



PSD2
SCA
3DS2

A PRACTICAL GUIDE TO UNDERSTANDING
THE UPCOMING CHANGES

INTRODUCTION

The Second Payment Services Directive (PSD2). Strong Customer Authentication (SCA). 3D Secure Version 2.0 (3DS2). There's been a lot of chatter around these terms recently.

To be sure, there is a lot of confusion and misinformation about what exactly you, as a merchant, are supposed to do. You might have heard that they'll affect transaction authorisations and your conversion rates. But how? And how can you make sure your business truly benefits?

The bottom line is: if you're a merchant that operates in Europe and accepts card payments online, you'll be affected by PSD2, SCA and 3DS2 in some way.

This whitepaper will answer your questions about these terms, how they will affect your business and what you need to do. It also includes a brief history of the 3D Secure security protocol and what's changed with the new version, so you have a full picture on how it will help merchants implement the SCA requirements that come into effect from 14 September 2019.

Importantly, we'll give you advice on how to get the best 3D Secure solution for your business. Whatever your level of understanding, we'll help you decide on the best approach to take when looking for a supplier. With this whitepaper, you'll know exactly what you need to be ready for the September deadline, and we'll answer the ultimate question – are these new requirements killers or converters for your business?



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WHAT IS 3D SECURE AND WHY SHOULD YOU CARE ABOUT IT?

WHAT IS 3D SECURE?

3D Secure (3DS) is essentially an extra layer of security for online card transactions. It's an authentication tool that asks cardholders to enter a password or a passcode sent via SMS when buying something online. In the original version, it would often appear as a pop-up window after clicking "Buy" on the checkout page.

WHY DID 3D SECURE BECOME NECESSARY?

Card-not-present (CNP) transactions, in which the merchant and point-of-sale aren't in the same location as the card and cardholder, have been a source of fraud since the earliest days of eCommerce. Merchants can't physically verify the cardholder's identity in CNP transactions, and fraudsters have exploited this ruthlessly.

Card-not-present fraud has historically accounted for a large proportion of fraud losses worldwide, and it's grown constantly since the early days of online shopping. In the UK, for example, CNP fraud increased 118% between 2003 and 2008, accounting for £328.4M worth of losses during that period. Similarly in the US, the Nilson Report found in 2016 that over 50% of fraud losses were associated with CNP transactions. According to Accenture, estimates of the global cost of CNP fraud losses today range from \$25 to \$40 billion.



Card-not-present fraud is exactly what 3D Secure (3DS) sought to reduce when it was originally developed by Visa in the early 2000s. Version 1.0 of 3DS (3DS1) required merchants to add a layer of payment authentication, like a password or code sent via SMS. Other card schemes like Mastercard and Amex eventually joined forces with Visa to create EMVCo, the body responsible for facilitating adoption of 3DS1 and developing the technical standards.

It was a major milestone for the industry. For transactions authenticated with 3DS1, fraud liability shifted from merchants to card issuers and banks, giving merchants greater protection from financial risks like chargeback fraud.

Unfortunately, 3DS1 added friction and frustration to the customer experience. Customers had to register for 3DS schemes, create passwords and enter them (or a code sent via SMS) into a pop-up window whenever they made a card transaction. The windows were often hidden by pop-up blockers and poor mobile optimisation meant many simply authentication portals were totally unusable on smartphones or tablets.

These factors combined to annoy online customers, and many simply abandoned their shopping carts. According to Mastercard, these authentication processes contributed to an eCommerce cart abandonment rate of 10-15%, with an authentication failure rate of around 20%. Further research found that applying 3DS1 to all transactions led to conversion rate drops of 55% in Brazil and 43% in China and the US.

For merchants like you, this represents a significant amount of lost customers and lost revenue. To be sure, greater security and less liability are preferable, but not if it means a drop in your eCommerce sales. Because of this impact, it quickly became clear that changes were necessary to improve the balance between security and customer experience.

HOW DOES THIS FIT IN WITH THE SECOND PAYMENT SERVICES DIRECTIVE (PSD2) AND STRONG CUSTOMER AUTHENTICATION (SCA)?

Version 2.1 of the protocol – also known as 3DS2 – addresses some of the issues with 3DS1 by making the authentication process less disruptive to the customer. Basically, 3DS2 allows you and your payment provider to give issuing banks more data around each transaction, increasing customer authentication and reducing fraud, while collecting and transmitting the data in the background, without the customer having to do anything.

Issuing banks can then use this additional information to make more accurate decisions about the risk level of each transaction and respond in one of two ways:



FRICTIONLESS FLOW

the information is considered enough to validate that the real cardholder making the purchase, and no further cardholder action is needed.



