MIS 520 – Data Analytics for IT Auditors

Week 1: Introduction to Fraud

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The Many Faces of Fraud
Fraud

Theft
(Misappropriation)

Deceptive Statements

Corruption
## Fraud

The intent to deceive to obtain an unearned benefit.

### Fraud:
- Is an illegal act or acts (intentional wrongdoing that violates a law or laws)
- Includes the concealment of the act or acts
- Results in the perpetrators gaining financial benefit from the act (monetizing the gains - cash or another valuable commodity)

### Examples:
- Borrowing money using someone else’s identity
- Misrepresent the profitability of a publicly traded company to artificially inflate the company’s stock price
- Misrepresent the profitability of a privately held company, when selling the company, to make the buyer believe the company is worth more than it actually is
- Plant small quantities of valuable ore on land for sale to deceive potential buyers about the value of the land
- Using a stolen credit card to purchase goods and or services
- Often seen in conjunction with money laundering to hide the proceeds of the fraud
## Fraud Other Examples

<table>
<thead>
<tr>
<th>Fraud that benefits An Organization</th>
<th>Fraud that harms an organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improper transfer pricing between related entities</td>
<td>Stealing money, property or falsifying financial records to cover up a theft</td>
</tr>
<tr>
<td>Intentional improper related-party transactions where one party receives some benefit not obtainable in a normal arm’s length transaction.</td>
<td>Intentionally misrepresenting or concealing events or data</td>
</tr>
<tr>
<td>Legally transferring (assignment) fictitious or misrepresented assets or sales</td>
<td>Submitting claims for services or goods not actually provided by the organization.</td>
</tr>
<tr>
<td>Deliberate misrepresenting or valuing assets, liabilities or sales in a financial transaction</td>
<td></td>
</tr>
<tr>
<td>Conducting business activities that violate government statutes, rules, regulations, or contracts</td>
<td></td>
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<tr>
<td>Misrepresenting the financial status of an organization to outside parties by intentionally failing to disclose significant information.</td>
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</table>
Revenues the typical organization loses to fraud each year

5%
Our study analyzes 1,483 cases that caused in excess of $3 billion in losses due to fraud.
of occupational fraud cases cause losses of more than $1 million
POSITION

The majority of occupational frauds were committed by staff at the employee or managerial level.

- Employee: 42%
- Manager: 36%
- Owner/Executive: 19%
MEDIAN LOSS BY POSITION
The higher the fraudster’s level of authority, the greater losses tended to be.

$75,000
EMPLOYEE

$130,000
MANAGER

$500,000
OWNER/EXECUTIVE
MEDIAN LOSS BY POSITION
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DEPARTMENT

77% of all occupational frauds originated in one of seven organizational departments: accounting, operations, sales, executive/upper management, customer service, purchasing and finance.

GENDER

Male fraudsters outnumbered females two to one.
MEDIAN LOSS BY GENDER
Losses attributed to males were 123% higher than losses caused by females.

AGE
52% of fraudsters were between 31 and 45 years old, but older fraudsters tended to cause larger losses.

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TENURE
7% of perpetrators committed fraud during their first year on the job. 53% had been with their organizations for more than five years.
Money Laundering
How Do Criminals Think About Money?

- A large percentage of your money (wealth) is illegal
- The government will seize this money (wealth) if detected and caught
- Therefore criminals need to:
  - Hide their wealth
  - Transport / Transfer in order to hide
  - Transform the wealth from illegally sourced funds to legally sourced funds
- Enjoy
**Fraud vs. Money Laundering**

**Fraud**
- Secure cash or property under false pretenses
- Companies or individuals that are victims of fraud incur financial losses.

**Money Laundering**
- Companies or individuals the launder money do not incur financial losses
- Money laundering separates the source of the cash
- Loss is only experienced if the government seizes funds due to illegal activity
Money Laundering

An estimated 900 billion to 1 trillion US dollars of illicit funds circulating worldwide. Approximately 500 to 600 billion US dollars associated with the drug trade. About 300 billion US dollars associated with United States drug sales.

Aggregate money laundering is estimated to be 2% to 5% of the world’s gross domestic product (GDP).

Physical introduction of bulk cash into the financial system – cash deposits, and cash equivalent purchases – currency smuggling.

Separating the proceeds of criminal activity for their source through complex layers of transactions – using more than one financial institution – obscuring the audit trail.

Placing the laundered funds back into the economy – entering as apparently legitimate funds. Accomplished through real-estate purchases, shell companies, and securities investments.

