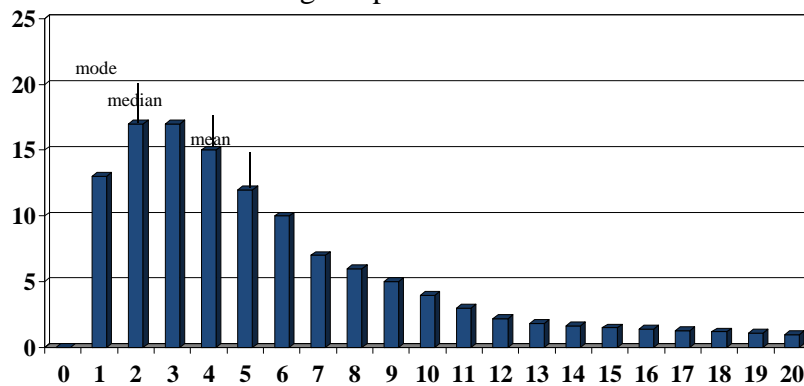
The distribution has two modes



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6. Measure of Central Tendency (con't)

6.9 Distribution that is asymmetrical; in this case with a tail to the right – positive skew



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6. Measure of Central Tendency (con't)

6.10 Quartiles

- It is often desirable to divide data into four parts
- With each part containing approximately one fourth, or 25% of the observations



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6. Measure of Central Tendency (con't)

6.11 Quartiles (con't)

- The division points are referred to as the quartiles and are defined as:

Q_1 = first quartile, or 25th percentile

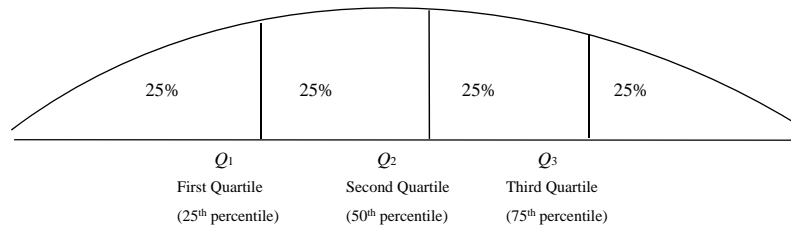
Q_2 = second quartile, or 50th percentile (also the median)

Q_3 = third quartile, or 75th percentile.

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6. Measure of Central Tendency (con't)

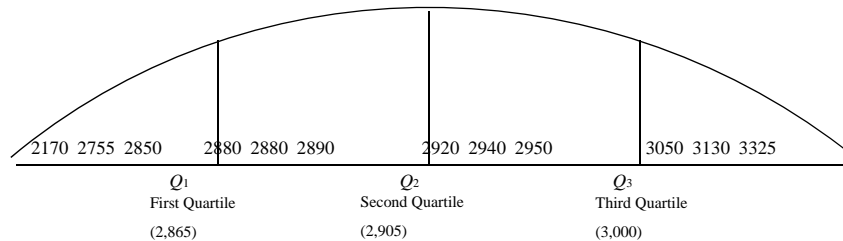
6.12 Location of Quartiles



42

6. Measure of Central Tendency (con't)

6.13 New Clients by Sales Representatives:



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7. Measure of Variability

7.1 Range

- The simplest measure of variability
- The difference between the largest and smallest numbers in a group
- Seldom used as the only measure
- Based on only two of the observations
- Therefore, influenced by extreme values

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7. Measure of Variability (con't)

7.1 Range (con't)

- Largest value – smallest value = range
 $5,000 - 3,000 = 2,000$
 $10,000 - 3,000 = 7,000$

Refer to 6.13 for new clients:

- Range is $3,325 - 2,170 = 1,155$
- 10,000 new clients instead of 3,325, the range would be:
 $10,000 - 2,170 = 7,830$
- 11 of the 12 sales representatives within 2,170 and 3,130

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7. Measure of Variability (con't)

7.2 Variance

- The variance is a widely used measure of dispersion
- A measure of variability that utilizes all the data
- Based upon the difference between the value of each observation and the mean.
 - If the numbers in the list are all close to the mean, the variance will be small
 - If they are far away, the variance will be large

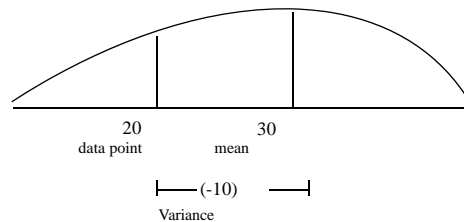
46

7. Measure of Variability (con't)

7.2 Variance (con't)

- Variance is the sum of squared deviations of observations around their mean:

Measurement of distance from the mean



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7. Measure of Variability (con't)

7.3 Calculating the Variance

For the number of students in a classroom, we first find the distance from the mean for each element:

Students per classroom	Distance from mean
25	$25 - 30 = (-5)$
40	$40 - 30 = 10$
35	$35 - 30 = 5$
22	$22 - 30 = (-8)$
28	$28 - 30 = (-2)$
Mean = 30	Total -0-

48

7. Measure of Variability (con't)

7.4 As observed in the previous slide:

- We cannot add distances up and average them
- Negative numbers and positive numbers cancel out
- Resulting in zero
- We must square each of these numbers, making all positive numbers

49

7. Measure of Variability (con't)

- Therefore, we must square each of these numbers, making them all positive:

Students per classroom	Distance from mean	Distance Squared
25	$25 - 30 = (-5)$	$(-5)^2 = 25$
40	$40 - 30 = 10$	$10^2 = 100$
35	$35 - 30 = 5$	$5^2 = 25$
22	$22 - 30 = (-8)$	$(-8)^2 = 64$
28	$28 - 30 = (-2)$	$(-2)^2 = 4$
		Total: 218

50

7. Measure of Variability (con't)

- The calculations would then be:

Mean = 30

Number of classrooms (n) = 5

$$\text{Variance} = \frac{(\sum x_i - n\bar{x})^2}{n - 1} = \frac{218}{4} = 54.5$$

Variance = 54.5 Units²

Standard Deviation = $\sqrt{54.5}$

Standard Deviation = 7.3824 Units

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7. Measure of Variability (con't)

7.5 Standard Deviation

- The measure of dispersion in original units
- The positive square root of the variance
 - Variance is in squared units
 - Standard deviation is in original units

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7. Measure of Variability (con't)

7.6 Coefficient of Variation (CV)

- » A descriptive statistic that indicates how large the standard deviation is relative to the mean
- » It is usually expressed as a percentage
- » The formula is $CV = \frac{\text{standard deviation}}{\text{mean}} \times 100\%$

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7. Measure of Variability (con't)

7.6 Coefficient of Variation (CV) (con't)

» This ratio is useful when comparing the variability of variables that have different standard deviations and different means

$$CV = \left(\frac{7.3824}{30} \right) 100\% = 24.61\%$$

54

8. Measure of Relative Location

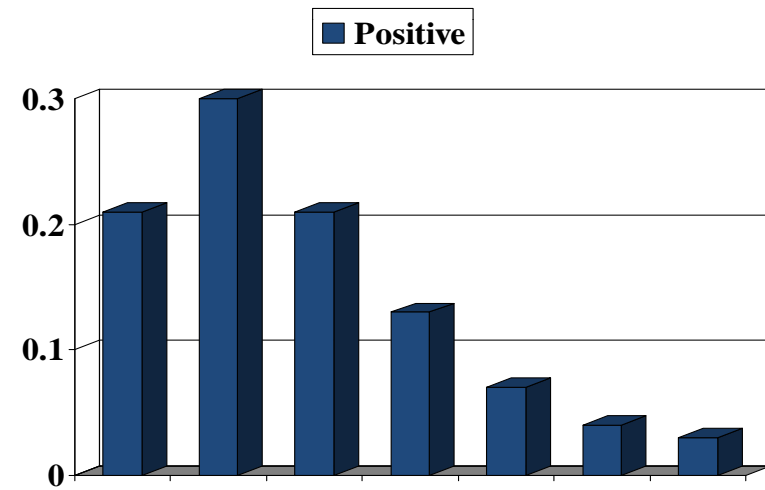
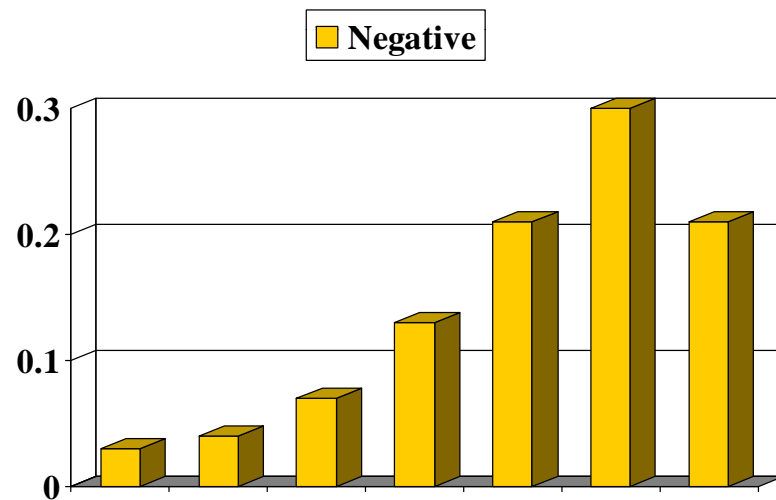
8.1 The measure of the shape of the distribution is also important

- Skewness is an important numerical measure of the shape of a distribution
- Complement the measures of location and variability
- In a symmetric distribution – mean and median are equal
- When positively skewed – mean greater than median
- When negatively skewed – mean less than median

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8. Measure of Relative Location (con't)

8.1 Skewness for Two Distributions



8. Measure of Relative Location (con't)

8.2 Z-score

- Expresses a measure in terms of the number of standard deviations the measure is from the mean
- Often called standardized value
- $Z_1 = 2.2$ would indicate that X_1 is 2.2 standard deviations greater than the mean

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8. Measure of Relative Location (con't)

8.3 Chebyshev's Theorem

- Allows us to make statements about the proportion of data values that must be within a certain number of standard deviations of the mean

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8. Measure of Relative Location (con't)

8.3 Chebyshev's Theorem (con't)

- Some of the implications of this theorem, with $z = 2, 3$, and 4 standard deviations, follow.
 - At least .75, or 75%, of the data values must be within $z = 2$ standard deviations of the mean
 - At least .89, or 89%, of the data values must be within $z = 3$ standard deviations of the mean
 - At least .94, or 94%, of the data values must be within $z = 4$ standard deviations of the mean

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8. Measure of Distribution Shape

8.4 Empirical Rule

- Based upon the normal probability distribution
- Distributions are symmetric mound-shape or bell shaped
- Determines the percentage of items that must be within a specific number of standard deviations of the mean
- Formula - When the distribution of data approximates a normal (symmetrical) curve, the percentage of items that must be within a specified number of standard deviations of the mean can be estimated

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8. Measure of Distribution Shape (con't)

8.4 Empirical Rule (con't)

Application - For normally distributed data:

- Approximately 68% of the items will be within one standard deviation of the mean
- Approximately 95% of the items will be within two standard deviation of the mean
- Approximately 100% of the items will be within three standard deviation of the mean

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8. Measure of Distribution Shape (con't)

8.5 Outliers

- Represents a data set where one or more observations have unusually large or small values
- May represent a data value that has been incorrectly recorded
- May be from an observation that was incorrectly included in the data set
- May be an unusual data value that has been recorded correctly and belongs in the data set, and should remain

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9. Relation Between Two Sets of Measures

9.1 Types of Measurement Charts

- Scattergram – is used to display graphically the relationship between two different measures in a sample
- Dot Plot – one of the simplest graphical summaries of data
- Scatter Diagram – a graphical presentation of the relationship between two quantitative variables
- Trendline – a line that provides an approximation of the relationship between two variables

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10. Presentation of Data

10.1 Descriptive statistics

- Methods of organizing and summarizing data to reveal patterns and facilitate interpretation
 - Numeric statistics
 - Pictorial statistics

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10. Presentation of Data (con't)

10.2 Numerical statistics

- Numeric values (measures) describing the data set
- Measurements include:
 - Measures of central tendency
 - Measures of variability

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10. Presentation of Data (con't)

10.3 Pictorial statistics

- Presents numerical statistics in the form of pictures and graphs
 - Tabular procedures
 - Graphical procedures



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10. Presentation of Data (con't)

10.3 Pictorial statistics (con't)

10.3.1 Presentation depends on the type of data

- Qualitative data is numerical data about categories that vary significantly in kind
 - Best represented in Bar Charts and Pie Charts
- Quantitative data can be measured in amounts
 - Best represents in Dot Plot or Histograms

