

CSA is a rule-based expert system for fraud detection in bricks and mortar retail. CSA analyses huge volumes of transactional data from the point of sales combined with metadata and optional inventory or cash in transit data. This enables an internal audit department to identify and prevent fraud in an effective and efficient way while complying with GDPR requirements



KPMG's CSA Solution is built in the Microsoft Azure Cloud platform, easily integrable, and available globally, providing scenario-based data analysis of sales data

# Sales-data credibility analysis made easy

× Plausibility checks

Payment Method analysis

**Customer card** 

Corrections

**Commodity groups** 

**Discounts** 

- Receipt abort / cancel
- Returns
- $\otimes_{\times}$  Cancellation types
- **Risks**
- **=** Cross-receipt analyses
- System-based full analysis of POS transaction data by means of predefined scenarios
- Scenarios enable flexible linking of events from different receipts across operator and branch boundaries
- Complex checking scenarios permits focusing solely on relevant data with a high probability of misconduct
- Display of hits based on pseudonymized transaction data only if scenario and frequency criteria are met
- Identification of irregularities and manipulation over a fixed rolling analysis period





# **Key Functions**



#### **Dashboard**

Start page with high-level overview of scenario hits by scenario groups

## **Overview of receipts**

Display of the hit at receipt level with supporting formatting for quick identification of suspicious transaction features

#### Overview of hits

Tabular overview of all scenario hits with detailed information, e.g. date, scenario value or accumulation

## **Receipt environment**

Viewing the hit receipt in the context of the previous and subsequent receipts.

## **Threshold maintenance**

Adjustment of analysis scenarios by maintaining thresholds, accumulations and time periods for regions or sales lines within defined specifications

## **Deletion concept and Encryption**

Ring buffer with incremental loading



Daily encryption of operator references

## Multi-stage release workflows

Extension of the analysis period



Decoding the operator references

# **Data Protection Compliance**

#### **Earmarking**

Clear purpose limitation of the processing of personal data in CSA:

Investigation of criminal offences or other breaches of duty by cashiers, preservation of evidence, support in the enforcement of claims for damages under civil law and optimization of processes

# Technical and Organisational measures

Derive risk-oriented technical and organizational measures, e.g.:

- Focusing on content
- Temporal restriction
- Pseudonymisation
- Deletion concept
- Release workflows

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