

paladin vendor report | fraud prevention

2021



paladingroup

Third-party fraud prevention platforms provide protection and flexibility to not only prevent fraudulent transactions but also increase acceptance of legitimate orders. They help scale fraud teams by managing, or helping to eliminate, the manual requirement associated with transactional order review. Often, the foundation of the prevention platform is a customizable rules engine designed and maintained to identify historically high-risk combinations of order attributes, then make a decision on behalf of the merchant.



Arvato Financial Solutions provides professional financial services to a wide range of brands and businesses—allowing them to focus on what matters most for their business.

The services center on cash flow in all segments of the customer lifecycle, from identity, fraud, and credit risk management to payment and financing services as well as debt collection.

The **Arvato Financial Solutions** team is made up of experts in 20 countries, including 7,500 IT, analytics, process, and legal specialists focused on predictive analytics, platforms, and big data. All are aligned to make sure a client's credit management runs effectively, with the end goal of optimized financial performance.

Solutions & Functionality

Within the ID & Fraud Management segment, **Arvato Financial Solutions** offers a menu of solution elements for client integration to prevent and detect fraud while allowing an optimized experience for legitimate customers. These services can be applied as an end-to-end solution, or as segmented modules depending on the customer's need.

Merchants can utilize the **Arvato Financial Solutions** infrastructure as an approach to new markets as well—such as, for example, if an American company seeks to enter the European market with its unique payment and legal landscape. In these instances, merchants start integrating different modules until slowly incorporating the full solution. Covering security segments in online environments (such as mobile and desktop authentication) can help optimize costs.

Arvato Financial Solutions uses a “make, partner, buy” strategy that brings the best technologies together with regional, financial, and cross-industry expertise. This



At a Glance:



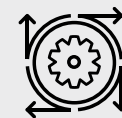
3rd Party API Capabilities



Payment Gateway Capabilities



Operational Support



Machine Learning



Account/Client Management



Device Fingerprint Capabilities



Historical Sandbox Testing



Professional Guidance/Services



Fraud Engine/Platform Functionality



ATO Detection Capabilities



User Behavior Capabilities



Pre-Authorization Functionality

approach enhances customer trust and ensures that clients have access to the most sophisticated technology available to fight fraud. **Arvato's** solutions and modules operate in real time and in accordance with European data protection legislation.

These include the following:

Device Fingerprinting helps clients identify and recognize a device based on different attributes such as device type, screen size, and user agent. These are gathered to generate a Device-ID. Specific device and transactional data can be put on client-specific blacklists or whitelists as device history is created. This record allows for recognition even if changes are made in the device itself, through browser or operating system updates. The technology can also indicate a user's true geographic location and detect proxy servers which are known to be high-risk. The association of diverse data types allows the detection of fraud attempts that would not be identified by a single variant.

Device Fraud Pool (DFP) improves fraud detection by providing access to a large database that enables the comparison of device and transactional information on a rule basis, with other numerous records in the pool. It helps recognize transactions that seem valid but have been identified as fraudulent by other clients. The rule set is industry-specific, which makes it possible to detect industry-specific fraud. This solution can help detect fraudulent transactions

earlier in the process to help reduce false positives.

The DFP increases the value of **Device Fingerprinting** by sharing device and transactional data as input for the Fraud Rules Engine. These datasets from pool clients remain invisible to other pool clients, since no transactional data is shared between the **DFP** clients.