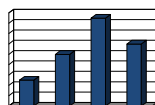
67

10. Presentation of Data (con't)

10.4 Types of graphical presentations

10.4.1 Bar chart

- A graphical device for depicting qualitative data summarized by frequency
- Can be arranged horizontally or vertically
- Ordering is ascending or descending
- Spaces are present between bars to define categories
- Bars are of equal width



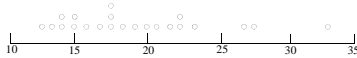
68

10. Presentation of Data (con't)

10.4 Types of graphical presentations (con't)

10.4.2 Dot plot

- A graphical device for depicting quantitative data summarized by frequency
- Generally used for a small set of values or data
- Dots, representing a measure of value, are placed above a reference number on a horizontal axis



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10. Presentation of Data (con't)

10.4 Types of graphical presentations (con't)

10.4.3 Pie chart

- A graphical device for depicting qualitative data summarized in a frequency distribution or a relative frequency distribution
- Sections are presented in ascending order
- Effective when the elements or classes are few in number
- Addresses the limitations of bar charts and dot plots by representing the proportion of each element or class



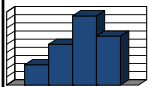
70

10. Presentation of Data (con't)

10.4 Types of graphical presentations (con't)

10.4.4 Histogram

- A graphical device for depicting quantitative data summarized in a frequency distribution or a relative frequency distribution. Sections are presented in ascending order.
- The range of values are divided into non-overlapping, equal length class intervals.
 - The number of intervals should be more than 5 and less than 20
 - Class intervals are not separated by spaces as with a bar chart



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11. Conclusion

11.1 Statistics are *not truth*

- Statistics are relative truth extracted from numerical data
- Statistics are estimates based on incomplete information
- Statistics are subject to manipulation and misinterpretation
- Statistical information must be sufficiently evaluated before use as a foundation for an opinion

11.2 Statistical analysis is not a substitute for common sense and logical reasoning

Statistics in Valuation

Dispersion

Seller's Description	Sale Type	Seller's Annualized Revenues	Seller's Annualized Net Income	P/E	P/R	P/SE	P/A	P/CF	P/EBITDA
Operates as a FREIGHT FORWARDER including air and sea export and import between NYC and Asian locations for various dry goods and apparel industries, HQ'd in NYC	STOCK	29.1	0.6	6.5	0.1	0.0	1.5	22.0	6.1
Domestic and international FREIGHT FORWARDING and project management service business, HQ'd in Sterling, VA	ASSET	4.2	1.9	14.3	6.5	16.0	15.1	33.1	14.3
FREIGHT FORWARDING company offering a full range of international logistics services including international air and ocean transportation in the Republic of Singapore and the Kingdom of Cambodia	ASSET	15.5	1.4	7.9	0.7	5.3	1.6	5.8	6.2
Provides logistics and FREIGHT FORWARDING services, HQ'd in Des Plaines, IL	STOCK	6.4	0.2	5.4	0.2	2.6	0.5	0.0	3.1
Provides logistics and FREIGHT FORWARDING services, based in Sydney, Australia	STOCK	25.1	0.1	49.3	0.1	22.9	0.7	0.0	13.9
Average		16.06	0.83	16.89	1.52	9.36	3.88	12.19	8.72
Median		15.50	0.57	7.93	0.16	5.29	1.48	5.84	6.17
Harmonic Mean		9.38	0.23	9.00	0.22	#NUM!	1.06	#NUM!	6.34
Stddev		11.02	0.79	18.56	2.78	9.71	6.30	14.76	5.08
CoVar		0.69	0.96	1.11	1.82	1.04	1.62	1.21	0.58
+/- 2 Stddev		38.11	2.41	53.80	7.08	28.79	####	41.70	18.88

Statistics in Valuation

Dispersion

SIC			Business Description	Sale Date	Net Sales	MVIC Price	MVIC/			Sale Type	GrossCF	Net Income
No	Code	NAICS					Sales	GC	MVIC/N			
4731	488510		Freight Forwarder	3/19/2008	\$9,979,020	\$2,000,000	0.2		9.4	Asset		\$213,384
4731	541614		Involved in the Domestic and International Freight Forwarding	6/20/2003	\$4,163,293	\$4,700,000	1.1	2.5	2.5	Asset	\$1,879,860	\$1,852,769
4731	488510		Logistics and Freight Forwarder	4/25/2007	\$1,895,460	\$500,000	0.3	7.8	8.6	Asset	\$63,971	\$58,252
4731	488510		Logistics and Freight Forwarding Services	4/1/2005	\$6,358,932	\$1,625,000	0.3	7.8	8.6	Stock	\$208,635	\$189,733
4731	541614		Logistics Consulting and Transportation Brokering	2/17/2000	\$1,945,488	\$900,000	0.5		2.8	Asset		\$320,480
4731	488510		Provides Services for Ocean Freight Shippers and Non-Vesse	11/16/2007	\$2,300,000	\$2,000,000	0.9	4.3	4.3	Asset	\$470,000	\$470,000
4731	541614		Third Party Logistics Provider, Coordinates, Tracks and Ensu	2/1/2008	\$2,918,192	\$1,525,000	0.5	3.5	3.5	Asset	\$440,771	\$440,771
			Average		4,222,912	1,892,857	0.53	5.16	5.65		612,647	506,484
			Median		2,918,192	1,625,000	0.46	4.26	4.26		440,771	320,480
			Harmonic Mean		\$3,021,525	\$1,251,117	0.37	4.24	4.34		197,211	198,976
			Stddev		\$2,991,724	\$1,356,214	0.35	2.49	3.04		728,009	610,994
			CoVar		0.71	0.72	0.66	0.48	0.54		1.19	1.21
			+/- 2 Stddev				1.23	10.14	11.74		2,068,666	1,728,472

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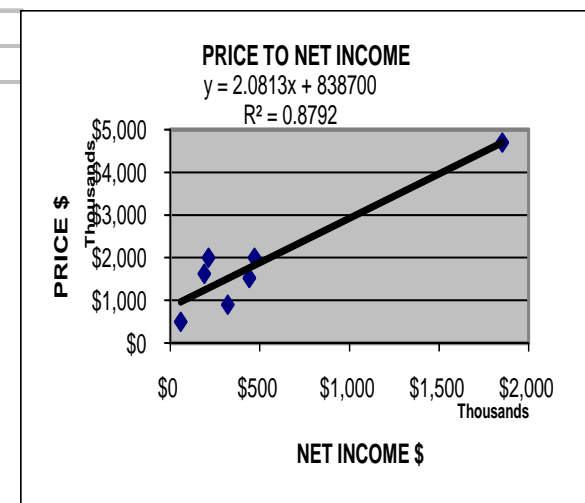
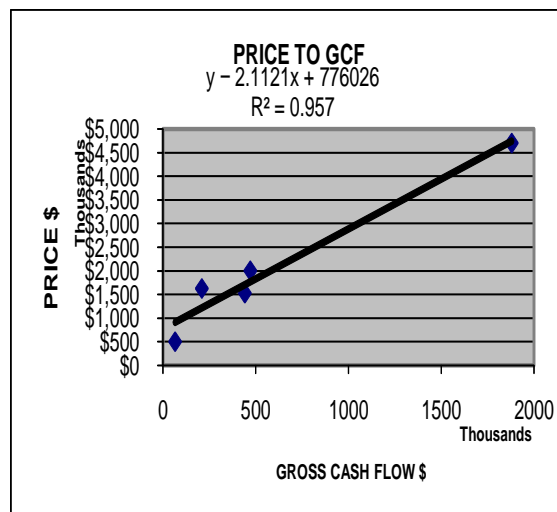
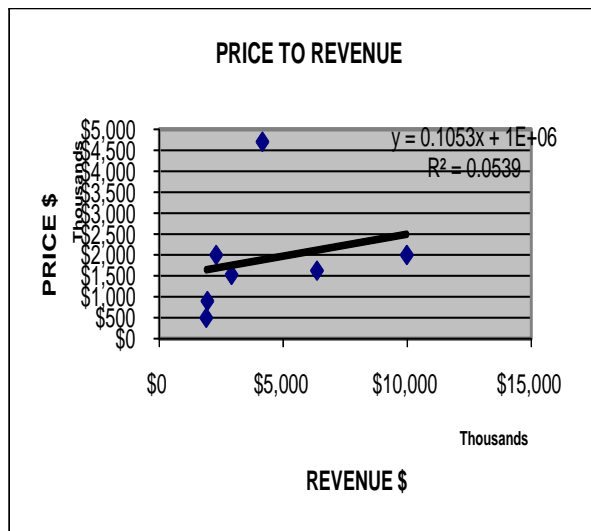
Rejects

SIC			Business Description	Sale Date	Net Sales	MVIC Price	MVIC/			Sale Type	GrossCF	Net Income
No	Code	NAICS					Sales	GC	MVIC/N			
4731	488510		Freight Forwarding	6/15/2000	\$340,000	\$115,000	0.34	#DIV/0!	#DIV/0!	Asset		
4731	488510		Ground Transportation, Warehouse Services, Air, Rail, and O	12/6/2000	\$3,457,079	\$200,000	0.06	#DIV/0!	2.63	Stock		\$76,157
4731	488510		Shipping	1/16/1998	\$580,000	\$200,000	0.34	2.2099	2.34	Asset	\$90,500	\$85,500
4731	488510		Provide Expedited Trucking, less than Truckload (LTL), Air Ca	12/31/2003	\$6,728,249	\$2,000,000	0.3	28.2	-95.6	Stock	\$71,027	(\$20,927)

Statistics in Valuation

Correlation:

- Linear relationship between two variables
- Often misapplied in forensic accounting (time v. revenues)



Statistics in Valuation

Significance

	Year Ending 12-31-01	Year Ending 12-31-02	Year Ending 12-31-03	Year Ending 12-31-04	Year Ending 12-31-05	Mean	Median	Min	Max	Chi Square 11.07
Accounting	0	0	0	0	0	0	0	0	0	#DIV/0!
Advertising	127,477	362,950	591,745	823,828	930,050	567,210	591,745	127,477	930,050	763,729
Auto and Travel	135,998	136,050	136,001	135,479	135,546	135,815	135,998	135,479	136,050	2
Bad Debts	6,070	208	3,380	634	262	2,111	634	208	6,070	12,557
Bank Fees & Finance Charges	40,756	77,308	103,308	126,730	105,722	90,765	103,308	40,756	126,730	47,998
Benefit Plan Expense	0	610,000	0	0	0	122,000	0	0	610,000	2,440,000
Company Functions	0	0	0	22,781	44,414	13,439	0	0	44,414	118,204
Contributions	1,325	0	0	0	0	265	0	0	1,325	5,300
Dues & Subscriptions	15,598	16,191	14,731	23,079	30,908	20,101	16,191	14,731	30,908	9,455
Employee Benefits	0	31,338	75,327	239,985	365,515	142,433	75,327	0	365,515	676,911
Freight & Express	58,218	0	0	0	0	11,644	0	0	58,218	232,872
Gifts	0	0	0	0	0	0	0	0	0	#DIV/0!
Insurance	61,959	29,051	105,236	269,642	624,561	218,090	105,236	29,051	624,561	1,103,788
Legal & Professional Fees	94,068	347,990	277,532	482,391	1,200,458	480,488	347,990	94,068	1,200,458	1,511,855
Machine & Equipment Rental	36,000	875	941	0	0	7,563	875	0	36,000	133,758
Meals & Entertainment	10,790	21,990	24,132	32,551	36,624	25,217	24,132	10,790	36,624	16,006
Miscellaneous	7,430	0	0	0	0	1,486	0	0	7,430	29,720
Office Supplies & Postage	64,975	102,512	175,961	288,019	236,318	173,557	175,961	64,975	288,019	195,231
Other Taxes & Licenses	4,347	19,132	17,555	53,482	78,504	34,604	19,132	4,347	78,504	107,766
Payroll Taxes	60,774	84,371	132,645	246,942	323,663	169,679	132,645	60,774	323,663	295,793
Plane Lease & Operating Expense	0	31,352	336,146	451,999	1,026,289	369,157	336,146	0	1,026,289	1,869,567
Printing & Reproduction	258,603	40,996	11,111	16,876	27,612	71,040	27,612	11,111	258,603	626,323
Promotional Expense	2,598	0	0	158,252	459,189	124,008	2,598	0	459,189	1,282,301
Purchased Services	38,426	0	0	0	0	7,685	0	0	38,426	153,704
Reference Materials	1,296	0	0	0	0	259	0	0	1,296	5,184
Rent	71,742	66,040	90,861	338,999	397,904	193,109	90,861	66,040	397,904	541,435
Repairs and Maintenance	12,890	12,270	22,972	36,219	33,470	23,564	22,972	12,270	36,219	21,224
Retirement Plan Expense	0	140,000	115,057	205,151	0	92,042	115,057	0	205,151	353,827
Royalty Expense	0	0	0	0	0	0	0	0	0	#DIV/0!
Salaries & Wages	203,194	138,566	260,533	593,207	949,576	429,015	260,533	138,566	949,576	1,076,150
Shop Supplies	881	0	0	0	0	176	0	0	881	3,524
Trade Show Expense	30,588	50,890	58,938	182,171	223,012	109,120	58,938	30,588	223,012	278,447
Training & Seminars	1,867	0	0	37,275	21,950	12,218	1,867	0	37,275	92,342
Utilities & Telephone	45,604	50,811	69,716	185,439	309,286	132,171	69,716	45,604	309,286	395,102
Website	0	31,219	58,174	115,895	231,322	87,322	58,174	0	231,322	379,912
Total Operating Expenses	1,350,979	2,413,770	2,682,602	5,114,087	7,857,530	3,883,794	2,682,602	1,350,979	7,857,530	7,035,179

