

Fraud Detection and Compliance

Case Study

Learn how Axis Group helps clients use innovative visualization techniques to identify noncompliant and potentially fraudulent activity



GET DATA DRIVEN
analytics@axisgroup.com

CHALLENGE

How can compliance investigators quickly sift through millions of transactions to focus on potentially fraudulent activities?

Compliance personnel and investigators often wade through millions of records looking for needles in a giant haystack. Since it's impractical to review every journal entry, vendor application and travel expense, companies tend to create reports that rely on simple rules, such as expenses that exceed a certain amount.

Unfortunately, this approach can flag too many false positives to review effectively. It also misses the opportunity to examine transactions in context, or drill into other related data that could expose a broader pattern of fraud that depend on a web of interdependent companies, schemes and bad actors.

Our client's compliance team was overwhelmed with false positives while looking for shell companies, overbilling schemes and ghost employees. They knew there had to be a better way.

That's when they called Axis Group.

APPROACH

Axis designers developed innovative visualizations that make it easier to spot possible fraud.

We began by researching the myriad ways that employment/operational frauds could occur and documenting the forensic traces they leave in the data trail. Once we learned the essence of the problem, our team applied design thinking principles, brainstorming new ways to visualize the forensic trail that aligned with our client's natural investigative process.

By using principles of visual analytics, Axis helped our client cut through the noise, spot outliers and prioritize those actors and transactions that are most worth investigating.

PERSONA

Corporate Compliance Officer

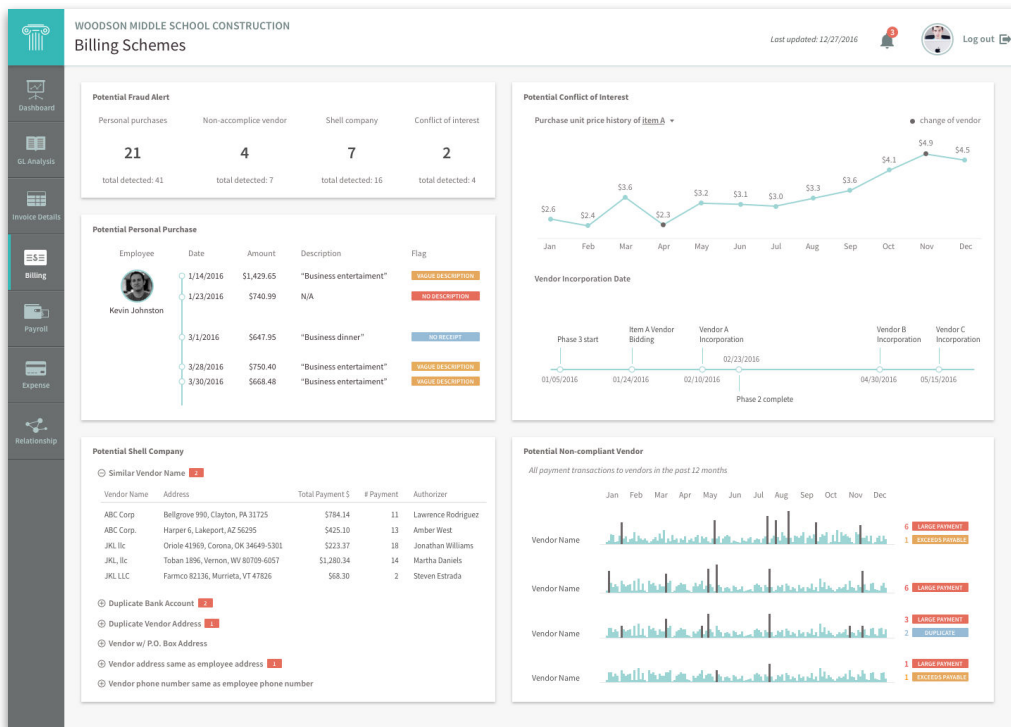
Business Goals:

1. Identify and reduce fraud
2. Uncover new fraud schemes
3. Automate investigation processes to increase throughput

SOLUTION

An interactive, custom dashboard that automatically highlights transactional anomalies so they may be investigated.

