Issue Based - Typology Driven Investigations

Phillip A. DeLuca
JPMorgan Chase & Co
Mid-Atlantic AML Conference

July 2011
Our strategy is to continue to enhance our ability to identify illicit activity with greater efficiency, developing and utilizing more sophisticated tools and methods.

One of our challenges as an industry is elimination of noise and the identification of true money laundering and terrorist financing risk. At JPMorgan Chase we incorporate Money Laundering/Terrorist Financing typologies identified from previous investigations into our investigative approach, and create a risk models encompassing, product, geography, and customer type. The models help to provide a detailed road map for investigators to conduct their investigations. This approach also allows more precision in building sustainable monitoring tools to identify suspicious activity and provides the investigator with a more purpose through which to conduct investigations. We term this “finding a needle in a world of haystacks”.

We’ve applied this approach to several areas like Human Trafficking, Black Market Peso, Interstate Cash, Pain clinics and Healthcare fraud.

Similarly we built an in-house tool to help incorporate scoring logic for alert generation. This concept goes beyond the sole value/volume ML detection method that is prevalent in the first generation ML detection software products.
Evolution of Monitoring and Investigations

- **First Generation: Raw Alert processing**
- **Second Generation AML: “Needles in a World of Haystacks**
- **Third Generation: Portfolio Analysis**
  - “**Portfolio Analysis**” is the risk framework that primarily focuses resources on higher ML/TF matters. Conversely, the Portfolio Analysis approach seeks to: (a) reduce the “jet engine impact” from noise that impairs detection of potential ML/TF activity; and (b) avoid opportunity cost from mechanical raw alert-specific “deep-dives” or “data dump documentation” on matters that do not appear to have potential significant ML/TF risk.
  - The “**Portfolio Analyzer**” is an integrated web-based tool for which we have applied for a patent to conduct account-specific data retrieval and analysis of customer demographic and specific transaction information for an overall pre-defined portfolio for the purpose of improving our ability to detect and report higher risk potential money laundering or terrorist financing activity flowing through JPMC.
<table>
<thead>
<tr>
<th>“Second Generation Monitoring”</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Define the “Needle”</strong></td>
<td>Build risk models based on specific ML/TF typology</td>
</tr>
<tr>
<td><strong>Choosing the “Haystack”</strong></td>
<td>Locate the “choke point” that best highlights ML/TF typology</td>
</tr>
<tr>
<td><strong>Looking for the Needle</strong></td>
<td>Look for specific electronic ML/TF transaction characteristics</td>
</tr>
<tr>
<td><strong>Finding the Needle</strong></td>
<td>Investigate and SAR</td>
</tr>
<tr>
<td><strong>Needle finding machines</strong></td>
<td>Automate ML/TF risk model for specific typology</td>
</tr>
</tbody>
</table>
Third Generation AML “Portfolio Analysis Process”

- **Continually focus** on higher ML/TF risk at all stages of monitoring and investigations within any given population (Portfolio)

  ![Likelihood of ML/TF activity](image1) x ![Severity of consequence if ML/TF activity](image2) = **ML/TF Risk**

- **“AID”** the investigator in making effective and efficient ML/TF risk decisions:
  - **A**utomated data gathering
  - **I**nformation enrichment
  - **D**isplay ML/TF risk

- **Assessment** of the likelihood of finding potential suspicious activity:
  - Typologies consistent with ML/TF activity
  - Traits inconsistent with ML/TF activity
  - Materiality
  - Deeper ML/TF risk model assessment (geography, product, customer-type, and referral source)

- **Deploy** resources at higher ML/TF risk/reduce “Jet Engine Noise” impairment

- **Investigation** and SAR filings

- **ML/TF risk decisions by LOBs**

- **Feedback** loop (including iterative changes to ML/TF risk models)