Glossary of Terms

Presented in Handout

Test Your Knowledge



Multiple Choice Questions

1. In general terms, statistics are?
 - a) Absolute truth
 - b) Arithmetic estimates
 - c) Free of personal and systematic bias
 - d) Absolute proof of the hypothesis

Multiple Choice Questions (con't)

2. What is an inference?
- a) A premonition
 - b) An educated statistical guess used to solve a particular problem
 - c) The test of a mathematical theorem or hypothesis
 - d) An absolute truth

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Multiple Choice Questions (con't)

3. What is a statistical inference used for?
- a) Determine the absolute truth of a theorem or hypothesis
 - b) Nothing it's only a guess
 - c) A logical method by which relative truth can be extracted from numerical data
 - d) None of the above

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Multiple Choice Questions (con't)

4. A value estimate of a business enterprise is?
- a) A guess by informed persons
 - b) A Solomon-like pronouncement based on an evaluation of elements not readily measurable
 - c) A probability distribution based on the application of generally accepted theories and methodologies
 - d) All of the above
 - e) Items a and c only

82

Multiple Choice Questions (con't)

5. Statistical analysis is?
- a) Subject to manipulation, errors, false inferences and random chance
 - b) Always accurate to the level of precision indicated
 - c) Never accurate as it is simply a guess
 - d) None of the above

83

Multiple Choice Questions (con't)

6. Published statistics are always accurate because statisticians prepare them?
- a) Yes, all results are tested before publication
 - b) No, they are guesses based on incomplete information and can not therefore be accurate
 - c) No, random and systematic errors occur frequently in published surveys and studies
 - d) Yes, they would not be published unless they were true

84

Multiple Choice Questions (con't)

7. Mathematical estimates should be presented how?
- a) With as many decimal places as provided in Excel™ default settings
 - b) With no decimal places
 - c) With two decimal places
 - d) With as many decimal places as needed to prove to level of precision

85

Multiple Choice Questions (con't)

8. Graphical statistics can be manipulated to effect the perception of the data?
- a) No, the graphs, lines and charts represent actual data
 - b) Yes, by altering the aspect ratio of the axis different inferences can be suggested
 - c) Yes, different colors and textures can be used to influence the audience
 - d) Item b and c only
 - e) None of the above

86

Multiple Choice Questions (con't)

9. The most common cause of misleading and false inferences in statistical data is attributed to?
- a) Improper sampling
 - b) Subliminal graphic presentations
 - c) Arithmetic errors in the data
 - d) Inclusion of outlier values

87

Multiple Choice Questions (con't)

10. Data is defined as:
- a) Entities, individuals or groups
 - b) Characteristics of interest
 - c) A set of measurements
 - d) Facts and figures which are collected, analyzed and summarized

88

Multiple Choice Questions (con't)

11. Methods of organizing and summarizing data include?

- a) Numerical statistics
- b) Pictorial statistics
- c) Graphs diagrams
- d) Items a and b only
- e) Items a and c only

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Multiple Choice Questions (con't)

12. The term statistic refers to?

- a) Numerical descriptions of populations
- b) Numerical descriptions of samples
- c) Numerical descriptions of ranges
- d) Numerical descriptions of quartiles

90

Multiple Choice Questions (con't)

13. What are the general measures of central tendency?

- a) Mean
- b) Median
- c) Mode
- d) All the above

91

Multiple Choice Questions (con't)

14. The median is defined as:

- a) The average of a range of values
- b) The point which divides a distribution into equal parts
- c) The point of greatest frequency
- d) The distance between the smallest and largest values in a distribution

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Multiple Choice Questions (con't)

15. The mode is defined as:

- a) The average of a range of values
- b) The point which divides a distribution into equal parts
- c) The point of greatest frequency
- d) The distance between the smallest and largest values in a distribution

93

Use Of Technology To Uncover Fraud

- Computer Assisted Forensic Tools and Techniques (CAFTTs)
 - Access databases
 - Import unlimited data into working files
 - Profile certain characteristics
 - Perform testing on 100% of database v. sampling
 - Does not replace judgment

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Computer Assisted Forensic Tools and Techniques

Roadblocks to Implementation

<u>Statement</u>	<u>Today</u>
<ul style="list-style-type: none"> ■ Too expensive to buy and maintain 	<ul style="list-style-type: none"> ■ <i>No longer run on mainframe computers</i> ■ <i>Cost drastically reduced</i>
<ul style="list-style-type: none"> ■ Too technical for accountants to use 	<ul style="list-style-type: none"> ■ <i>User-friendly versions now in place</i> ■ <i>Many classes available for instruction</i>
<ul style="list-style-type: none"> ■ Only to be used by computer experts 	<ul style="list-style-type: none"> ■ <i>Professionals are more savvy today with some level of expertise</i> ■ <i>Programs are more standardized</i>
<ul style="list-style-type: none"> ■ Too far removed from the hands-on approach to auditing 	<ul style="list-style-type: none"> ■ <i>More of a myth than a reality</i> ■ <i>Ability to run a variety of tests and get immediate results</i> ■ <i>Allows auditors to perform tests of 100% of the transactions without regard to the size of the database</i>
<ul style="list-style-type: none"> ■ May place the clients systems in danger 	<ul style="list-style-type: none"> ■ <i>Software is no longer required to be loaded on client's system</i> ■ <i>Files of data can be downloaded on laptop computers</i>

Advantages of CAFTTs

- Greater efficiency in our assignments
- Ability to review and analyze a larger population
- Greater analytical capabilities
- Uniform application of procedures
- Increased cost efficiency through standardized computer techniques
- More opportunities to develop new approaches
- More efficient management of the case data and work papers

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Examples Of Fraud Uncovered By CAFTTS

- Fictitious vendors
- Altered invoices
- Checks under approval limits
- Duplicated payments
- Payroll schemes

97

Digital Analysis

- Procedures used to analyze the digit and number patterns of data sets, with the aim of finding anomalies and reporting on broad statistical trends
- Benford's Law, duplicate numbers, round numbers, etc.

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Data Analysis Software

- With **Data Mining Software**, you can read, display, analyze, manipulate, sample or extract from data files from almost any sources – mainframe to PC, including reports printed to a file.
- **Data Mining Software** does not require users to be technical specialists.
- Fraud investigation:
 - Purchases and payments – vendor validity, account analysis
 - Payroll – cross-matching, calculations
 - Money laundering – large values, round amounts, frequent movement management

99

Gap Detection

- Identify missing items in a numerical sequence or a range of dates.
- A gap indicates missing items and could include one or more missing items.
- Examples of use of **Gap Detection**:
 - Determine missing invoice numbers.
 - Determine gaps in credit memos.
 - Determine missing check numbers.
 - Determine date when recurring entry does not occur.

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Duplicate Detection

- Identify and / or isolate records with or without duplicate values.
- Examples of use of **Duplicate Detection**:
 - Duplicate vendors.
 - Duplicate invoice numbers assigned to different vendors.
 - Duplicate credit memo numbers issued.
 - Duplicate check numbers.
 - Duplicate numbers test.
 - Items without a duplicate, such as one-sided journal entries.

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Numeric Tests

NUMERIC TESTS

The Numeric Tests are comprised of 2 key examinations, e.g. a Numeric Duplication Test and a Rounded Numbers Test. Once any significant duplication has been identified, meaningful inferences can be drawn through further investigation.

The Numeric Duplication Test is used to identify abnormal recurrences of specific numbers. The objective is to draw attention to small groups of numbers that appear to be unusual.

The Rounded Numbers Test operates on the same premises as the Numeric Duplication Test. However, the objective is to identify abnormal recurrences of *rounded* numbers. Abnormal recurrences of rounded numbers are good indicia of estimation since people tend to estimate when they create contrived numbers.

Duplicate Numbers Test

Amount	# of Records	Total Amount	% of Records	% of Debits
10.00	469	4,690.00	2.21%	0.00%
15.00	144	2,160.00	0.68%	0.00%
18.00	41	738.00	0.19%	0.00%
18.50	129	2,386.50	0.61%	0.00%
20.00	201	4,020.00	0.95%	0.00%
22.00	37	814.00	0.17%	0.00%
25.00	651	16,275.00	3.07%	0.01%
30.00	45	1,350.00	0.21%	0.00%
40.00	114	4,560.00	0.54%	0.00%
50.00	42	2,100.00	0.20%	0.00%
100.00	204	20,400.00	0.96%	0.01%
150.00	41	6,150.00	0.19%	0.00%
200.00	91	18,200.00	0.43%	0.01%
250.00	38	9,500.00	0.18%	0.01%
300.00	208	62,400.00	0.98%	0.04%
301.50	111	33,466.50	0.52%	0.02%
400.00	34	13,600.00	0.16%	0.01%
450.00	22	9,900.00	0.10%	0.01%
500.00	91	45,500.00	0.43%	0.03%
550.00	16	8,800.00	0.08%	0.01%
600.00	34	20,400.00	0.16%	0.01%
650.00	10	6,500.00	0.05%	0.00%
700.00	23	16,100.00	0.11%	0.01%
750.00	38	28,500.00	0.18%	0.02%
800.00	26	20,800.00	0.12%	0.01%
900.00	14	12,600.00	0.07%	0.01%
950.00	10	9,500.00	0.05%	0.01%

Querying Data

- Select, analyze or search for data based on chosen criteria.
- Extractions – **query data** and isolate the desired records.
- Examples of Extractions:
 - Entries made on weekends.
 - Round number entries.
 - Stratified Random Sampling.

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Round Numbers

Rounded	Number of Records	Aggregate Withdrawals	Actual Proportion	Expected Proportion	Direction	Z-Statistic
10s	6,287	\$108,667,550.00	0.25971	0.1 over		82.8198
25s	5,533	\$106,764,875.00	0.22856	0.04 over		149.6980
100s	4,054	\$104,427,800.00	0.16747	0.01 over		246.2083
1000s	2,369	\$97,216,000.00	0.09786	0.001 over		476.7037

105

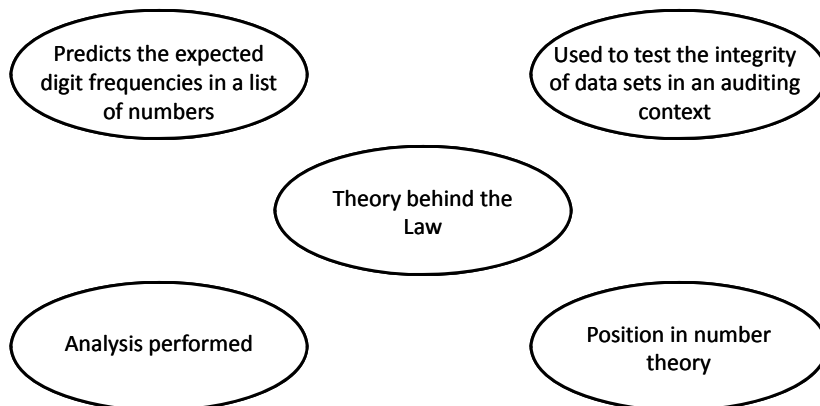
Benford's Law

Benford's Law is an analytical technique identified in the late 1800s and developed during the 1920s by Frank Benford, a physicist at General Electric research laboratories. He noted that the first few pages of logarithm table books were more worn than the later pages. In those days, logarithm table books were used to accelerate the process of multiplying 2 large numbers by summing the log of each number and then referring to the table for the requisite integer.