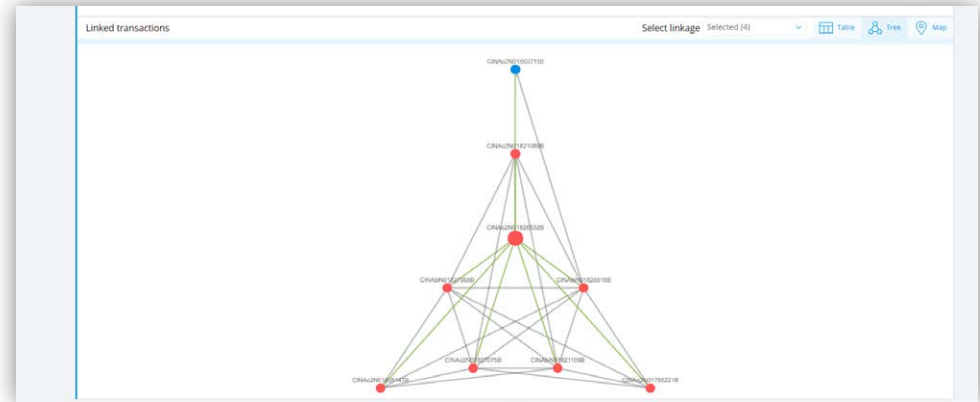
Behavioral Biometrics analyzes device, location, and the user's signals to build an ongoing digital identity. The user is identified based on the individual passive biometric profile (such as user finger pressure, fingertip size, touch coordinates, device movement). The solution also allows clients to authenticate the user's navigation behavior during the web session (such as typing, clicking, zooming, and swiping) against historical and normal population patterns anonymously.

This analysis informs clients of fraud risk and gives them advice regarding what actions to take. Not only does this serve to identify high-risk behavior and detect automation, but it also notes legitimate customers' behavior, which can help fast-track good transactions through the checkout process, reducing potential customer friction. The service is applicable to both web and mobile applications (iOS, Android, or Windows).

The **Fraud Rules Engine** is a core component of the fraud prevention and detection infrastructure, as it's used to link all

relevant data points. It can provide a multidimensional view of data collected, allowing for evaluation of the consumer's transaction. The **Fraud Rules Engine** is designed to adapt to a number of fraud issues by analyzing correlations on a large set of historical data.

Machine Learning algorithms can help complement the rule-based approach, while **Advanced Analytics** also help predict fraud and generate risk scores in real time. In this framework, a recommended action is suggested, and the decision whether to approve a transaction can take place automatically or manually. In conjunction with the **Case Management Cockpit**, customers can view triggered rules and manage blacklists and whitelists. Rules can be used across a user base, and the service team supports building new and specific rule sets together with the client.



The **Case Management Cockpit** allows clients to manually review transactions based on predetermined rule sets and score thresholds. Transactional data and all fraud check results are displayed in a customizable user interface. The ultimate goal is to provide enough in-depth detail to make a decision, in addition to providing the transparency to follow up on historical judgment without overwhelming the fraud analyst. The optional connection to a client's order-management system allows the transmission of manual order review results automatically into the client's order-management system. Features in the response detail include geographical order location, overview of all linked transactions, and order handling recommendations.

Time left	Result	Status	Process	Editor	Commentary	Date	Order number	Salutation	First name	Last name	LU	Device ID	E-mail
			payment			01/01/2019 9:30:19 AM	cx2869269443		Cosima	Forster	1929-10-15	fatma.setz@web.de	
			payment	ANG	Device ID on blacklist	01/01/2019 9:30:21 AM	rm8367478699		Letizia	Bremser	1981-06-18	nfs.gaba@mail.de	
			payment	ANG	Device ID on blacklist	01/01/2019 9:30:22 AM	oy6098370807		Joe	Heinze	2007-07-20	leona.kumbernuss@web.d	
			payment	ANG	Review in progress	02/22/2018 10:12:08 AM	te0156664593		Nele	Sprenger	1930-02-05	kay.gakstder@freenet.de	

Within the interface, users can apply decisions on orders, add notes or comments, and tab through all relevant customer and order details (such as items, card info, etc.). Linked transactions can be viewed via matrix or linkage map, including potential secondary links. Users can add or remove criteria from the queue that is not relevant. Any changes or customizations to the individual review interface are persistent when logging in and out.

Users can also add or remove "widgets" designed to ingest order detail and track performance of certain rule configurations. Users are then able to search a list of all orders that contain that criteria, which can help track schemes and attacks in either the long or short term.

