TAX OFFICES USE SAS AT DIFFERENT LEVELS OF MATURITY

- USA - IRS
- Ireland – Irish Tax
- Netherlands DTA
- Belgium – SPF European C- Taxud
- Spain – AEAT Tax
- France – DGFIP
- Greece - Tax
- UK - HM Revenue & Customs
- Denmark - Danish Ministry of Taxation
- Estonia - Estonian Tax
- Hungary -National Tax
- Singapore - IRAS
- Australia - ATO
- South Africa – SARS
THE FACE OF VAT CAROUSELS
1 trillion euro lost to tax evasion and avoidance

VAT gap of 168 billion euros in 2013
SERIOUS & ORGANISED VAT FRAUD

VAT CAROUSEL

Conduit Company
NO VAT

Missing Trader

Buffer Company
VAT

Profit Taker

Offshore

French Treasury

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SERIOUS & ORGANISED VAT FRAUD

VAT CAROUSEL

Conduit Company

Missing Trader

Buffer Company

Profit Taker

Offshore
SERIOUS & ORGANISED VAT FRAUD

Fake Company

NO VAT

Company

Goods stay on the French territory and are sold on the black market

French Treasury
SERIOUS & ORGANISED VAT FRAUD

Conduit Company

Company

VAT

NO VAT

[OF RED]

VAT

NO VAT

XFACF

Buffer Company

Buffer

French Treasury
SERIOUS & ORGANISED VAT FRAUD

MULTI CELL VAT REPAYMENT FRAUD

- Shared Phone
- Different Apparent Owners
- Shared Address
- Companies of similar type
- All Companies have a negative net balance claimed more $ refunds than payments
- Started around same date
- Claims submitted around same days
- Average claim amount is relatively small
- Average claim amounts are similar for each company
- Companies located in different regions
Refunds Per Company Per Period

- Refund amounts within a narrow range
- Refund amounts between VAT reg. companies are similar
- Refund amounts well under Tax Authority defined non-automatic thresholds (i.e. small amounts)
SERIOUS & ORGANISED VAT FRAUD

A NETWORK AFTER INVESTIGATION
Super Cluster
SERIOUS & ORGANISED VAT FRAUD

CHALLENGES WITH VAT CAROUSEL DETECTION

• Complex environment

• High velocity fraud

• Constantly evolving:
  • Legislative changes
  • Changes in the behaviour of fraudsters
  • Geographical shift
  • “Commodities” shift
Business Problem

Organized VAT Fraud was a billion euro problem for the Belgian Government. This fraud typology is a high velocity fraud: “Carousel frauds are like floods. It is futile to believe that after the storm we can put back water in the riverbed with buckets. What is needed is to build dykes to prevent overflows”. The Tax Department is overloaded with data relevant for Organized VAT Fraud (600,000 tax-payers, 5,000,000 VAT return, 24,000,000 Intra-community transactions).

SAS Approach

The solution is used to detect companies with a high probability of being involved in Organized VAT Fraud. The SAS Hybrid approach provides ultra-early detection from the first suspect VAT return or other suspicious behaviour. This Hybrid approach combines network analysis, business rules, predictive modeling and anomaly detection. The combination of these methods enables new networks to be discovered and to monitor known networks. The models are highly accurate (80% true positive rate). This makes the SAS Hybrid approach the ideal tax auditor.

Results

The result is a reduction by 98% (from 1.1 billion € to 0.029 billion €) of the VAT carousel fraud. Analytics was key in achieving this result. The models are not only very accurate (80% true positive rates), they also provide ultra-early detection as from the first VAT declaration. Organized VAT fraud is now a controlled phenomenon. The system also enables international collaboration by identifying suspicious companies abroad.

Highlights

• VAT carousel fraud reduced by 98% (from 1.1 billion € to 0.029 billion €)
• Ultra-early detection
• SAS hybrid approach provides a high accuracy model (80% true positive rate)
SERIOUS & ORGANISED VAT FRAUD

NEW APPROACH FOR SERIOUS CASES

Detection | Tax Investigation
---|---
Natural Death | Criminal Investigation

Fraud

Detection | Stop the Fraud
---|---

Fraud

Tax Investigation

Criminal Investigation
SERIOUS & ORGANISED VAT FRAUD

BENEFITS

INCREASE DETECTION RATES
Detect Fraud before it is committed
List of Suspected Fraud (80% True Positives)

INCREASE EFFICIENCY
3 weeks pre-investigation
  =>
5 minutes pre-investigation

Increased efficiency during investigation: Risky transaction and the role of the different companies are provided to the investigator.