Benford's Law states that digits and digit sequences in a dataset follow a predictable pattern. The technique applies a data analysis method that identifies possible errors, potential fraud or other irregularities. For example, if artificial values are present in a dataset the distribution of the digits in the dataset will likely exhibit a different shape (when viewed graphically), than the shape predicted by Benford's Law. Benford proved his theory by using 20 lists containing 20,229 numbers, and produced the statistical array that is still applied today.

106

Benford's Law



107

Benford's Law

The specific probabilities of the first digit being any number are listed below:

<u>Position in Number</u>		
<u>Digit</u>	<u>1st</u>	<u>2nd</u>
0	-	11.9%
1	30.1%	11.4%
2	17.6%	10.9%
3	12.5 %	10.4%
4	9.7%	10.0%
5	7.9%	9.7%
6	6.7%	9.3%
7	5.8%	9.0%
8	5.1%	8.8%
9	4.6%	8.5%

108

Benford's Law - Requirements

- Sizes of similar phenomena
 - e.g. Revenues for corporations on the NYSE
- No built-in minimum or maximum numbers
 - Zero is an acceptable as a minimum
- No assigned numbers
 - i.e. social security numbers or zip codes
- Positively skewed when ranked smallest to largest
 - Mean > Median (larger ratio = better fit)
 - More small numbers than large numbers
- Scale invariant
 - If Benford's compliant, would still be in new scale (feet to meters)

109

Benford's Law – Major Digit Tests

Major Digital Tests

The digital analytical tests applied through Benford's Law are comprised of the following:

- ❑ **First Digits Test** - The first Major Digital Test is a test of the first digit proportions, a test for reasonableness. The first digit of a number is the leftmost digit with the understanding that the first digit can never be a zero. For example, the first digit of 7,380 is "7."
- ❑ **Second Digits Test** - The second Major Digital Test is a test of the second digit proportions, also a test for reasonableness. The second digit of a number is likewise determined by its placement within the number, thus the second digit of 7,380 is "3."
- ❑ **First 2 Digits Test** – This test is more focused than the 2 preceding tests and uses the first 2 leading digits, again excluding zeros. For example, the first 2 digits of 7,380 are "73" and the first 2 digits of 0.07380 are also "73." There are 90 possible first-two digit combinations: 10 to 99 inclusive. This test finds anomalies in the data that are not readily apparent from either the first or second digits seen on their own.
- ❑ **First 3 Digits Test** – This test focuses on the 900 possible first 3 digit combinations: 100 to 999 inclusive. This highly focused test indicates abnormal duplications.

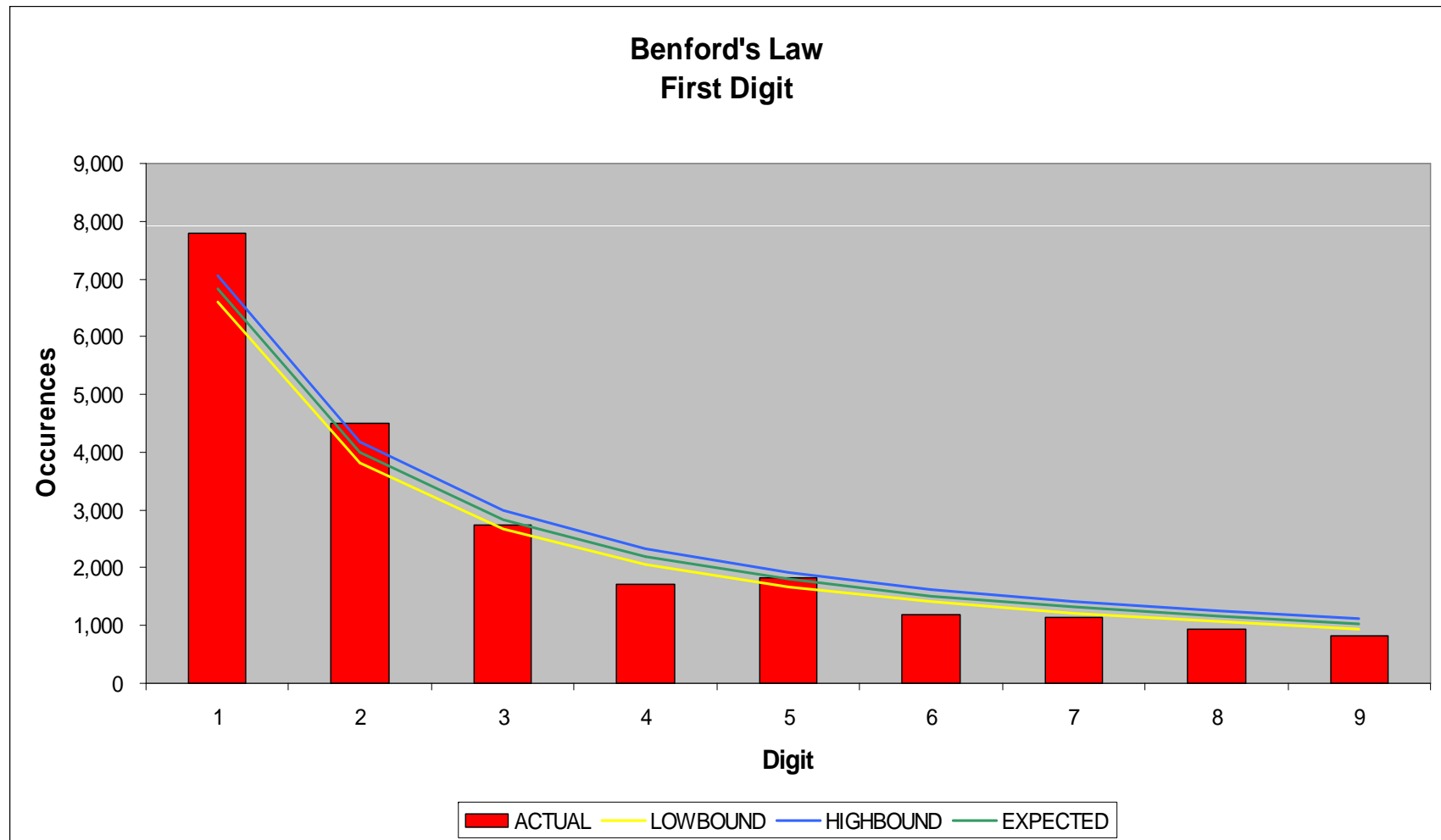
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Benford's Law – Major Digit Tests

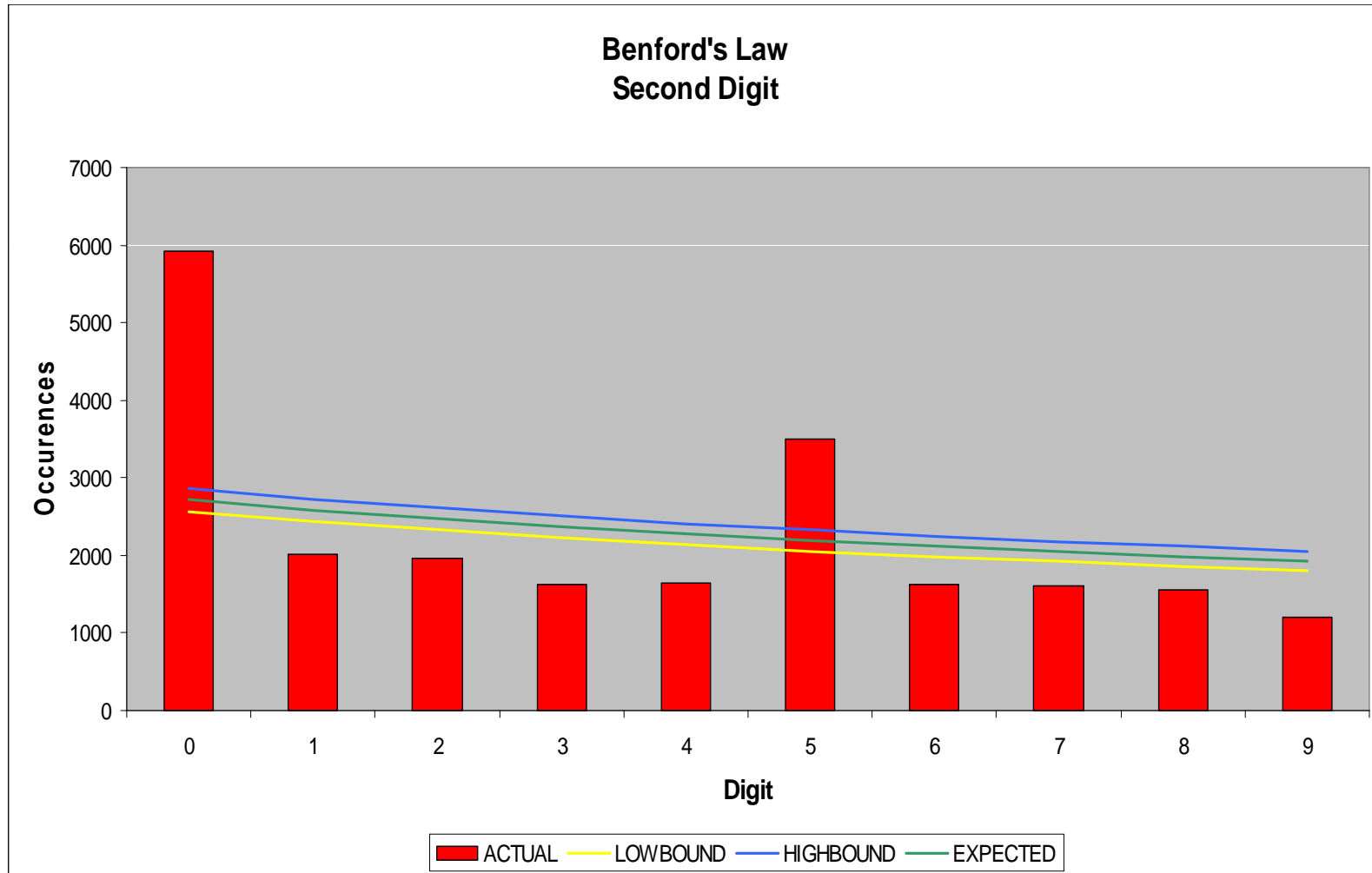
- Benford's Law tests results can provide a roadmap for the investigation as well as provide indirect evidence.
 - The 1st and 2nd digit test are high level and not used to select samples.
 - The 1st two and 1st three digits tests are designed to select audit samples.
 - The last two digits test detect excessive rounding or numeric invention.
- Existence of a pattern or benchmark
 - Not necessarily one consistent pattern, but some pattern which false or wrong data will deviate from.
 - "Before and After" Testing.

