

Outseer 3-D Secure™

Balance security with delivering a seamless user experience so you can grow your business

Covid has accelerated the digital transformation of everything. Global spending on e-commerce reached \$4.2T in 2020, a growth of almost 28% since the prior year¹. As digital commerce scales, organizations need to be prepared for the potential payment risks and challenges that come with this growth. Solutions need to provide security without sacrificing the user experience. Outseer 3-D Secure™ does just that.

In 2020 alone, Outseer 3-D Secure™ protected almost 1.2 billion transactions, saving our customers approximately \$1.6 billion in fraud losses.

1.2 Billion

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Stop fraud, not transactions

Outseer 3-D secure maps to the latest EMV® 3-D Secure 2.x protocol, the global standard for authenticating card-not-present (CNP) and digital transactions. EMV 3-D Secure was designed to achieve the right balance of security and convenience. The EMV 3-D Secure 2.x protocol promotes a frictionless shopping experience for cardholders by leveraging risk-based authentication technologies. To more fully support a risk-based approach, EMV 3-D Secure 2.x include new transactional attributes that enhance the ability to distinguish genuine transactions from fraudulent ones.

The 2.x protocol also expand its scope from the legacy browser-based environment of 3DS 1.0.2 to a much wider set of devices, with specific attention to mobile applications. The protocol addresses authentication needs of IoT devices such as smart watches, smart TV's, and gaming consoles. Expanding the scope beyond the Web is imperative in today's increasingly mobile transaction environment.

EMV 3-D Secure 2.x also includes extensions to support European Payments Services Directive 2 (PSD2) Strong Consumer Authentication (SCA) requirements for e-commerce transactions.



"The way we measure the success is that we're able to process many more sales, we have our fraud losses under control, and our customers are happy with the solution."

Vice President and Manager
Fraud Risk Control Large Bank

Finally, the 2.x protocol seeks to provide a smooth and intuitive user experience for those transactions still requiring active authentication by integrating it into the consumer shopping experience, and giving merchants complete control over the look and feel of the interaction.

As an industry pioneer, Outseer has participated in EMVCo and provided inputs to the specification.

Outseer 3-D Secure enables payment card issuers and processors to leverage the latest functionality as specified by the protocol—and then goes even further.

Empower your business with the industry's best fraud detection and intervention rates

Outseer 3-D Secure is an Access Control Server (ACS) for credit and debit card issuers and payments processors. With the Outseer Risk Engine™ at its core, Outseer 3-D Secure transparently evaluates each transaction in real time to determine the probability of fraud vs. genuine transactions. Step-up authentications are reserved for instances that truly warrant closer scrutiny, with a global average of approximately 5% requiring intervention. This leaves the vast majority of transactions unimpeded by a verification process.

As illustrated in the chart below, Outseer 3-D Secure maintains an average fraud detection rate of 95%, and a low genuine-to-fraud ratio (or the number of genuine transactions for each confirmed instance of fraud) that translates to a better transaction approval rate that grows your bottom line. That's the best performance in the industry. And it's achievable due to our Global Data Network, data science, fraud management expertise, and our machine learning through our Outseer Risk Engine.

95%/5%

Fraud Detection
vs. Intervention

2:1

Genuine to
Fraud Ratio

How it works

Managing digital transactions fraud is crucial to payment card issuers and payment processors, who bear the financial burden of bad transactions. Outseer 3-D Secure allows issuing banks to provide Visa Secure, Mastercard Identity Check, American Express SafeKey, JCB J/Secure™2.0, and eftpos support without negatively impacting their cardholders' shopping experience.

While any number of products leverage the EMV 3-DS protocol, only Outseer 3-D Secure predicts what others can't to accurately and transparently authenticate your cardholders.

