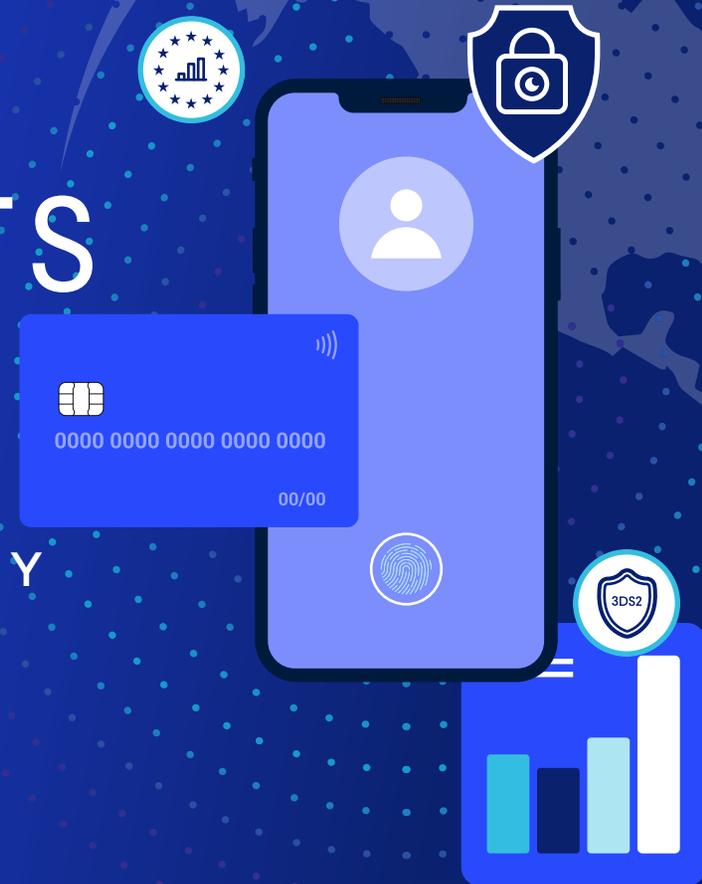


GLOBAL PAYMENTS REPORT 2025

REGULATION, AUTHENTICATION, SECURITY



CONTENTS

3 INTRODUCTION

5 SECTION A: AUTHENTICATION REPORT

3D Secure success rates globally, per-card scheme, and per-country, as well as frictionless rates, all from Ravelin's internal data.

AUSTRALIA	DENMARK	ITALY	SLOVAKIA
AUSTRIA	ESTONIA	LATVIA	SLOVENIA
BELGIUM	FINLAND	LITHUANIA	SOUTH AFRICA
BRAZIL	FRANCE	LUXEMBOURG	SPAIN
BULGARIA	GERMANY	MALTA	SWEDEN
CANADA	GREECE	NETHERLANDS	UNITED KINGDOM
CHINA	HUNGARY	NORWAY	UNITED STATES
CROATIA	ICELAND	POLAND	
CYPRUS	INDIA	PORTUGAL	
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27 SECTION B: REGULATIONS ANALYSIS

The state of payments authentication, regulation and compliance in 2025, advice to merchants and PSPs, and global regulations map.

32 SECTION C: ATTITUDES TO AUTHENTICATION, PAYMENTS AND PAYMENT FRAUD

What do merchants really think about payments and authentication? Findings and takeaways from our survey of 1453 merchants.

39 METHODOLOGY

INTRODUCTION

If you accept card payments online, then authentication, regulation and fraud are likely to be an area of concern.

Ever-shifting card scheme expectations, protocols, legislation and fraudster tactics can make this a complicated topic to keep track of. That's why Ravelin is releasing the Payments Report 2025.

The Payments Report is an update of our well-received previous regulation and authentication report. This time, we've enriched it with **new sections, additional data and deeper analysis.**

You'll find three sections, homing in on:

SECTION A

Authentication report:

Ravelin's 3D Secure data from around the world

SECTION B

The state of payments authentication, regulation and compliance 2025:

Analysis and breakdown of new regulation and expectations in authentication

SECTION C

Attitudes to regulation, payments and payment fraud:

Merchant attitudes around 3DS, PSD2, payments and selling online

We hope it provides you with valuable insights into what works and what doesn't in online payments, what to anticipate in the future and what to watch out for.

Enjoy reading!

The Ravelin Technology team

KEY TAKEAWAYS

1

Global frictionless rates are disappointingly low. Are merchants utilizing frictionless authentication options to their full potential?