111

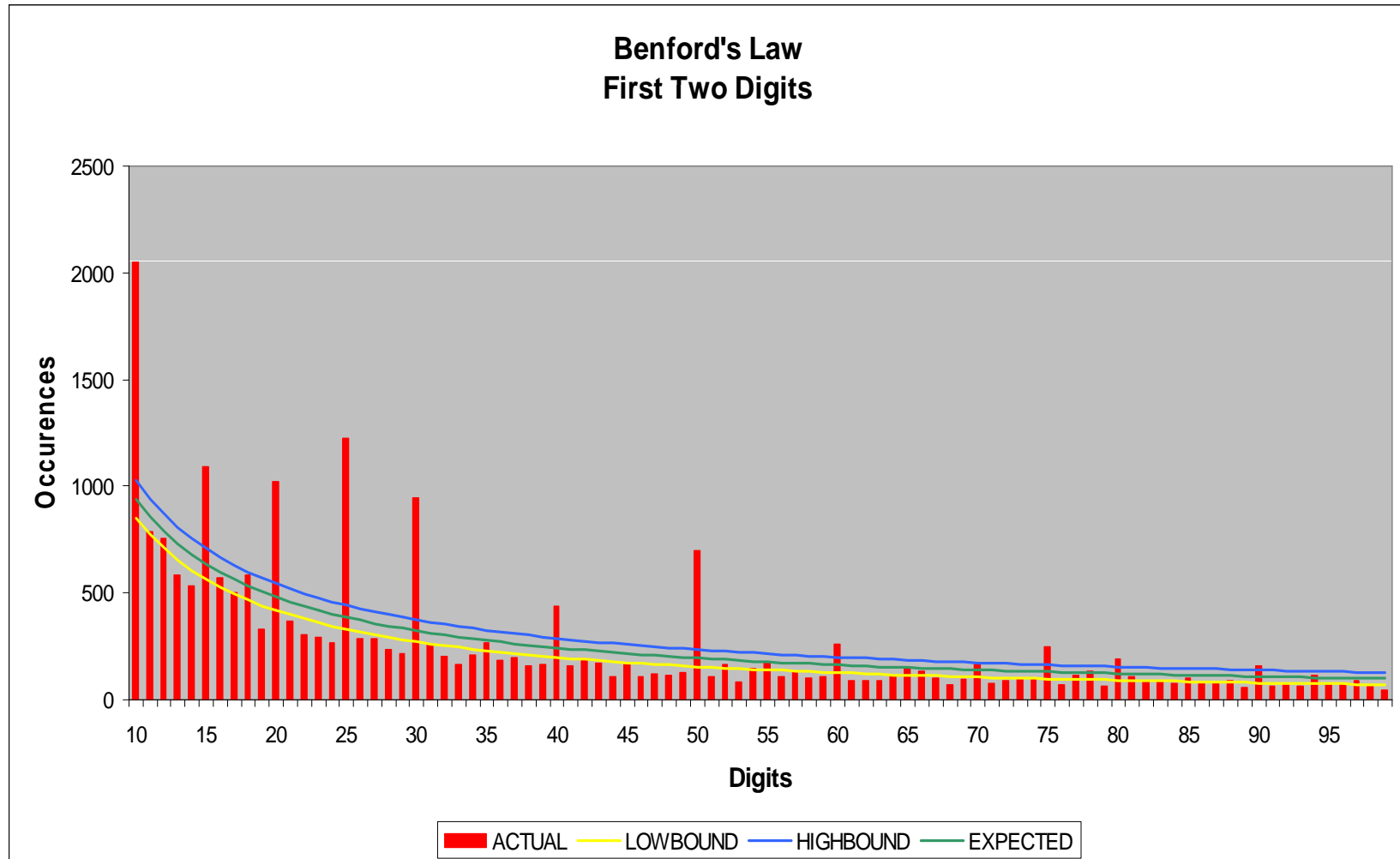
First Digit Test



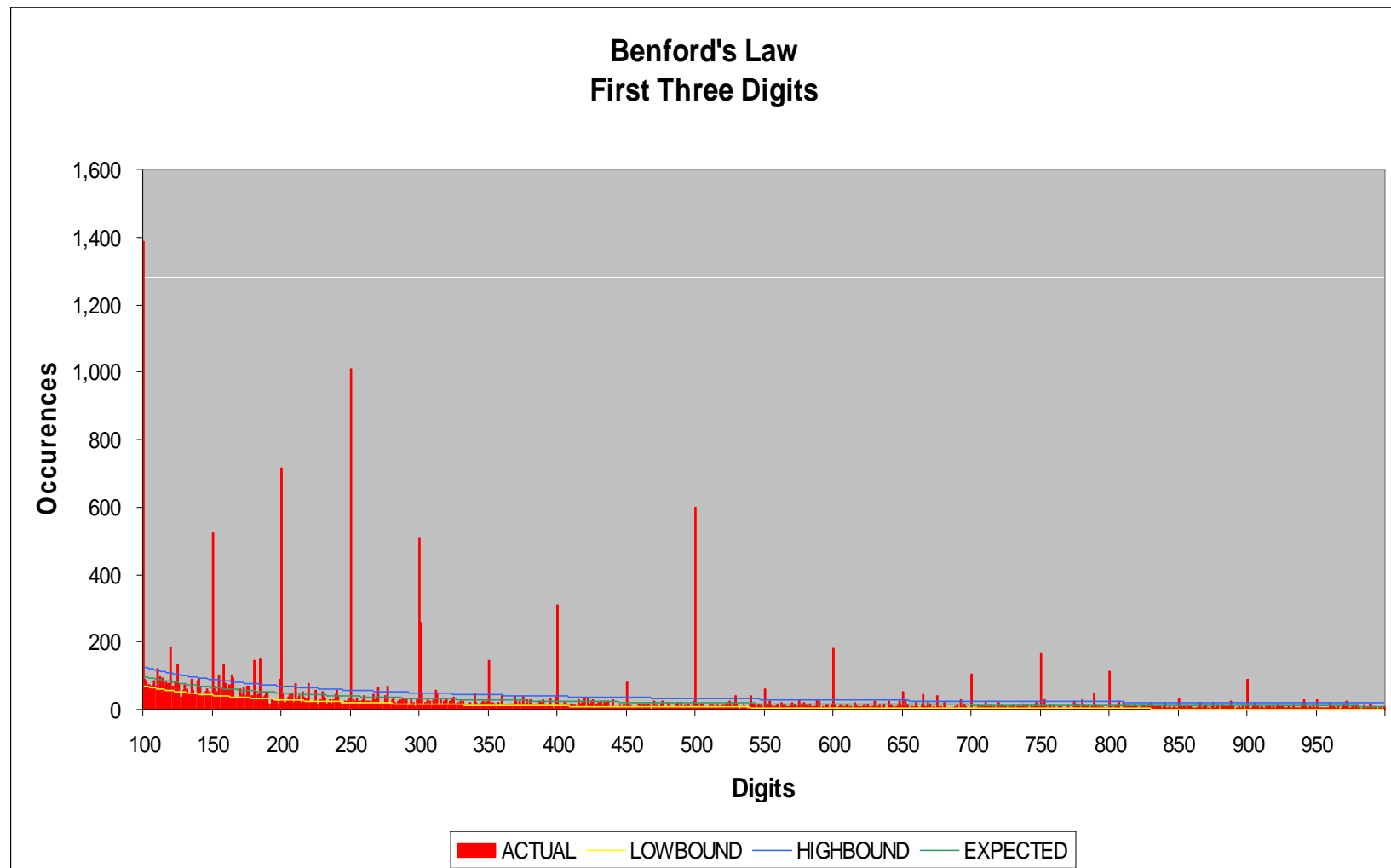
Second Digit Test



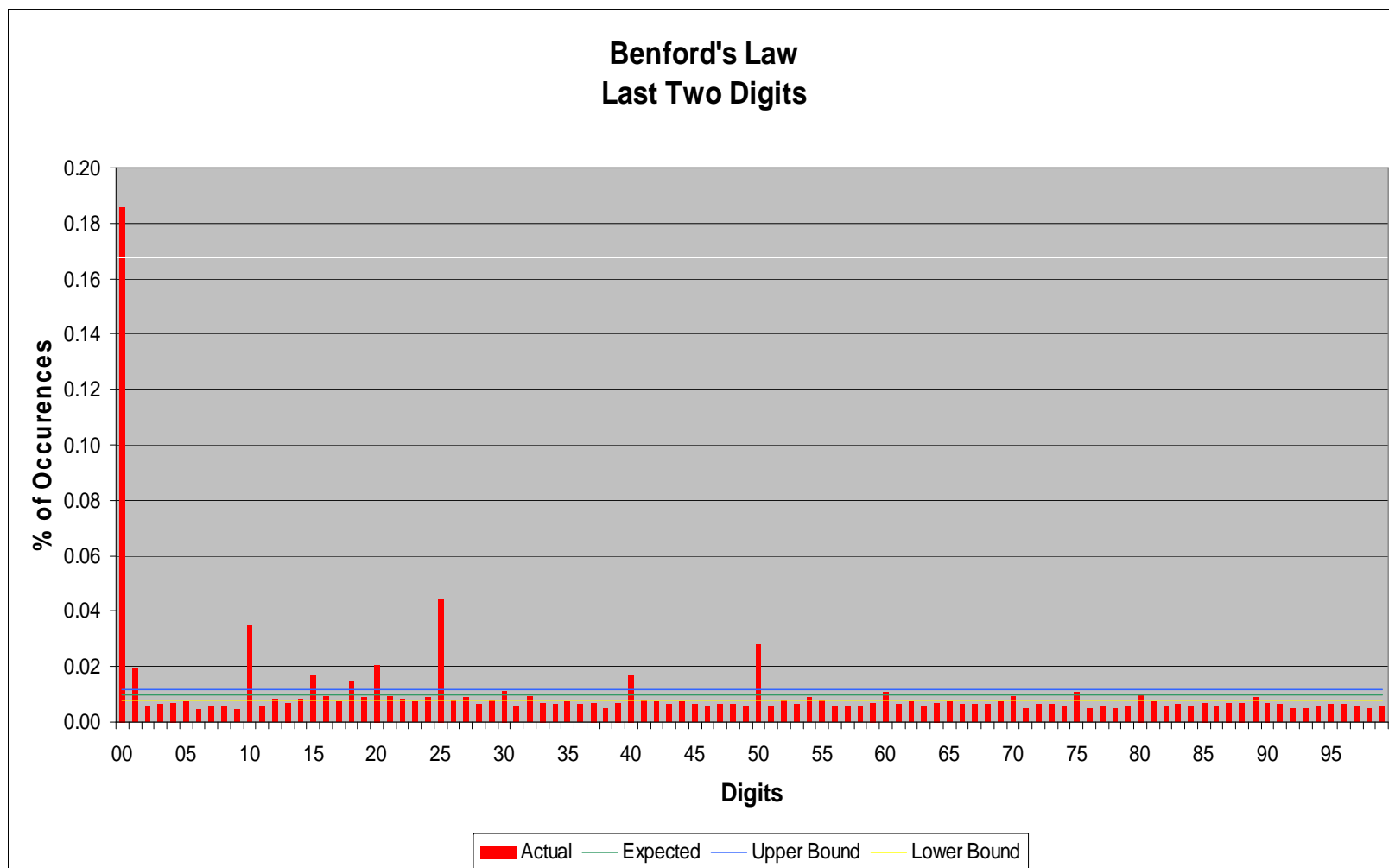
First Two Digits Test



First Three Digits Test



Last Two Digits Test



Stratified Random Sampling

- Extract a random sample with a specified number of records from each of a series of categories (strata).
- When to utilize **Stratified Random Sampling**:
 - Disbursement authorization threshold.
 - Agreed upon procedure materiality threshold.
- How to perform a **Stratified Random Sample**:
 - Stratify the database into a series of numbers, characters or dates.
 - Determine the number of records included in each band.
 - Select the number of random records to select from each category.

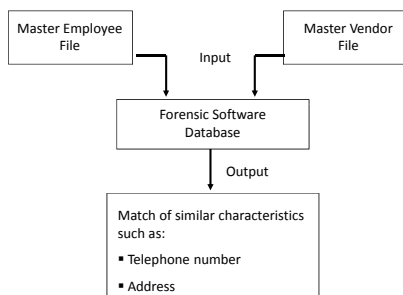
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Link Analysis

- Review relationships between two separate databases.
- Examples of when to utilize **Link Analysis**:
 - Ghost employees.
 - Fictitious vendors.
- How to perform **Link Analysis**:
 - Determine the link between two databases.
 - Join Databases.

118

Use Of Technology To Uncover Fraud



119

Join Databases

- Combine two databases into a single database for testing.
- Test for data which matches or does not match across spreadsheets.

120

BENFORD'S LAW QUIZ

Would you expect the following data sets to conform to Benford's Law and why?

121

1. The populations of towns and cities in Europe.

122

2. The daily and weekly number of shares bought and sold for an individual company for the approximately 4,000 companies listed on the NYSE.

123

3. The same as above but for the Johannesburg Stock Exchange.

124

4. The five-digit postal zip codes used in the United States.

125

5. The claims paid by an automobile insurer that imposes a \$500 deductible for each claim.

126

6. The points scored by each team in the National Football League in the United States. If there are 30 teams that each play 14 games your list will have 420 scores.

127

7. The street numbers for every house in the United states that has a street number.

128

8. The disbursements for a full year on an invoice-by-invoice basis for General Electric.

129

9. The dollar amounts of each air ticket sold or refunded by American Airlines for a full year.

130

10. The heights in meters of 10-year-old boys.

131

11. The invoiced amount of each bill issued by DIRECTV, a satellite-based television provider.

132

12. The dollar and cents selling prices of each item on the shelves of the Krogers supermarket in Hyde Park, Cincinnati, Ohio.