Outseer Risk Engine

Outseer Risk Engine assesses more than 100 different fraud indicators to evaluate the risk of a transaction in real time and produces a risk score. The score is based on device and behavioral profiling, data elements from the 3-D Secure protocol, along with intelligence from the Outseer Global Data Network. The risk engine combines rich data inputs, machine



Global

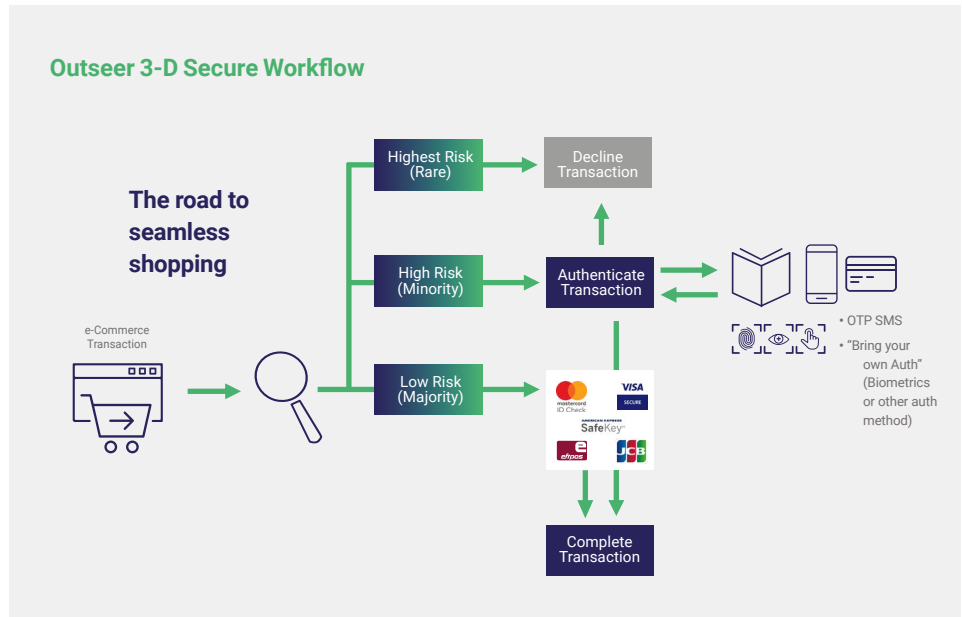
Outseer 3-D Secure leverages globally shared, cross-industry fraud and identity intelligence to inform risk assessment.

learning methods, and case management feedback to provide accurate risk evaluations to mitigate fraud.

The Outseer Risk engine uses an advanced machine learning statistical approach to calculating the risk score. This approach looks at the conditional probability of each event to evaluate if its most likely genuine or fraudulent given the known facts or predictors. All available factors are taken into consideration but weighed according to relevance, so that the most predictive factors contribute more heavily to the score. The predictive weighting calculations are updated daily based on the feedback from case management, chargebacks data and authentication results.

Outseer Global Data Network

Our globally shared, cross-industry transactions and identity intelligence network informs smarter risk decisions. When a member of the network marks an activity as “Confirmed Fraud” / “Confirmed Genuine” in the case management application the associated data elements are shared across the network. When an activity is attempted and includes one of the elements from the Global Data Network the risk is automatically adjusted.



Outseer policy management

The Outseer policy management application translates risk intelligence into action. Using our fine-grained policy controls, you can set specific actions to different thresholds based on your risk tolerance and your business objectives.

Outseer case management

Our case management application enables you to track activities that trigger rules and determine if they are fraudulent. You can also use the application to research cases and analyze fraud patterns when revising or developing policy rules. When cases are resolved, you can use the case management UI to provide feedback to the Outseer Risk Engine, helping to enhance the accuracy of risk decisions even further. An available API can be used to extract cases and activities to third party case management systems, and to update case resolution.



Step-up authentication

For the small percentage of transactions that are high risk or in violation of your policies, a step-up authentication will be triggered. Outseer 3-D Secure offers out-of-the-box step-up authentication options as well as a flexible interface to integrate with your organization's own authentication methods.

The confidence to grow your business

By achieving a balance between risk and a seamless user experience, Outseer 3-D Secure can help you:

- Gain your customers trust and loyalty ("top-of-wallet") so they choose your card to transact with—every time!
- Grow profitability by reducing fraud losses, reducing chargebacks and lowering operational costs associated with fraud investigation
- Increase transaction approval rates that drive up revenue and help you grow your business

¹["Global Ecommerce Update 2021."](#) eMarketer, Jan. 2021

About Outseer

Outseer empowers the digital economy to grow by authenticating billions of transactions annually. Our payment and account monitoring solutions increase revenue and reduce customer friction for card issuing banks, payment processors, and merchants worldwide.

Leveraging 20 billion annual transactions from 6,000 global institutions contributing to the Outseer Data Network, our identity-based science delivers the highest fraud detection rates and lowest customer intervention in the industry. See what others can't at outseer.com

