

SOLUTION FLYER

Data Analytics

Use of AI for the reduction of false-positives

SMARAGD ICS (Intelligent Customer Segmentation) enables a segmentation of customers based on their actual payment behavior. This specific classification of customers has the advantage that the threshold value of the indicator and scenario model can be set more precisely. Changes in the transaction behavior can continuously be taken into consideration. This reduces the number of false-positives, the wrongfully conspicuous customers. The expenditures of costs of the alert management are thereby drastically reduced.

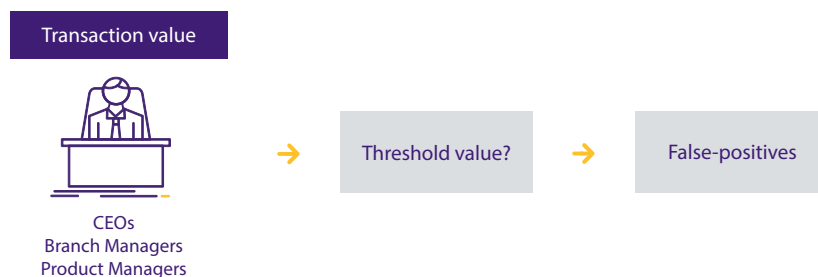
Highlights

- » Increase in alert quality – more specific threshold values
- » Reduction of false-positives – expenditure and cost reduction
- » Increase the data quality – by grouping of customers depending on their behavior
- » Flexibly configurable – individual clustering solution
- » Result report of the clustering – transparent logging

Initial situation: restriction of the static segmentation

In SMARAGD MDS customers are divided into groups by using static criteria. Within this customer segmentation SMARAGD MDS detects potential money laundering by monitoring of the customer data by the help of indicators. This segmentation, however, does not reflect the customer behavior.

Disadvantage of the static segmentation using the example of customer group „Manager“



In the figure above the problem of static segmentation is depicted exemplarily. There are e.g. management staff, branch managers part of this group. The income and the customer payment behavior that comes with it is different in the customer group managers. Despite that an indicator and a threshold value are set for each customer group. If the customer exceeds this, he is considered to be conspicuous and has to be checked by the compliance manager. The consequence is that many customers become conspicuous, even though they do not have conspicuous payment behavior.

Compliance-Solutions on the highest Level



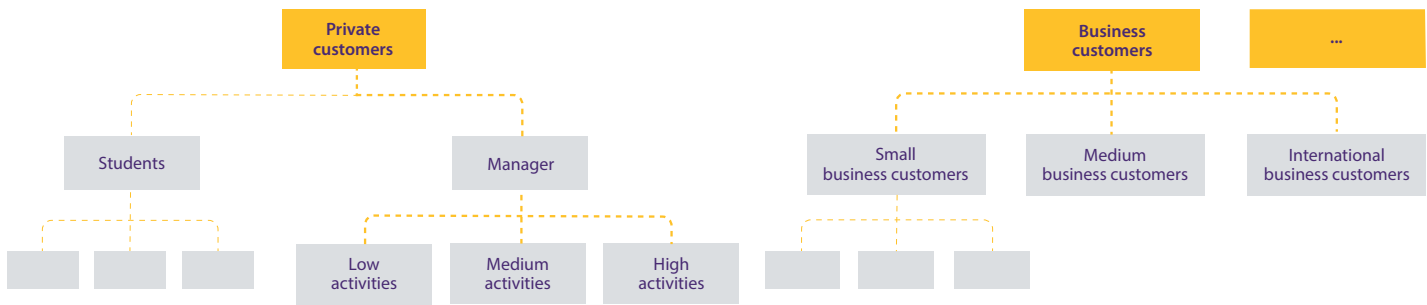
AI-SOLUTION: CLUSTERING

In order to increase the quality of the alerts and to reduce the amount of false-positives, the static is extended by a behavior-based classification. The clustering algorithm classifies customers according to their degree of similarity. Influencing factors can e.g. be number and amount of cash or foreign transactions as well as the entirety of transactions. As depicted in figure 2, the static customer group manager is amended by three activity clusters. As depicted there the customers in the segment „low activities“, „medium activities“ and „high activities“ correspondingly display low, medium and high transaction volume. Customers within the cluster, a group, behave similarly in respect to their transaction behavior. A behavior-based classification of customers makes it possible to detect changes in behavior in time in the future.

At one glance - Data Analytics

- » Data Mining – Draw conclusions from data
- » Exploratory Analytics – Recognize connections and patterns in data
- » Predictive Analytics – Predictions of future events

Extension of customer groups



Increase of Data Quality

One of the highlights of the solution is the fact that the data quality can also be increased by it. Before the clustering an outlier analysis is carried out for each customer group. Detections that are very far from the other data points and therefore deviate from the usual group behavior, are identified as outliers. The result of this analysis serve as the basis for an improvement of the data quality.

Configuration of SMARAGD ICS

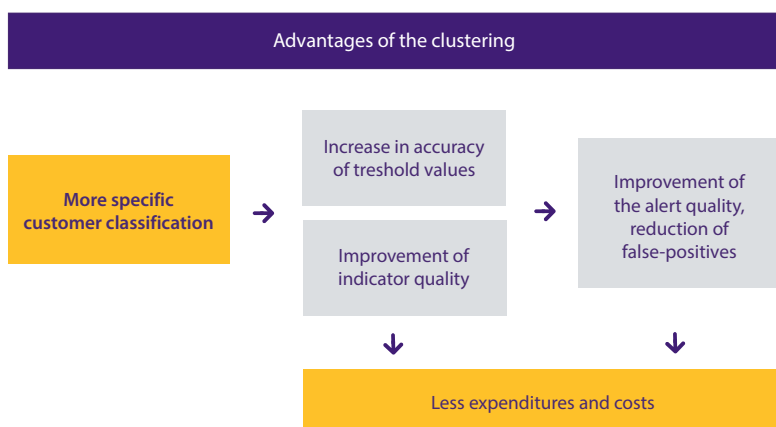
SMARAGD ICS is individually configurable.

The targens experts take the requirements and wishes of the customers into consideration; e.g.:

- » Number of clusters
- » Entry parameters and dimensions
- » Outlier analysis
- » Automated re-training of the clustering model, e.g. re-clustering after one year
- » Allocation of new customers to existing clusters
- » etc.

Summary of the main advantages of the clustering

The figure below summarizes the main advantages of the clustering once more.



SMARAGD

1,600 companies from all sectors in more than 50 countries rely on the compliance competence when it comes to counseling and implementation projects in conjunction with the marketleading software SMARAGD.

targens»

As an expert consultancy for banking, compliance and digital innovation, targens is the leading provider of consulting and software solutions. Based in Germany, Austria and Switzerland, the company has 30 years of experience in the development of internationally proven compliance services for financial institutions with futuristic and disruptive technologies. Using artificial intelligence and blockchain technology to create innovative products that provide the highest possible value to our clients. With its consulting portfolio, targens supports clients in their banking and corporate management, trading activities and the safeguarding of business processes.

Your contact

Ines Röder
Senior Data Scientist

Ines.Roeder@targens.de