2

The UK boasts the strongest 3DS and 3DS challenge rates – but frictionless rates aren't as good.

3

Fraud prevention is the key reason why merchants authenticate, with card scheme expectations and regulations coming in 2nd and 3rd.

4

Merchants aren't optimistic on the upcoming PSD3's effects on conversion, despite legislator assurances for more frictionless payments.

5

Innovation and legislation seem to move faster in regions such as LatAm, Australia and India.

6

3DS data holds potent value – it can create positive feedback loops that boost fraud prevention and improve customer journeys.

- › The 3DS data in Section A is internal and comes from Ravelin's payment fraud and optimization recommendations, as well as from managing authentication itself.
- › Section B is based on the authors' expertise in the online payment landscape, including official legislation announcements, card scheme bulletins and the media.
- › Section C contains new data from Ravelin's annual Survey, the latest version of which had 1453 participants – all enterprise merchants who sell products or services online.

For detailed **methodology and breakdown**, [please visit page 39](#)

SECTION A: AUTHENTICATION REPORT

RAVELIN'S GLOBAL 3D SECURE AUTHENTICATION REPORT

In this section, you'll find authentication data for 37 key countries, as well as global averages per card scheme and region.

For each, we'll look at:

3DS SUCCESS RATE:

The rate of success of 3D Secure authentication as a proportion of all payments sent to authentication. In this sense, the 3DS success rate can also be called the 3DS authentication success rate.

3DS CHALLENGE SUCCESS RATE:

Where there has been a 3D Secure challenge, what percentage of cardholders successfully authenticated themselves? In other words, this is the rate of successful 3D Secure challenges as a proportion of all 3D Secure challenges.

FRICTIONLESS RATE:

How many of all authentication attempts were authenticated without a challenge?

TOP CARD PAYMENT METHODS:

What are this country's preferences when paying by card?



Card



Wallet



PayPal

FINDINGS WORTHY OF YOUR ATTENTION

- › Globally, frictionless rates are disappointingly low. Our assumption is that not enough merchants are separating the wheat from the chaff before they send a payment to 3DS. Are merchants utilizing frictionless authentication options to their full potential?
- › The UK can be proud of having the highest 3DS rates. However, there's room for improvement when it comes to frictionless.
- › In the USA, success rates are very low. Consumers are abandoning their carts in some cases, and issuers don't want to keep accepting liability for fraudulent transactions, so they're less likely to do frictionless on a challenge. Are American merchants using 3DS dynamically?
- › France's frictionless rate is not so great at 56% – neither is Canada's (43%). Shoppers are on the receiving end of more friction in these countries.
- › Mastercard and the Cartes Bancaires system are leading the way in success rates and frictionless payments.

GLOBAL STATISTICS

AVERAGE 3D SECURE SUCCESS RATES GLOBALLY

JAN–JUL 2024

AVERAGES

		3DS success rate	3DS challenge success rate	Frictionless rate
	North America	61%	84%	60%
	Europe	82%	73%	66%
	Global	79%	74%	64%

GLOBAL STATISTICS

AVERAGE 3D SECURE SUCCESS RATES PER CARD SCHEME

JAN–JUL 2024

AVERAGES

		3DS success rate	3DS challenge success rate	Frictionless rate
	Mastercard	91%	86%	70%
	Visa	91%	88%	60%
	American Express	89%	94%	47%
	Diners & Discover	50%	90%	99%
	Private label cards	40%	61%	50%
	Cartes Bancaires	87%	96%	85%
	UnionPay	99%	99%	70%



AUSTRALIA

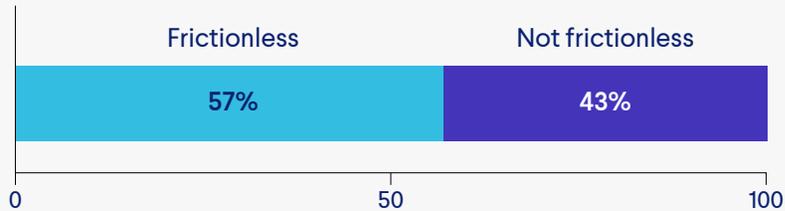
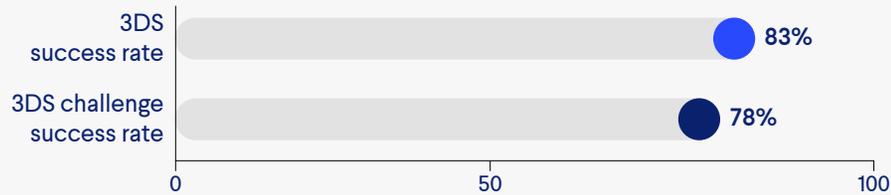
National Competent Authority

Reserve Bank of Australia and the Australian Payments Network (AusPayNet)

SCA status

Since 2019, the CNP Fraud Mitigation Framework requires SCA when a merchant's fraud rate is above the recommended rate for two consecutive quarters.