Services Offered

To further support the notion of end-to-end fraud solutions, **Arvato Financial Solutions** includes **Fraud Manual Review** outsourcing support among its services. These services are designed for clients who may not have the bandwidth for manual order review, or who may have a seasonal need during peak volume periods.

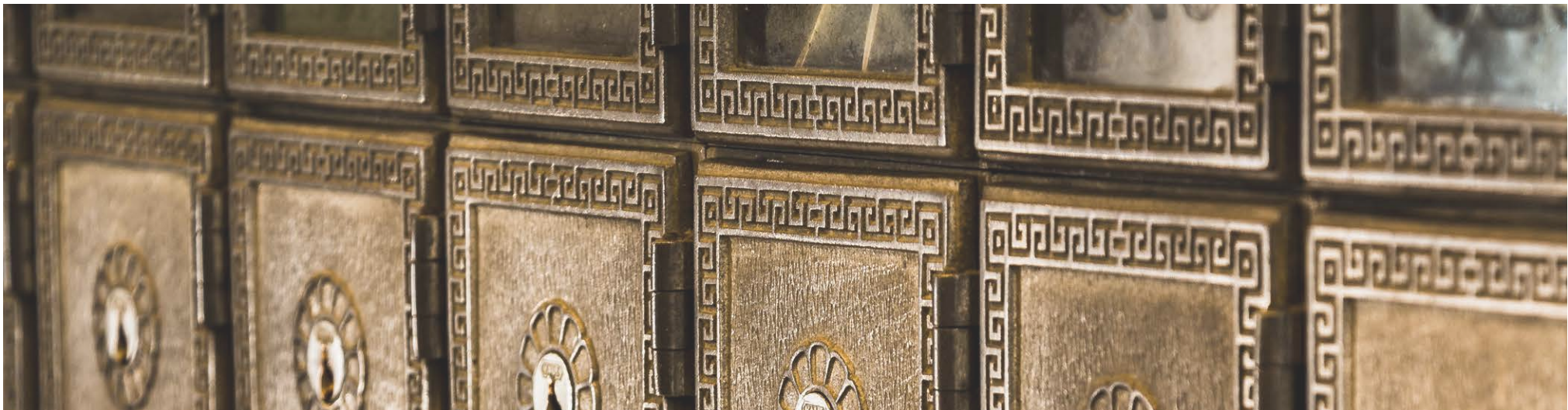
Arvato Financial Solutions' experienced fraud agents support with manual online fraud prevention, using their knowledge of country- and industry-specific fraud schemes and behavior. Decisions are generally taken directly, but, in some ambiguous cases, consumers are contacted on behalf of clients. Thanks to an agnostic approach, the full orchestration of customer-specific tools is also possible. Based on the global coverage, the team provides "follow-the-sun" support around the clock for global and regional clients.

Through industry and global fraud experience, **Arvato Financial Solutions** can create **Custom Consulting** experiences for customers in need. The portfolio includes project and change management, solution design, and **Advanced Analytics**. **Advanced Analytics** helps identify possible areas for change, utilizing machine learning and artificial intelligence technology

and platforms. In this framework, it is possible to recognize patterns, detect anomalies, and produce forecasts to generate recommendations for optimizing financial digital business processes and strategies. Industry insights, international revenue cycle management experience, and benchmarking all serve to support statistical methods and address a number of key performance indicators.

Arvato Financial Solutions' Fraud Management Consulting evaluates fraud management activities across industries, providing insights and analytical knowledge of fraud models. The management is handled through an account management team, which can offer process assessment and suggest areas for potential optimization.

Operational and Technical Consulting is also available through **Arvato Financial Solutions'** technical client management and integration team. Project setup, implementation, and process optimization services are offered. They follow up after the implementation phase to monitor and ensure sustainable, positive effects on business. This is often done prior to integration. Training is passed on in order to better handle technical needs in the future.



Paladin would like to thank all of the participating vendors for their time and availability during the discovery and post-writing processes. We also would like to remind all readers of this report that they can email us at info@paladinfraud.com to let us know which vendors they would like to see participate in the report next year.