CHALLENGE FLOW

the issuing bank decides more information is required to validate that the real cardholder is making the transaction, and the customer is directed to enter more information to complete authentication.

Crucially, the 3DS2 specifications have been designed for a modern world of mCommerce – the challenge flow can be embedded directly into both web and mobile checkouts without requiring redirects, and are adapted for various screen sizes. Gone are the days of pop-up windows and authentication portals not loading properly on a smartphone.

3DS2 also lets banks offer more innovative authentication methods. For example, customers can be redirected to their bank's mobile banking app to authenticate a transaction using biometric methods like fingerprinting or facial recognition.

Through the sharing of more transaction data, the accuracy and number of approval rates by issuing banks will increase. This, combined with an improved, smoother customer experience during online checkouts, should result in higher conversion rates for you. Initial research suggests that 3DS2 can reduce checkout times by 85% and cart abandonment by 70%.

HOW CAN MERCHANTS TAKE ADVANTAGE OF TRANSACTION RISK ANALYSIS (TRA)?

The TRA exemption allows for certain remote transactions to be exempted from SCA, provided that a robust risk analysis is performed, and the issuer or acquirer meet specific fraud thresholds. Issuers and acquirers can both apply the TRA exemption if they meet certain requirements, including maintaining consistent and very specific fraud thresholds for card payments.

Because of this, to take advantage of these exemptions, in addition to migrating to the new 3D Secure, you must ensure that your fraud rates are at acceptable levels and that you're using a real-time fraud monitoring solution that is compliant with PSD2.





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REGULATION WILL PUSH THE INDUSTRY FORWARD

With PSD2, SCA and 3DS2, it might feel like there is a lot to get your head around, a lot of technical specifications to navigate, and a lot of resources to invest in new solutions and technology. New regulations can often seem like a burden.

But it's important to remember that regulation is intended to make things better for everyone, and there have been numerous financial solutions developed based on regulations that have ended up advancing the entire industry. Think of Card Verification Value (CVV) codes on credit cards, which ended up drastically reducing online fraud. Or how IBAN numbers standardised bank account identification and allowed for greater processing of cross-border transactions.

PSD2 has been built to offer protection to consumers, encourage competition and make business practices more sustainable. The SCA requirements have been created to ensure that online transactions are secure, and that consumers, merchants and banks are protected from fraud.

It is also pushing companies to innovate new solutions that advance the market. For example, EMVCo has defined the 3DS2 protocol to meet SCA requirements so regulatory requirements can be met. But, aside from that, it will improve life for both customers and merchants by making the checkout experience frictionless. This will improve conversion rates for merchants – perhaps by as much as 10%.

And, crucially, if you don't comply, it will kill your conversion rates. Research suggests that failure to abide by SCA requirements could result in a reduction in transaction approval rates that could cost an estimated €57 billion in cart abandonments.



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A PRACTICAL GUIDE FOR MERCHANTS IMPLEMENTING 3DS2

Now that you understand what 3DS2 is, why it can benefit you, and how long you have to prepare for it, follow these steps to be ready for the 14 September 2019 deadline:

1. DON'T THINK YOU CAN DO JUST THE BARE MINIMUM

It's important to have the right attitude before you even start. Because PSD2 and SCA are regulatory requirements, it's easy to consider compliance as a simple box-ticking exercise – a chore that needs to be completed.

However, 3DS2 represents a huge opportunity for merchants to improve conversion rates. 3DS2 lets you provide your customers with a frictionless checkout experience, making them less likely to abandon their carts and more likely to convert. And by sharing more data with issuing banks, the likelihood that those transactions are approved also increases, all of which means more sales for you.

But you need to do it right. You're going to have to invest in implementing 3DS2 anyway, so you may as well ensure that you're future-proofing your business when it comes to SCA requirements. It's crucial to invest in a 3DS2 solution that will work for years to come, and to work with a provider that has the tools and agility to innovate as the requirements evolve and new regulations come into play.

2. CONSULT EXPERTS ON THE BEST EXEMPTION POLICY FOR YOUR BUSINESS

You will want to make sure that you're using all the exemptions that apply to your business – but you will no doubt need assistance navigating the specific requirements of each one.

You might need some help when preparing your policy for 3DS2, how you intend to apply exemptions and how that integrates with the processes and systems your business is built on. Expertise and consultancy from a provider are just as important as a robust technical solution or detailed implementation roadmap.

3. DETERMINE THE RIGHT MIX OF SERVICES

Each merchant will have different requirements when it comes to 3DS2. Factors such as where you operate, who and where your customers are, your specific business model will all determine how 3DS2 fits into your business. There's no one-size-fits-all approach.