3D SECURE PAYMENT DATA



Top card payment methods



AUSTRIA

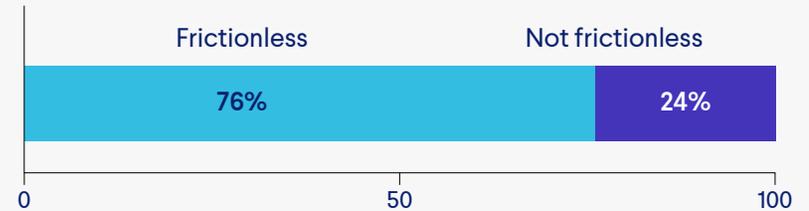
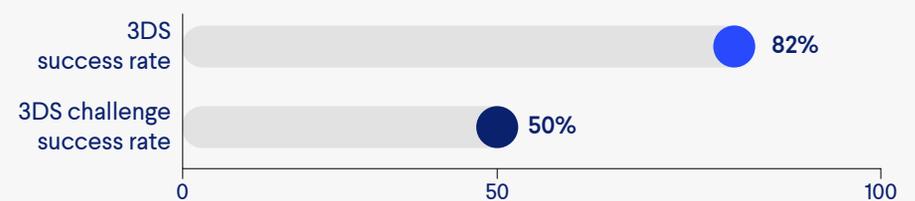
National Competent Authority

Financial Market Authority

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





BELGIUM

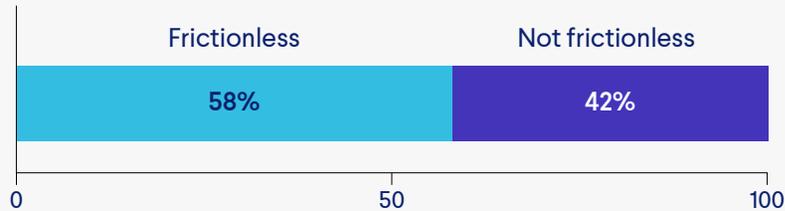
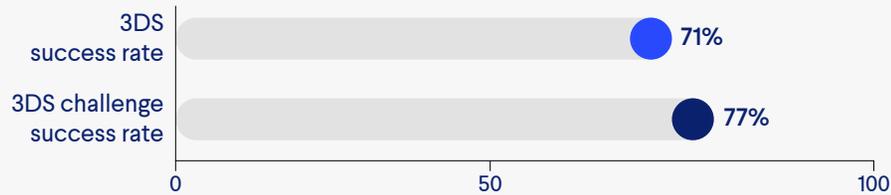
National Competent Authority

National Bank of Belgium

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



BRAZIL

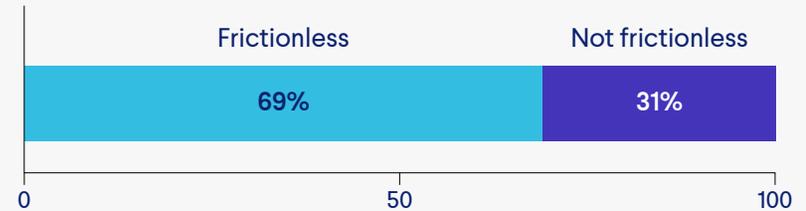
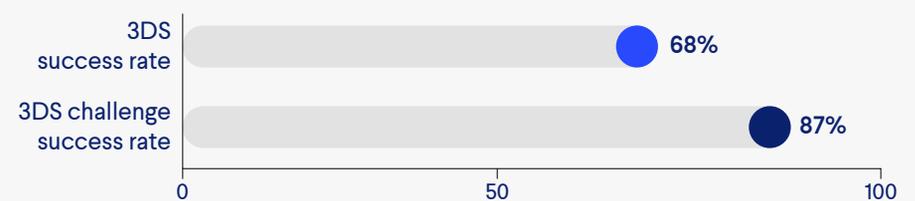
National Competent Authority

Banco Central do Brasil

SCA status

Two-factor authentication is required on transactions made using domestic-issued debit cards within Brazil.