133

13. The individual sales amounts for new cars at a Mercedes Benz dealership.

134

14. The extended inventory values (quantity times cost) of a Wal-Mart warehouse with more than 20,000 line items.

135

15. The populations of the 50 United States.

136

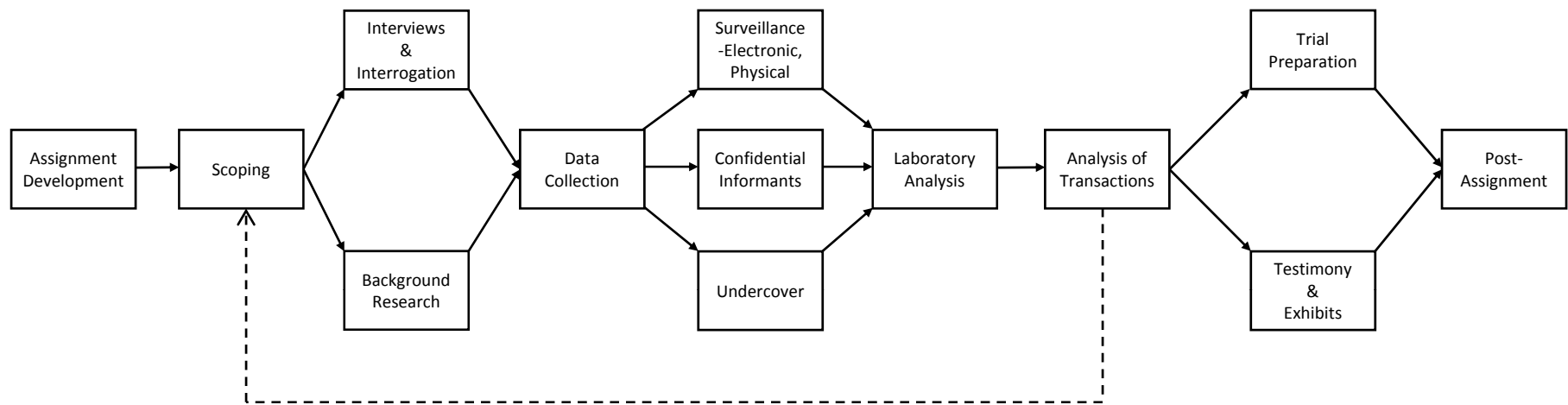
IDEA

Sample Exercises

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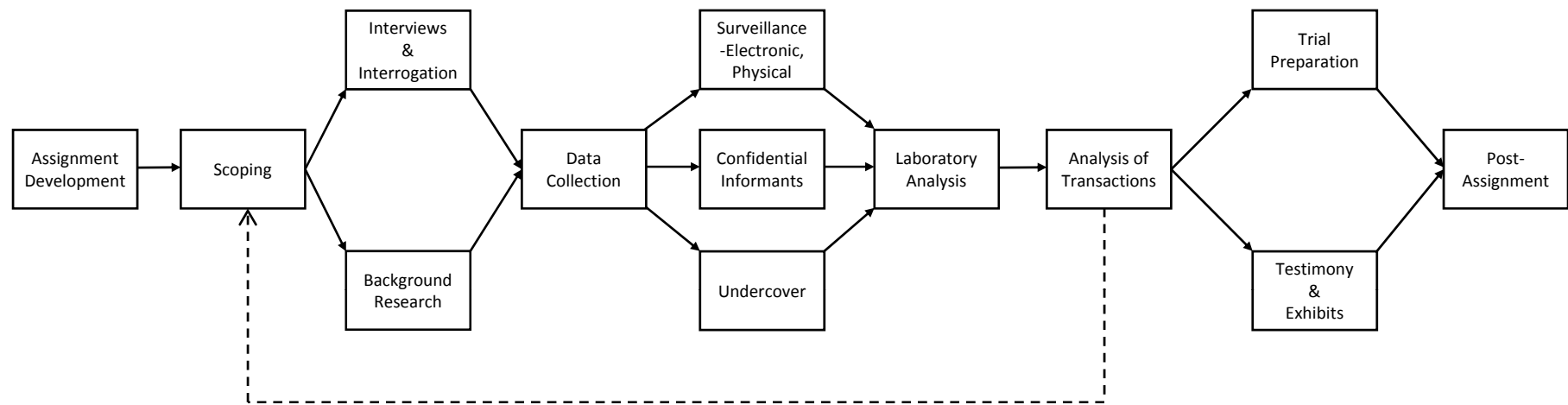
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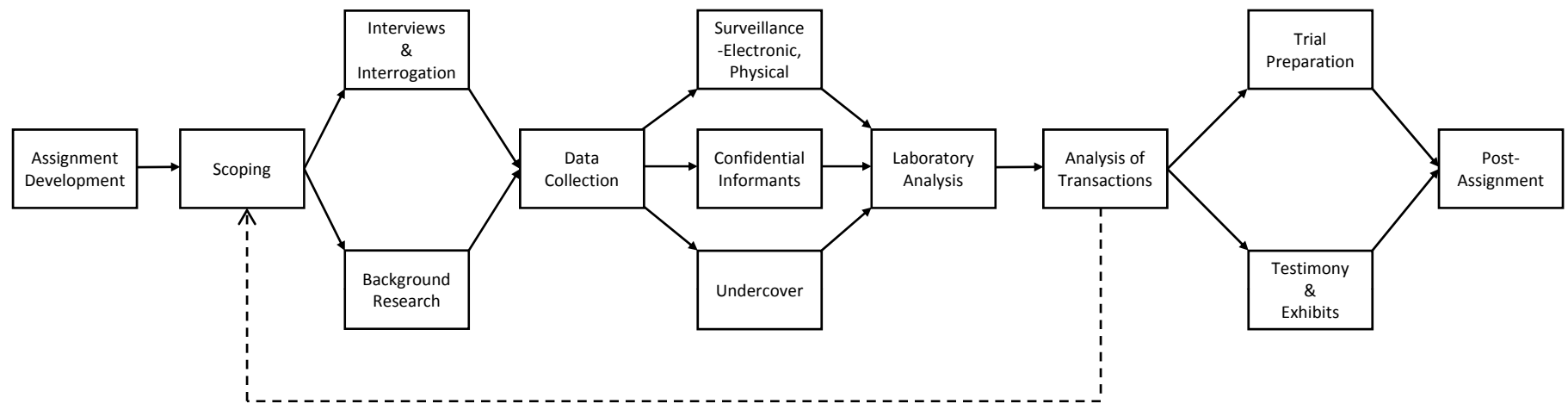
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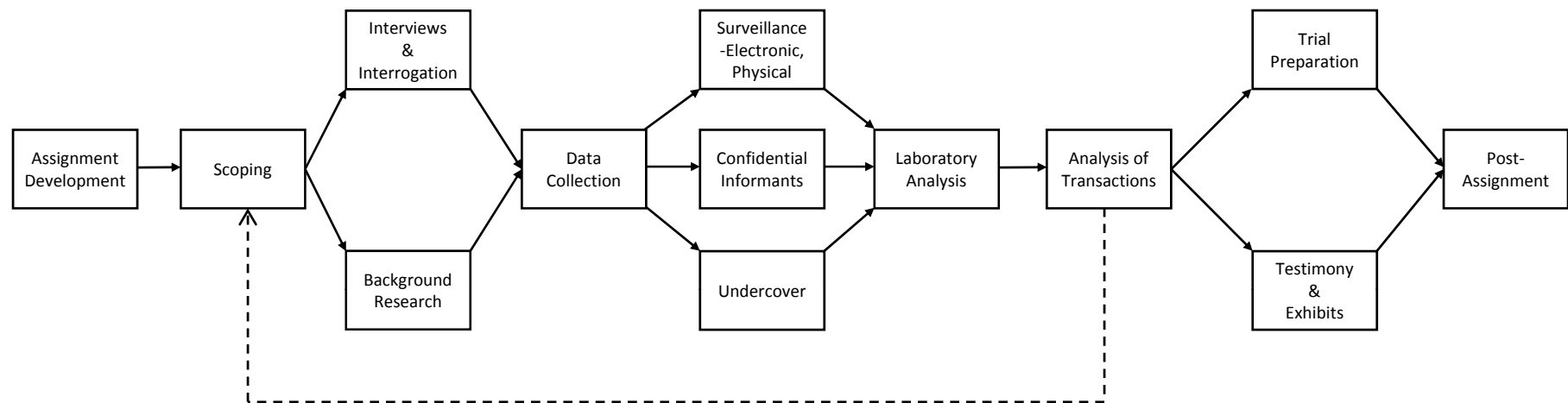
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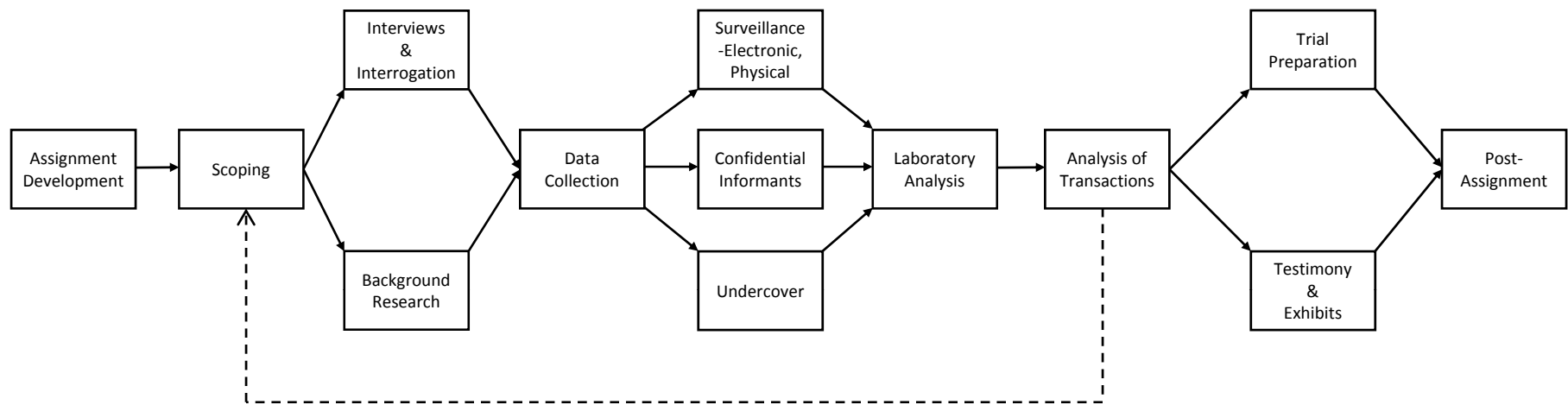
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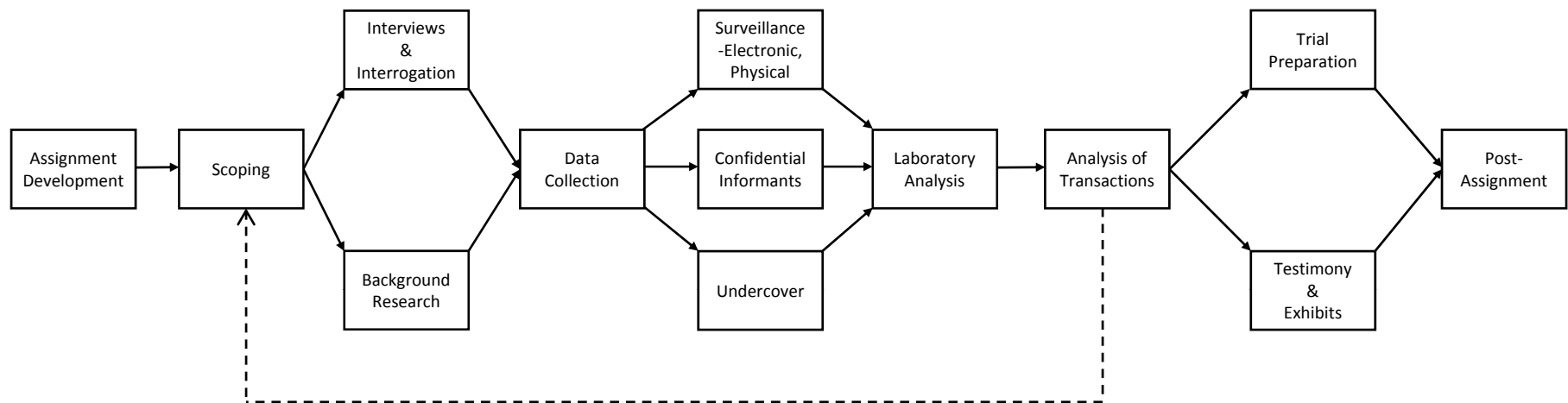