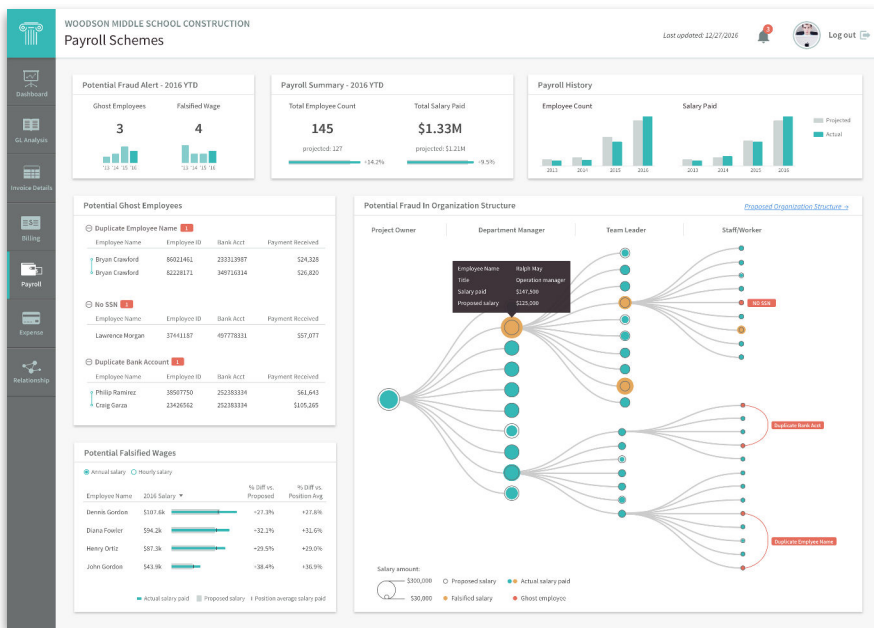
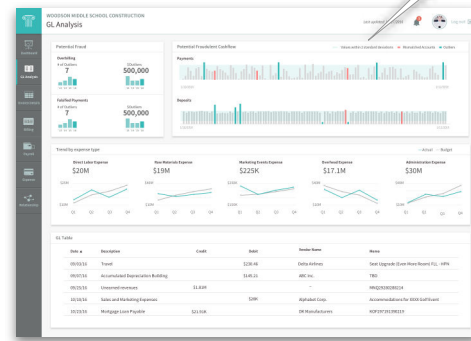
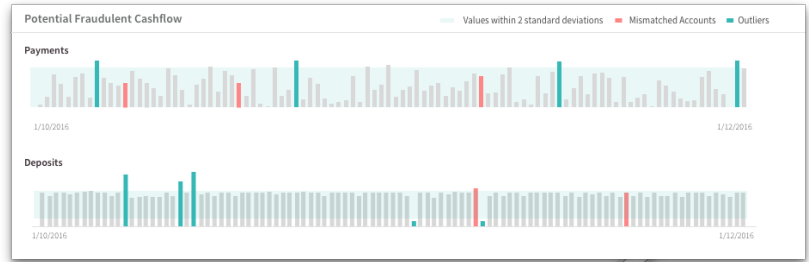
Billing Scheme Detection



The Billing Scheme analysis flags transactions and actors that involve elements such as dummy companies, unapproved disbursements or unusual vendor patterns. Each tile focuses on a different type of billing scheme and flags specific factors and patterns that may indicate fraudulent activity.

General Ledger Analysis

The General Ledger analysis highlights outliers and mismatched transactions that might be of interest to examiners for further investigation. Simply by looking at the graph, examiners can immediately identify entries that are statistically anomalous and drill further into the details underlying the transaction to decide whether they are worth investigating.



Payroll Scheme

The Payroll Scheme analysis puts payments into context of the various actors involved. By presenting the data in a visual hierarchy, the analysis sheds light on potentially fraudulent employee activity that may require confederates, such as ghost employees, falsified or padded hours, or pay rate alteration.




AXIS
axisgroup.com

GET DATA DRIVEN
analytics@axisgroup.com