3D SECURE PAYMENT DATA



Top card payment methods





BULGARIA

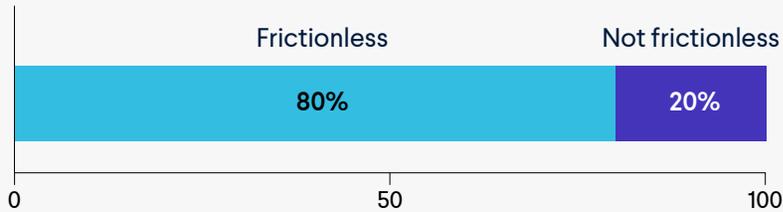
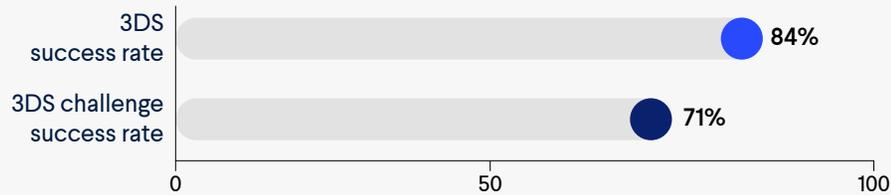
National Competent Authority

Bulgarian National Bank

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



CANADA

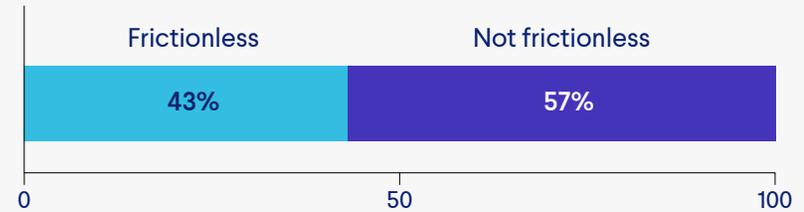
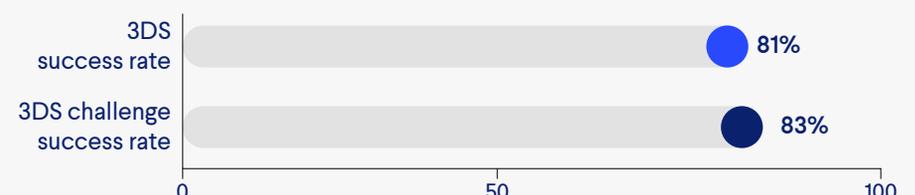
National Competent Authority

Department of Finance

SCA status

No regulation as of yet. Card schemes have discontinued use of 3DS v2.1.

3D SECURE PAYMENT DATA



Top card payment methods





CHINA

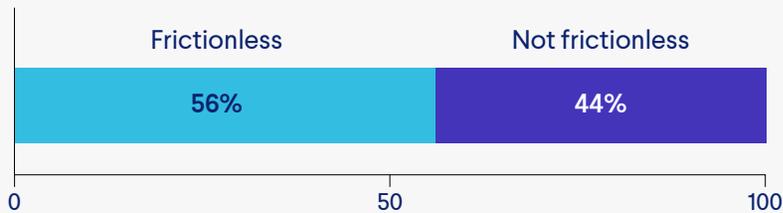
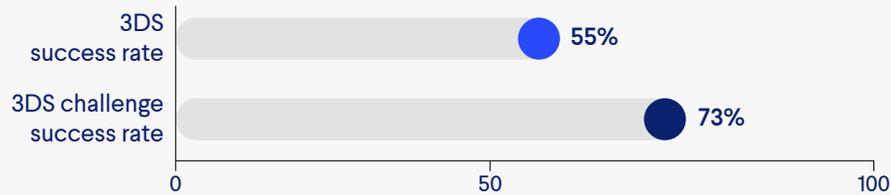
National Competent Authority

China's Central Bank

SCA status

Since 2017, QR code transactions above 500 yuan are subject to additional security checks. UnionPay is the only card scheme in China.