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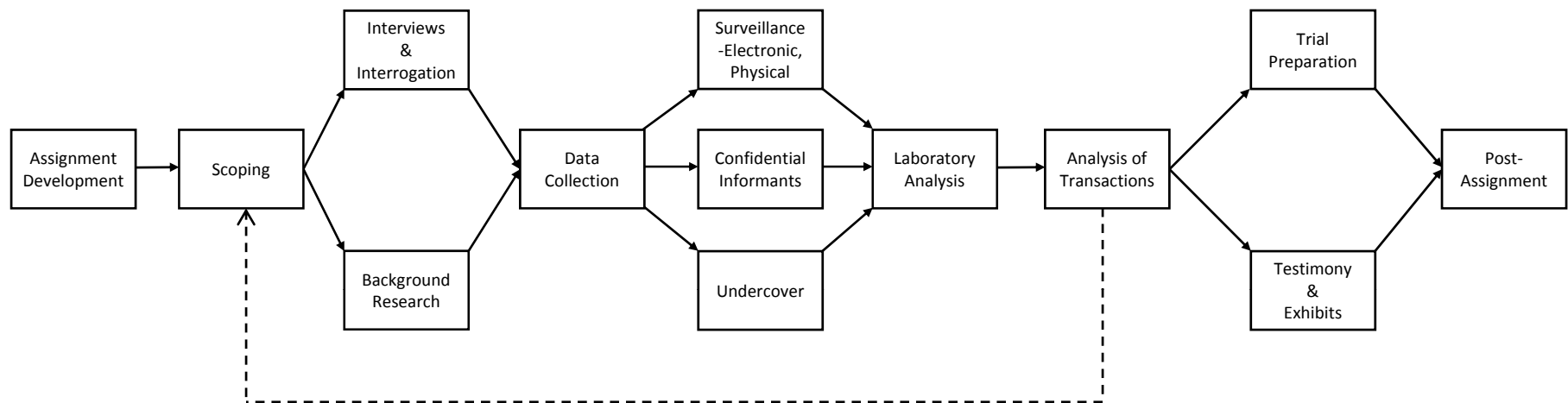
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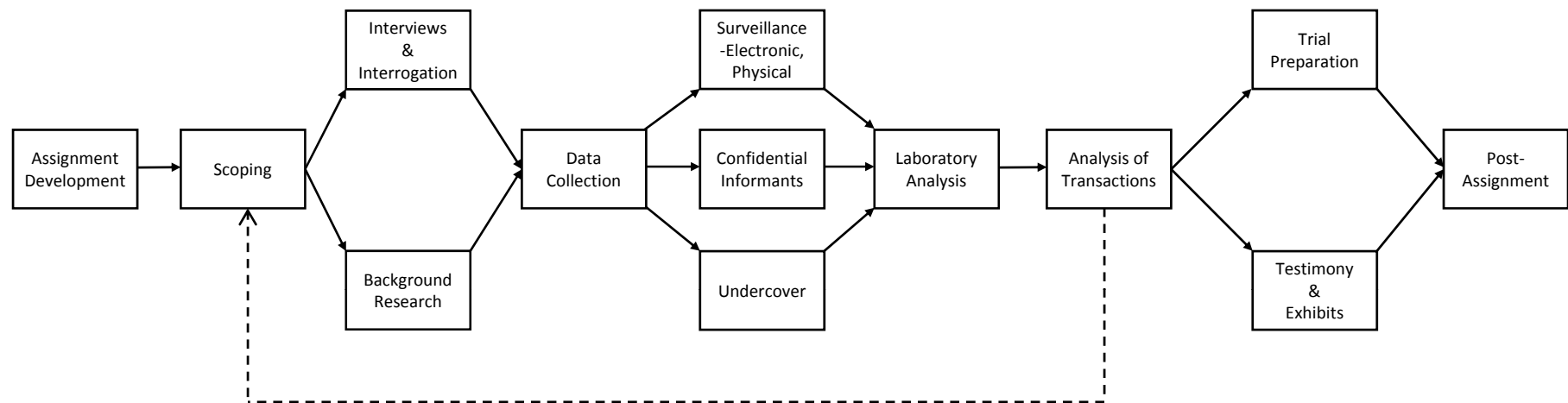
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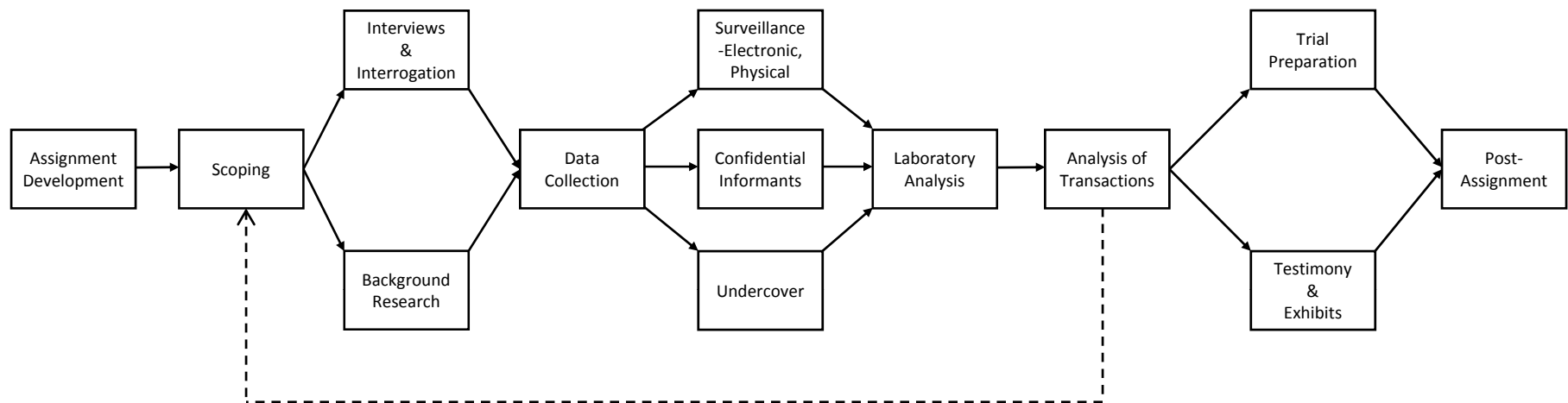
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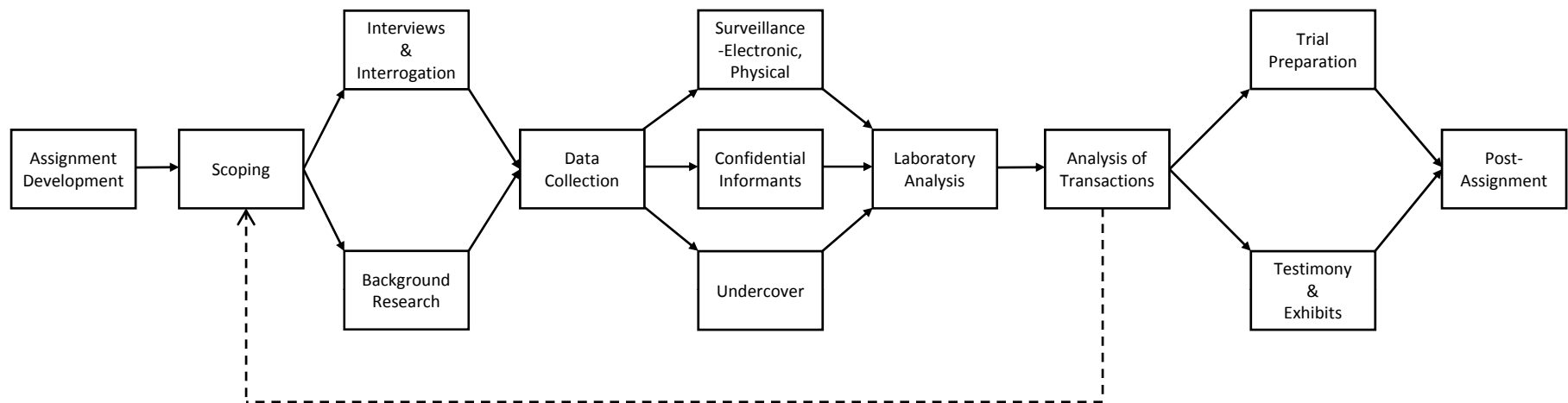
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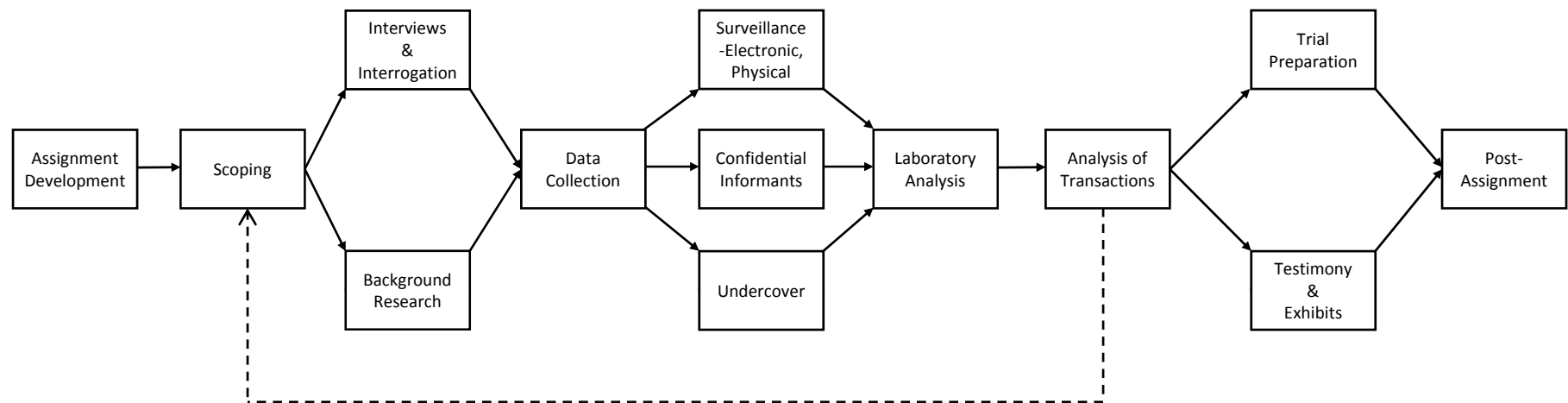
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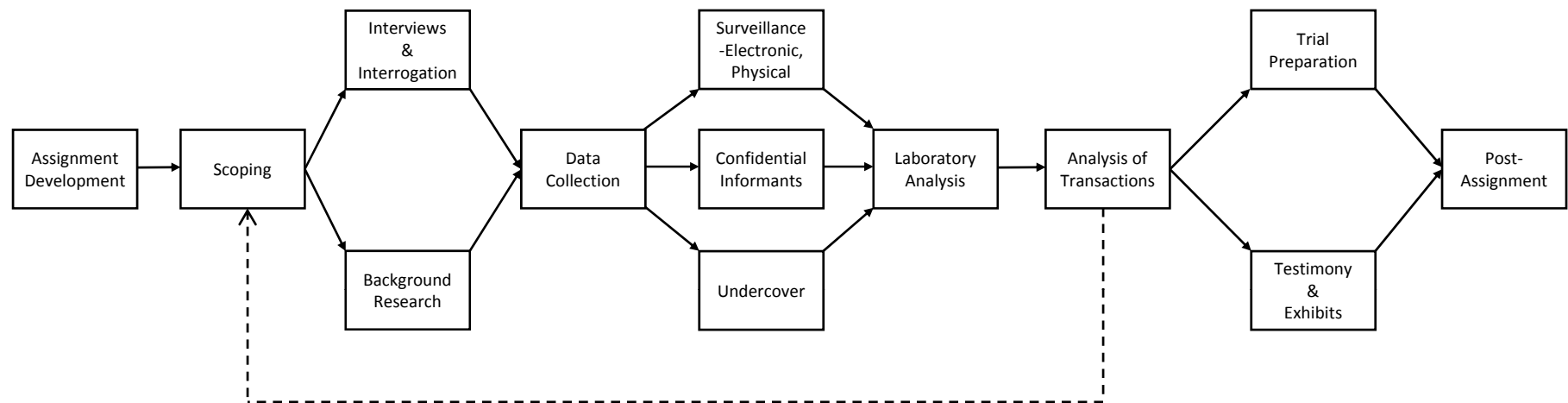
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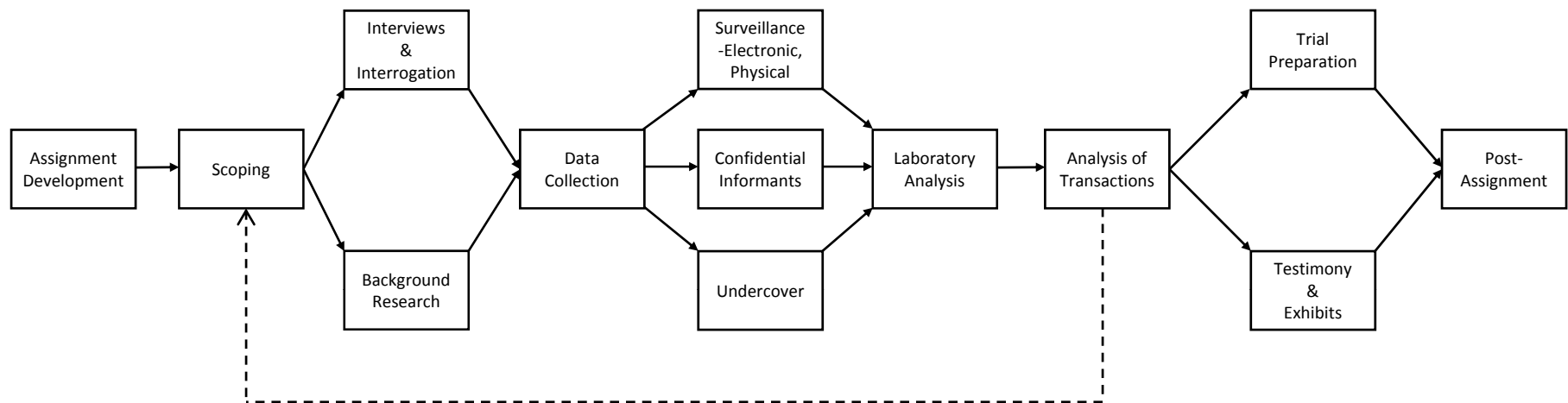
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Forensic Accounting/Investigation Methodology (FA/IM)©

