“After foreign exchange and the oil industry, the laundering of dirty money is the world’s third largest business.” —Jeffrey Robinson, The Laundrymen.
As much as $2 trillion is laundered globally every year – or 5% of the global GDP. The people behind money laundering are determined, sophisticated criminals who fund global terrorism, human trafficking, and narcotics distribution.

THE SIX PAINS OF MONEY LAUNDERING

1. **Regulatory fines**
   In the past decade, compliance fines erased $342 billion in profits for top US and European banks. This figure is expected to exceed $400 billion by 2020.

2. **Organizational burden**
   Financial institutions might employ upwards of 5,000 employees in sanction screening alone. As transaction volume keeps growing, so do alerts, false positives, and compliance teams, all at unsustainable rates.

3. **Current transaction monitoring solutions lack context**
   A PwC report states that transaction monitoring for AML often generates false positive rates of over 90%. The rule-based systems that monitor these transactions do what they were supposed to: point to incidents where money movement exceeded certain thresholds. However, compliance teams cannot go deeper to provide additional context that would substantiate or refute the actual money laundering risk.

**BIG FINES FOR BREACHING US SANCTIONS**

Looking back on the decade

<table>
<thead>
<tr>
<th>Bankypes</th>
<th>Amount (USD)</th>
<th>Year</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top 10 World Bank</td>
<td>US$8.9b</td>
<td>2014</td>
<td>France</td>
</tr>
<tr>
<td>Top 5 High Street Bank</td>
<td>US$1.9b</td>
<td>2012</td>
<td>Britain</td>
</tr>
<tr>
<td>Top 5 German Bank</td>
<td>US$1.5b</td>
<td>2015</td>
<td>Germany</td>
</tr>
<tr>
<td>Chinese Telecom Manufacturer</td>
<td>US$1.2b</td>
<td>2017</td>
<td>China</td>
</tr>
<tr>
<td>British Multinational Bank</td>
<td>US$667m</td>
<td>2012</td>
<td>Britain</td>
</tr>
<tr>
<td></td>
<td>US$300m</td>
<td>2014</td>
<td>Britain</td>
</tr>
<tr>
<td>French Bank Network</td>
<td>US$787m</td>
<td>2015</td>
<td>France</td>
</tr>
<tr>
<td>Dutch Bank</td>
<td>US$619m</td>
<td>2012</td>
<td>Netherlands</td>
</tr>
<tr>
<td>Swiss Multinational Investment Bank</td>
<td>US$536m</td>
<td>2009</td>
<td>Switzerland</td>
</tr>
<tr>
<td>Top 5 High Street Bank</td>
<td>US$350m</td>
<td>2009</td>
<td>Britain</td>
</tr>
<tr>
<td>Top 5 High Street Bank</td>
<td>US$298m</td>
<td>2010</td>
<td>Britain</td>
</tr>
<tr>
<td>German Multinational Investment Bank</td>
<td>US$258m</td>
<td>2015</td>
<td>Germany</td>
</tr>
<tr>
<td>Scotland Retail Bank</td>
<td>US$100m</td>
<td>2013</td>
<td>Britain</td>
</tr>
</tbody>
</table>

Source: South China Morning Post, Hong Kong, China. April 3, 2017.
Current solutions are unable to connect the dots between multiple seemingly unrelated alerts in order to contextualize and visualize suspicious movement patterns that point to broader AML risk.

4. Manual SAR reporting
Typically as little as 7% of all filed SARS are deemed by the regulator as worthy of further AML investigation, which means that 95% of the effort of these teams goes to waste. As SAR reporting is still a highly manually intensive task, the end result is that most of the AML resources allocated by FIs and the regulator are busy clearing their own “noise,” created in the first place because they are unable to substantiate true money laundering risk. Today’s compliance-focused systems use limited legacy technologies and reward quantity over quality, sending millions of dollars to waste.

5. The disconnected business units
AML and fraud groups often work in silos, sending each other accounts in question without providing context. There’s also a disconnect between the teams handling investigations and analytics. When teams do attempt to communicate with case documentation, this process is tedious, and the documentation often lacks the detail to provide good evidence to regulators. As a result, a lot of cues that could have contributed to the overall risk assessment are disconnected, and go by unnoticed.

6. The barrier to digital transformation
Banks everywhere are pursuing digital transformation as they try to out-maneuver their competition in the coming decade. They’re focusing on providing fast and seamless customer experiences. They’re facing new fintech competition in the forms of challenger banks and “non-bank banks.” They’re facing tough decisions about whether to double down on legacy systems investment or switch to new ones. Their digital transformation can harbor new waves of financial crime with criminals hiding behind large new sets of distributed and disconnected data. The magnitude of the detection complexity calls for new technologies to take the helm as legacy systems simply don’t scale up to the task.