This means that different services and solutions will be relevant when it comes to implementation. When looking for a 3D Secure provider, it's important to find one that will help you decide on the right solution (or solutions) to optimise your approval rates. Similarly, a good provider will deliver a solution that helps manage the technical and legal hurdles of SCA exemptions, to ensure that your checkout experience is frictionless, while keeping things simple from your end.

Crucial to this will be a provider that seeks to truly understand your business and the payments journey of your customers. This way, you'll be getting a mix of services that truly optimises the 3DS authentication flow and delivers better conversions for you.





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WHAT TO LOOK FOR IN A PROVIDER

For the best 3D Secure performance for your business, look for a provider that meets the criteria in this checklist:

✓ **SUPPORT FOR 3DS VERSIONS 1.0 AND 2.0**

The old and new versions of the 3D Secure protocol will coexist for a little while, and any provider you work with should provide support for both, and be able to facilitate a seamless transition between the two when the SCA deadline comes.

✓ **SUPPORT FOR YOUR NATIVE MOBILE APPS ON IOS AND ANDROID**

One of the biggest changes with 3DS2 is that it allows you to embed authentication flows straight into your mobile app, without requiring redirects. It's therefore key that you work with a provider that can implement these into your mobile apps across multiple operating systems.

✓ **OPTIMISATION ENGINE THAT MANAGES YOUR 3D SECURE ACTIVITY AND EXEMPTIONS**

As mentioned previously, understanding when and how to apply exemptions to 3D Secure is a complex task. Choose a provider that will be able to implement solutions that largely automate your 3DS2 activity and apply exemptions whenever relevant.



KNOWLEDGE AND EXPERTISE ON HOW TO NAVIGATE THE NEW REGULATIONS

You are not expected to understand the complex technical and legal aspects of PSD2 and SCA, but you do need to work with someone who does. A good provider will help you make sense of the regulations and advise you on what you should do to be compliant – especially as the requirements evolve over time.

A provider that can deliver all the above will ensure that you not only meet the SCA requirements, but that you are truly using 3DS2 successfully, to maintain high levels of security and authentication, while also improving conversions and authorisations, and, most importantly, remaining compliant to regulatory requirements.



GET SMART ABOUT 3D SECURE

With broad knowledge and experience in regulation, Credorax has created Smart 3DS - a unified, optimised solution to manage your 3D Secure activities.

The main innovation is the Smart 3DS Advisor optimisation engine – a flexible decision layer that analyses transactions, optimises traffic and improves the conversion rates for optimal use of 3DS.

The system decides whether to employ 3DS on a transaction based on regulatory demands, approval rate and a risk-based rule engine. Smart 3DS Advisor removes the complexity of 3DS optimisation and ensures you are maximising your approvals and conversions.

In addition, Smart 3DS offers: unified support for 3DS 1.0 and 2.1, with selection of the authentication method built into the payment flow; a software development kit (SDK) for mobile apps; and full exemption management.

WHAT'S THE TIMELINE FOR 3DS2/PSD2/SCA?

Mastercard mandates the transition to 3DS 2.0 globally.

1
APRIL
2019

Visa mandates the transition to 3DS 2.0 in North American and Latin America.

15
AUGUST
2019

Visa mandates the transition to 3DS 2.0 in the rest of the world.

18
APRIL
2020

TBD
2020

Visa mandates the transition to 3DS 2.0 in Europe.

PSD2 Strong Customer Authentication requirements come into effect for all customer-initiated transactions and bank transfers in the EEA (aside for out of scope transactions). From this date, all non-exempted transactions will require two-factor authentication.

The original version of the 3D Secure protocol, version 1.0, will be decommissioned. Until then, 2.0 and 1.0 will run in parallel.

CONCLUSION

The 14 September 2019 deadline for Strong Customer Authentication requirements is approaching fast. There's time left to prepare your business - but not much.

The complexity of PSD2, SCA and 3DS2 means that you can't do it on your own. However, if you use our tips on how to approach 3DS2 and what to look for in a provider, you'll be able to find the perfect partner to help you navigate the complexity. With the right partner and right solution, you'll be able to turn 3DS2 from a conversion killer to a killer converter.

ABOUT CREDORAX

Credorax is a licensed NextGen merchant acquiring bank providing cross-border processing for eCommerce and omni-channel payments. Our core gateway technology, Source™, has been developed in-house to provide a streamlined payments experience so smart, that merchants can reach their full business potential simply by better managing their payments. Credorax merchants process in over 120 currencies, accept a wide range of alternative payment methods, and get paid in their currency of choice. Our merchants also enjoy best-in-class approval rate optimisation, advanced fraud protection, business intelligence and a host of other value-added services and products adding up to a payments experience unlike any other.

Contact our payments experts to get the 3D Secure solution that's tailored to your business:
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