- **Phase II Portfolio** - Typology-based detection of potential ML/TF activity
<table>
<thead>
<tr>
<th>Define needle</th>
<th>Choose haystack</th>
<th>Electronic traits</th>
<th>Investigate and SAR</th>
<th>Automate needle finding</th>
</tr>
</thead>
<tbody>
<tr>
<td>Underground (hawala) money transmission</td>
<td>Foreign correspondent ICL files</td>
<td>Retail customers with repetitive round dollar checks between $2,000 and $10,000 negotiated through Yemenis /Lebanese banks</td>
<td>High concentration of repetitive round dollar cash deposits followed by round dollar checks negotiated in Middle East; well above consumer levels</td>
<td>Yemen ICL PA database</td>
</tr>
<tr>
<td>US-based feeder network for BMPE cash placement</td>
<td>Customer EDW and Atchley cash files</td>
<td>Miami-based Retail customers with possible Columbian CIP / interstate cash between Miami and NY</td>
<td>High concentration of repetitive cash deposits in South Florida followed cash withdrawals in NY; little or no legitimate activity</td>
<td>Miami BMPE PA database</td>
</tr>
<tr>
<td>Sex-based human trafficking</td>
<td>ACH counterparty fields</td>
<td>Search for payments to Craigslist or Backpage in $ amounts consistent with “adult entertainment” advertising</td>
<td>Granular review of customer activity and background (including public records search of phone numbers, names to detect predatory advertising)</td>
<td>Craigslist PA database</td>
</tr>
<tr>
<td>Potential terrorists traveling to HR countries for training/indoctrination</td>
<td>Credit card data mart</td>
<td>Airport codes for Yemen, Afghanistan, and Pakistan PLUS other risk factors (e.g. fall off financial grid &gt; one month)</td>
<td>Granular review of customer activity and background</td>
<td>YAP PA database</td>
</tr>
<tr>
<td>Cash moving into domestic correspondent network in wake of Mexican cash restriction</td>
<td>Cash vault files for FIG customers</td>
<td>Proxy for bulk cash = high % of $100 denominations; sharp increase in average size of cash deposits</td>
<td>Vault cash questionnaire; FIG/T&amp;SS Product/Compliance quarterly risk meetings; customer interviews</td>
<td>Quarterly Vault Cash Report</td>
</tr>
</tbody>
</table>
Healthcare Fraud example #1

Medicare $838,656

EMS Company #1

Customer

EMS Company #2

Medicare $392,000

$730,000 of cashed checks, mostly round dollar and all under $10K

$50,869 for 2004 Bentley ContGT

$50,000 wire to BANK in NIGERIA

$110,000 in cashed checks

$140,000 in official checks or wires to other individuals
Healthcare Fraud example #2

Medicare

$1,015,138

EMS Company #3

$567,000

Consumer acct

$343,000
of checks or wires to other US banks (no apparent nexus to COGS)

$261,334
accumulated balances as of 12/31/2010

$206,000
In teller or ATM withdrawals

$197,000
In round dollar wires to Individual in Nigeria
Healthcare Fraud example #3

Customer

Health Care company

Consumer Account

Medicare $1 MM

$840,000 in round dollar wires to Individual in Nigeria
Human Trafficking Investigation

**Purpose and time period:** Literature review conducted pursuant to the Human Trafficking project revealed that low-priced illegal prostitution services, such as those advertised on Craigslist and other internet classified advertisement-type services, are a high risk for human trafficking and juvenile sex trafficking. JPMC conducted an issue-based investigation to determine if Chase retail accounts were being used to facilitate sexual commerce. The review looked at customers with extensive payments to Craigslist occurring in May 2010.

**JPMC Retail review**
- The investigation included reviews of JPMC Retail accounts, both consumer and business accounts, of which 83% of the population had reproducible patterns of interest for human trafficking typology development.
  - The accounts fit into three primary data sets:
    - Customers with internet ties to the sex trade;
    - Consumer accounts with extensive cash deposits that fund payments to Craigslist.com; and
    - Business accounts in industries more easily exploitable by traffickers
- JPMC enriched each data set to narrow the population and to further define monitoring strategies
  - Financial data points like frequency, amount, and value of transaction types including cash, ACH merchant credits, and debit card points of sale
  - Customer level attributes like occupation, tenure, and geography
- JPMC is in the process of building monitoring strategies based on the typology review to continue to detect customers possibly associated with trafficking
Human Trafficking Example #1

Original Population (164 Accounts)
- 100 payments by count made via debit card merchant points of sale between 02/01/2010 to 04/29/2010 to Craigslist.com

Internet Ties to Sex Trade (74 Accounts)
- Escort services ads
  - Sexual innuendo
  - Teenscort.com
  - FindHotEscorts.com
- Price lists
  - Most range from $30 to $300 per hour
  - Two customers posting extended service (full day or night) prices of $1500 and $1800.
- Foreign language websites
  - 2 Russian and 3 Chinese
  - Employment opportunities (tutors, educational services, translators, cooking classes, and wine bars)

Consumer cash in/Internet-based classified add services out (80 Accounts)
- Cash deposits
  - Average size = $4,982 / 45 day period
  - Average count = 13
- ACH to Internet-based classified add services
  - Average count = 337 payments

High Risk Industries (10 business accounts)
- Profile
  - 70% - new account
  - 70% - no public profile
  - Most of the customers in this population have not reciprocated contact.
- Advertising
  - Two businesses, both styled as beauty salons, had postings on foreign language websites for employment services:
    - Chinese site posted for masseuses
    - Russian site was blocked by Chase due to SOCIAL NETWORKING firewalls

Internet-Based Classified Adds
- Average count = 240
- Average size = $1,396 45 day period