In this landscape, banks are trying to strike the right balance between two goals that are at odds with each other: innovation on one hand, compliance on the other. 48% of respondents in this fintech survey by PricewaterhouseCoopers stated that AML/KYC compliance is a barrier to innovation.

THE ANATOMY OF AN ATTACK
This alleged money laundering scheme is believed to have fed funds to Hezbollah, and it led to a $102 million settlement against Lebanese Canadian Bank.
AUGMENTING YOUR AML WITH AI: 
SEE THE RISK SIGNALS IN THE NOISE

FLIP THE SCRIPT WITH FEEDZAI ANTI-MONEY LAUNDERING

The dawn of machine learning for AML
Feedzai uses machine learning and advanced automation to replace the manually tedious parts of existing AML processes with insights that are specific to money laundering. These capabilities allow FIs to separate meaningful risk signals from noise, ensuring that manual investigation resources are applied using a validated risk-based approach.

The Feedzai Risk Engine can augment existing legacy system with machine learning models, Segment-of-One™ profiling, and real-time processing capabilities. Financial Investigation Units (FIUs) can understand suspicious patterns and more precisely allocate their manual investigation resources.

Then, the Feedzai Case Manager automates insights for your compliance teams. It contains Whitebox™ explanations that add a human-readable semantic layer onto the underlying machine logic. Teams also receive transaction flow path anomaly alerts and risk scores. We trace anomalies within both origination and destination, providing visibility into the number of entities the money is going out to, and the frequencies and patterns of transmissions in relation to other money movements.

The Case Manager provides AML teams a unified interface to investigate alerts, drill into case details and add notes. Global queue management allows distribution of alerts and managing manual reviews more efficiently. And compliance reports (SAR, CTR, etc.), and custom dashboards and reporting to meet client-specific needs.

Machine Learning Models: Feedzai has built an advanced machine learning platform, purpose-built for compliance, providing rapid iteration and deployment of new and increasingly accurate models.

Segment-of-One™ Profiles: We combine historical omnidata and real-time omnidata to compute behavioral profiles for every entity in the system. These profiles are stored in memory across different timescales – the last three years, three months, three milliseconds – and updated constantly, so that we can pinpoint anomalies with hypergranular accuracy in real time.

Real-time Processing Capabilities: Our enterprise-scale events processing engine can correctly process ultra high volumes in ultra low latencies.
Feedzai applies hypergranular profiling and link analysis to figure out what is normal for transactions in each industry sector. So Feedzai can follow the money trail and understand whether the path it took is normal or unusual for the type of transaction that it represents. Feedzai’s ability to connect the dots among multiple seemingly unrelated alerts helps unveil if, and where, the true money laundering risk resides. As a result, organizations can transition from a minimum compliance mindset to deep, risk-based investigations. The Feedzai AML solution empowers organizations to not only reduce the cost of AML processing, but, more importantly, to detect substantiated high money laundering risk and report it in time, with great detail. —Eyel Eshel, VP of Sales, North America

All alerts are not equal
Feedzai transforms transaction monitoring. Before: robocop ticketing. After: high value alerts. We expose meaningful schemes of money laundering flows and suspicious common risk points that elevate the investigative materials to a new level. We can taken in seemingly disconnected risk signs across depositors, payment originators, correspondent banks, geographies and payees, and connect these signals in meaningful ways. The result is a shift in focus, away from merely meeting the AML minimum (reporting), and toward building maximum insights of how a financial institution is being taken advantage of.

Feedzai can ingest disparate data sources, pinpoint anomalies with hypergranular accuracy, and connect them intelligently to surface invisible red flags and complex money laundering patterns that would be missed if screened by rules and the human eye alone. Investigation speed is greatly accelerated, and the quality of findings is greatly increased. The alerts that matter are the ones that rise to the top, reducing manual waste.

With automated SAR reporting, we consolidate evidence from multiple alerts over time, and we
substantiate the report with the necessary underlying details, providing single threads of context for all your teams. Feedzai machine learning models ingest not only disparate data but also enrichment data, further adding to the list of additional attributes for high confident scoring. And our visual link analysis tool provides an interface to reveal all the nodes, connections, and speeds of the suspected money flows, producing a money laundering report that’s more concrete, better-documented, and substantiated.

This is the next stage for AML: augmenting existing legacy systems with Feedzai’s advanced, consolidated risk platform for anti-money laundering, enabled by artificial intelligence.
FEEDZAI IS AI

We’re coding the future of commerce with today’s most advanced risk management platform powered by big data and artificial intelligence. Our mission is to make commerce safe. The world’s largest banks, payment providers, and retailers use Feedzai’s machine learning technology to manage risks associated with banking and shopping, whether digitally or in person.