



# EMV® 3DS for E-Commerce: Fighting Fraud and Friction

Fighting payment fraud and checkout friction is key to businesses delivering a safe and convenient e-commerce experience for their customers. EMV® 3-D Secure (EMV 3DS) provides a way to identify fraudulent card payments more quickly and accurately, so that issuers and e-commerce merchants can prevent fraud without disrupting the purchase process, and consumers can expect a safe and easy checkout experience every time.

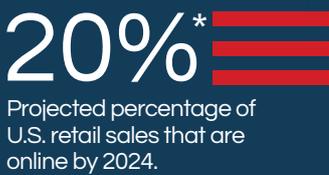
## Why EMV 3DS?



More and more consumers are shopping online using a variety of devices.



Projected total of U.S. e-commerce sales in 2020, an increase of more than 30% year-over-year.



\*U.S. Retail E-Commerce Sales, 2018-2024 (emarketer)

E-commerce fraud is a growing challenge for businesses to manage.



Projected U.S. e-commerce fraud losses in 2021.

False declines are a key problem in the fight against fraud.

Merchants are also losing money and customers because of false declines, which are legitimate transactions that are rejected due to suspected fraud.



Projected U.S. e-commerce losses due to false declines in 2021.

\*The E-Commerce Conundrum: Balancing False Declines and Fraud Prevention (Aite Group)

Consumers expect a secure, quick and convenient e-commerce checkout experience.

Given the rapid growth of e-commerce globally, merchants must engage with the digital channels or risk following the path of the dinosaurs. But they also have to manage digital channel activity with finesse to increase sales while improving security in an environment in which threats are ever-growing and consumers demand an easy, quick, and convenient checkout experience.

\*The E-Commerce Conundrum: Balancing False Declines and Fraud Prevention (Aite Group)



Percentage of surveyed U.S. consumers that indicated keeping payment information safe is one of the most important factors when choosing how to pay.

\*Deloitte U.S. Consumers Credit Card Payments Survey (Deloitte Insights)

The importance of authenticating the individual making the payment continues to be key in the fight against fraud. EMV 3DS is a fraud-prevention technology that enables consumers to authenticate themselves with their card issuer, without adding unnecessary friction to the payment process that often leads to abandoned purchases. The EMV 3DS Specification provides a common set of requirements product providers can use to integrate this technology into their solutions to support seamless and secure e-commerce payments.

Solutions like EMV 3-D Secure (3DS) are being more widely adopted to combat e-commerce fraud risks without adding friction to the checkout process.



For more information on EMVCo please visit: [www.emvco.com](http://www.emvco.com)

EMV® is a registered trademark in the U.S. and other countries and an unregistered trademark elsewhere. The EMV trademark is owned by EMVCo, LLC.

# How does authentication work with EMV 3DS?



Payer authentication is the process of verifying that the individual making a purchase with a payment card is the legitimate user of the card. For e-commerce purchases where EMV 3DS solutions are used, the process works like this:

- ▶ Consumer uses a payment card to make an online purchase on a mobile phone, tablet, laptop or other device.
- ▶ To confirm that the consumer making the purchase is the actual cardholder, the merchant uses EMV 3DS for authentication. This involves sending data about the transaction, payment method and device information to the issuer.
- ▶ Issuer reviews the data, decides the type of authentication needed, performs it and then processes the transaction per the usual authorization process. For transactions that are higher risk, EMV 3DS provides an additional layer of security by validating that the individual making the purchase is the legitimate cardholder. In these cases, the issuer can choose to prompt the consumer to authenticate themselves using a one-time-passcode, knowledge-based questions, biometrics or other method.

## Evolution of EMV 3DS

### 3DS 1.0

2001

3DS 1.0 was developed by Visa in 2001 to provide an additional security layer for online card payments.

### EMV 3DS

2016

EMVCo released the EMV 3DS Specification (v2.0) in 2016 to support the widespread adoption of 3DS technology for delivering convenient and reliable e-commerce payments globally.

EMVCo continues to evolve the EMV 3DS Specification to address industry needs for security, performance and user experience.

**“ 3-D Secure 2.0 has the potential to be a key tool in issuers and merchants’ fight against CNP fraud. ”**

**Aite**

**“ The airline industry has always looked to prevent fraud and better protect its customers. The EMV 3DS protocol helps make internet card payments more secure, while achieving a better balance between security and customer convenience by letting the card issuer know more details about the intended purchase. ”**

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## Benefits of EMV 3DS

EMV 3DS solutions help card issuers to identify fraudulent transactions more quickly and accurately, so that merchants can prevent e-commerce fraud with minimal disruption to the purchase process, and consumers can expect a safe and easy checkout experience.

Card Issuers	Merchants	Consumers
<p><b>Enhanced authentication and fraud management</b></p> <p>Better data and flexible authentication methods improve the decision-making process for issuers to determine the legitimacy of a transaction, resulting in:</p> <ul style="list-style-type: none"> <li>✔ Increased transaction approval rates</li> <li>✔ Less e-commerce fraud</li> <li>✔ Greater consumer confidence that transaction will not be falsely declined</li> </ul>	<p><b>Greater security, less friction</b></p> <p>An additional layer of security helps merchants better prevent fraud and promote convenience for their customers, resulting in:</p> <ul style="list-style-type: none"> <li>✔ Improved transaction security</li> <li>✔ Liability for fraudulent transactions shifted away from the merchant</li> <li>✔ Fewer false declines</li> <li>✔ Reduced risk of checkout abandonment</li> </ul>	<p><b>Better, safer checkout experience</b></p> <p>Consumers can use their preferred device to shop online and expect:</p> <ul style="list-style-type: none"> <li>✔ Quicker, easier authentication</li> <li>✔ Fewer purchases inaccurately declined</li> <li>✔ Confidence in safety of the transaction</li> </ul>