The Fraud Triangle

Why Is There Fraud?

Rationalization:
- I am simply borrowing the money...
- Everyone else is doing it...
- We are just meeting our numbers...
- It’s not really illegal...
- I have to do this for my family...
- If I don’t they will break my legs...

Access:
- Physical
- System
- Process

Opportunity

Means

Motive (Pressure)

Weak Internal Process & System Controls
Weak External Process & System Controls

Personal Gain

Integrity

Classic Criminal & Fraudulent Activity
How Occupational Fraud is Committed
Occupational Fraud – Percentage of Cases

- **Asset Misappropriation**: 85.4% (2014), 86.7% (2012), 86.3% (2010)
- **Corruption**: 36.8% (2014), 33.4% (2012), 32.9% (2010)
- **Financial Statement Fraud**: 9.0% (2014), 7.6% (2012), 4.8% (2010)
Occupational Fraud – Median Loss

<table>
<thead>
<tr>
<th>Type of Fraud</th>
<th>2014</th>
<th>2012</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset Misappropriation</td>
<td>$130,000</td>
<td>$120,000</td>
<td>$135,000</td>
</tr>
<tr>
<td>Corruption</td>
<td>$200,000</td>
<td>$250,000</td>
<td>$250,000</td>
</tr>
<tr>
<td>Financial Statement Fraud</td>
<td>$1,000,000</td>
<td>$1,000,000</td>
<td>$4,100,000</td>
</tr>
</tbody>
</table>

MEDIAN LOSS

$0 - $6,000,000
Occupational Fraud – Initial Detection

**Tip:**
- 2014: 42.1%
- 2012: 40.2%
- 2010: 43.3%

**Management Review:**
- 2014: 16.0%
- 2012: 14.0%
- 2010: 15.4%

**Internal Audit:**
- 2014: 14.1%
- 2012: 14.4%
- 2010: 14.4%

**By Accident:**
- 2014: 6.8%
- 2012: 7.8%
- 2010: 8.3%

**Account Reconciliation:**
- 2014: 8.6%
- 2012: 8.1%
- 2010: 8.1%

**Document Examination:**
- 2014: 4.7%
- 2012: 4.1%
- 2010: 5.2%

**External Audit:**
- 2014: 3.0%
- 2012: 3.3%
- 2010: 4.8%

**Surveillance/Monitoring:**
- 2014: 2.6%
- 2012: 3.0%
- 2010: 1.6%

**Notified by Law Enforcement:**
- 2014: 2.2%
- 2012: 3.0%
- 2010: 1.6%

**IT Controls:**
- 2014: 1.1%
- 2012: 1.1%
- 2010: 0.0%

**Confession:**
- 2014: 0.4%
- 2012: 1.5%
- 2010: 1.1%

**Other:**
- 2014: 0.5%
- 2012: 1.1%

*"Other" category was not included in the 2010 Report.*
### Responsibility for Fraud Detection (RACI)

<table>
<thead>
<tr>
<th>Responsible</th>
<th>Accountable</th>
<th>Consulted</th>
<th>Informed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal Audit</td>
<td>Executive Management</td>
<td>Legal Counsel Enterprise Risk Line Management</td>
<td>Interested parties (e.g. shareholders, governmental regulators, etc.)</td>
</tr>
<tr>
<td>External Audit</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

### Concept

<table>
<thead>
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<th>Concept</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsible</td>
<td>The person or group that does the work</td>
</tr>
<tr>
<td>Accountable</td>
<td>The person or group that gets fired if something goes wrong</td>
</tr>
<tr>
<td>Consulted</td>
<td>The person or group that is asked for their opinion and guidance</td>
</tr>
<tr>
<td>Informed</td>
<td>The person or group that is informed of the issue</td>
</tr>
</tbody>
</table>
Securities Fraud

- Penny stock fraud
- Stock price rises due to broker buying the stock artificially inflating the price
- Using false reporting and manipulative business activities

## Cyber Fraud – Financial Service Company

<table>
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<th>Rationalization</th>
<th>Opportunity</th>
<th>Motive (Pressure)</th>
<th>Means</th>
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<td>If I don’t do this they are going to break my legs or worse.</td>
<td>Custodian had physical access to the bank funds transfer room.</td>
<td>Gambling indebtedness to organized crime</td>
<td>Poor physical, process and system controls</td>
</tr>
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Fraud’s Impact
Next Week

Fraud Detection & Prevention