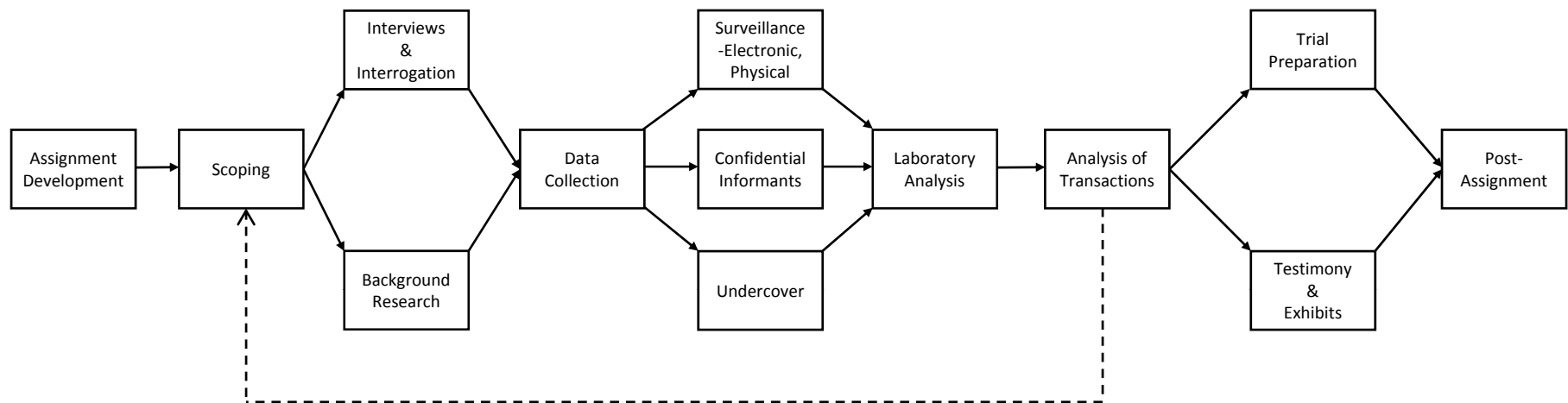
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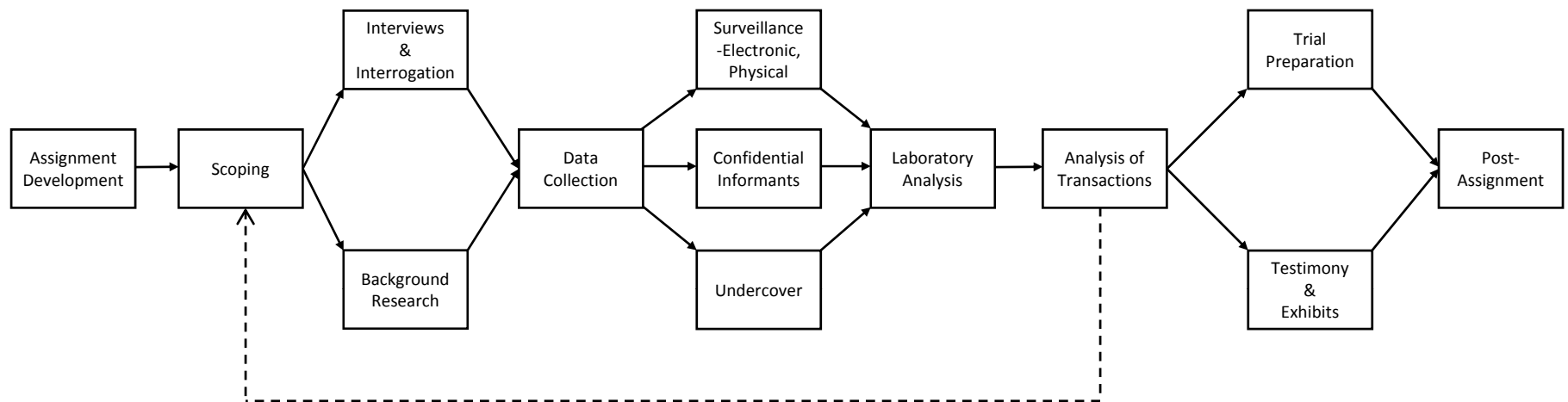
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Introduction to Forensic Accounting and Applicable Standards

In the performance of *any professional service*, Rule 102, *Integrity and Objectivity* (AICPA, *Professional Standards*, vol. 2, ET sec. 102 par. .01), requires members maintain objectivity and integrity, be free of conflicts of interest, and **not knowingly misrepresent** facts or subordinate his or her judgment to others.

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Introduction to Forensic Accounting and Applicable Standards

Statement on Standards for Consulting Services (SSCS) No. 1

Definitions - Terms established for the purpose of the SSCSs are as follows:

- *“Consulting Services.* Professional services that employ the practitioner’s technical skills, education, observations, experience, and knowledge of the consulting process.” Transaction services is listed as subset of Consulting Service.
- *“Transaction services, in which the practitioner’s function is to provide services related to a specific client transaction, generally with a third party. Examples of transaction services are insolvency services, **valuation services**, preparation of information for obtaining financing, analysis of a potential merger or acquisition, and **litigation services.**”*

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Introduction to Forensic Accounting and Applicable Standards

Standards for Consulting Services

The general standards of the profession are contained in Rule 201 of the AICPA Code of Professional Conduct and apply to all services performed by members. They are as follows:

- *Professional competence.* Undertake only those professional services that the member or the member’s firm can reasonably expect to be completed with professional competence.
- *Due professional care.* Exercise due professional care in the performance of professional services.
- *Planning and supervision.* Adequately plan and supervise the performance of professional services.
- *Sufficient relevant data.* Obtain sufficient relevant data to afford a reasonable basis for conclusions or recommendations in relation to any professional services performed.

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Introduction to Forensic Accounting and Applicable Standards

Standards for Consulting Services

- The following additional general standards for all Consulting Services are promulgated to address the distinctive nature of Consulting Services in which the understanding with the client may establish valid limitations on the practitioner's performance of services. These Standards are established under Rule 202 of the AICPA Code of Professional Conduct.
 - *Client Interest.* Serve the client interest by seeking to accomplish the objectives established by the understanding with the client while maintaining integrity and objectivity.
 - *Understanding with Client.* Establish with the client a written or oral understanding about the responsibilities of the parties and the nature, scope, and limitations of services to be performed, and modify the understanding if circumstances require a significant change during the engagement.
 - *Communication with Client.* Inform the client of (a) conflicts of interest that may occur pursuant to interpretations of Rule 102 of the Code of Professional Conduct, (b) significant reservations concerning the scope or benefits of the engagement, and (c) significant engagement findings or events.

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Reports

- Why do experts write reports?
 - Lawyers can:
 - Read
 - Depose
 - Cross-examine
 - Settle
- Are they discoverable?
- If so, why?
- Are they admissible into evidence?
- If not, why not?

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Federal Rules of Civil Procedure

- Rule 26 - Duty to Disclose; General Provisions Governing Discovery
- (2) *Disclosure of Expert Testimony*
- (b) *Written Report.*
- Judge may modify the rule, otherwise a written report must be prepared and signed
 - Note: The testifying expert signs, not the firm

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Evidence

- Federal Rule of Civil Procedure 26(a)(2)(B) controls - the report shall contain:
 - a complete statement of all opinions to be expressed and the basis and reasons for that opinion
 - the data or other information considered by the witness in forming the opinions;
 - any exhibits to be used as a summary of or support for the opinions;
 - the qualifications of the witness, including a list of all publications authored by the witness within the preceding ten years; the compensation to be paid for the study and testimony;
 - and a listing of any other cases in which the witness has testified as an expert at trial or by deposition within the preceding four years.

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Rule 26 (a) (2) (b) (i)

- (i) a complete statement of all opinions the witness will express and the basis and reasons for them;
 - What if an opinion is not stated?
 - What if the basis for the opinions are not stated?
 - What if the reasons are not stated?
- How much explanation to provide

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Rule 26 (a) (2) (b) (ii)

- (ii) the data or other information considered by the witness in forming them;
 - List the documentation considered
 - Meaning of “considered”
 - When in doubt
 - Too much or too little?

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Rule 26 (a) (2) (b) (iii)

- (iii) any exhibits that will be used to summarize or support them;
 - Can end up being trial exhibits
 - Statement in report that supplementary exhibits may be used at trial – does this work?

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Rule 26 (a) (2) (b) (iv)

- (iv) the witness's qualifications, including a list of all publications authored in the previous 10 years;
 - This is where you prepare to convince the court to admit you as an expert
 - Qualifications may include
 - Education
 - Experience
 - Certifications
 - Prior cases
 - Use of authored publications

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Rule 26 (a) (2) (b) (v)

- (v) a list of all other cases in which, during the previous 4 years, the witness testified as an expert at trial or by deposition; and
 - Provide two separate lists

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IMPORTANT!

- If you are going to be an Expert Witness (ever)
- Start to develop **RIGHT NOW**:
 1. A list of all publications authored in the previous 10 years;
 2. A list of all other cases in which, during the previous 4 years, the witness testified as an expert
 1. at trial
 2. or by deposition

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Rule 26 (a) (2) (b) (vi)

- (vi) a statement of the compensation to be paid for the study and testimony in the case.
 - State rates; or
 - Compensation paid to date; or
 - Both

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Report Writing

Are reports ever really complete?

What about a report issued prior to trial continuance then the business that is the subject of the suit has its audit report issued?

Sample Work in Progress Disclaimer:

"This document is based upon incomplete information and is recognized as a preliminary draft of work in progress. The statements and conclusions herein are tentative and should not be relied upon as conclusive or final. Additional information is being developed and will be provided that may alter the noted facts, analysis and conclusions."

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You should implement ***NOW!***

- ✓ Full-and-False Inclusion
- ✓ Genogram
- ✓ TATA
- ✓ AQI
- ✓ Behavior Detection
- ✓ FACS
- ✓ Styleometry
- ✓ ICE©/SCORE©
- ✓ Link Analysis
- ✓ Articulated Cash Flow
- ✓ Dechow-Dichev Techniques
- ✓ Timeline Analysis
- ✓ (Modified) Net Worth
- ✓ Expectations Attributes
- ✓ Gap Detection
- ✓ www.BlackBookOnLine.Info
- ✓ Proof-of-Cash
- ✓ Deposition Matrix
- ✓ Entity(s) Chart
- ✓ Lev-Thiagarajan Techniques
- ✓ Damages Report Card
- ✓ Digital Analysis
- ✓ CATA
- ✓ TITA
- ✓ CRO
- ✓ MSSP