3D SECURE PAYMENT DATA



Top card payment methods



CROATIA

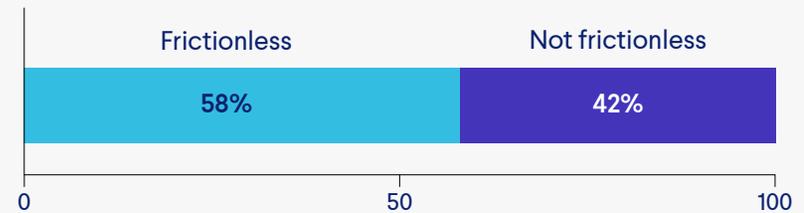
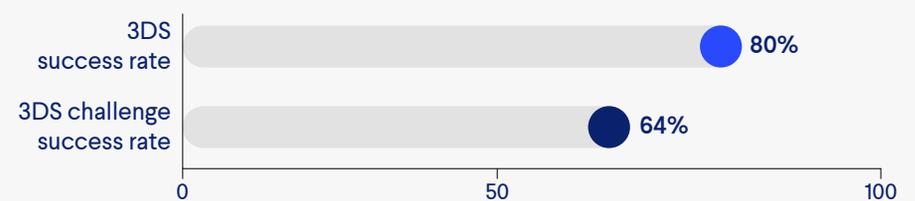
National Competent Authority

Department of Finance

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





CYPRUS

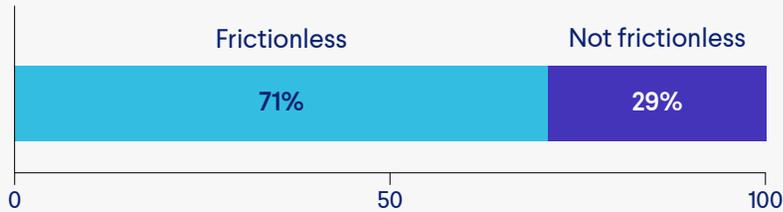
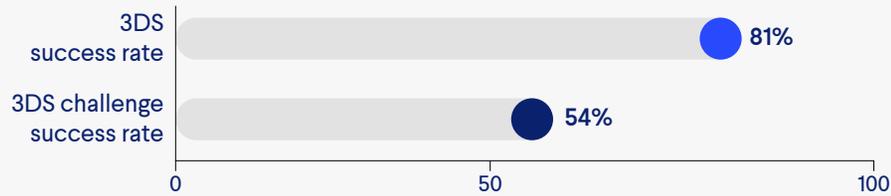
National Competent Authority

Bank of Cyprus

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



CZECH REPUBLIC

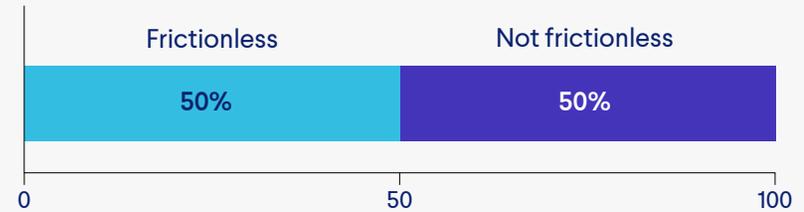
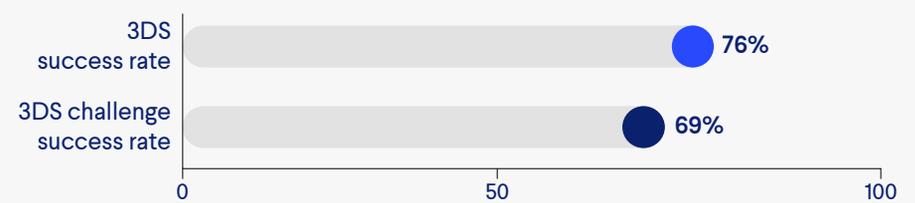
National Competent Authority

Czech National Bank

SCA status

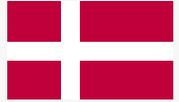
PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





DENMARK

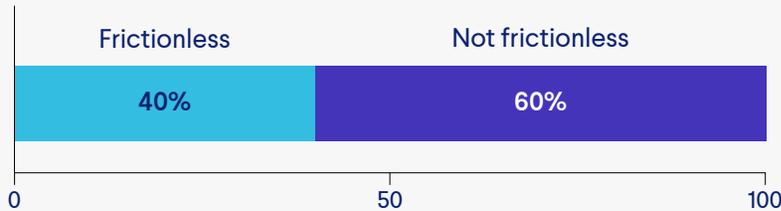
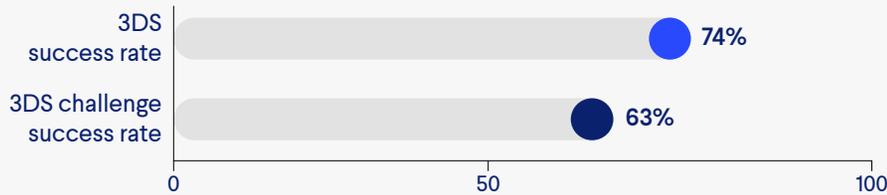
National Competent Authority

Danish Financial Supervisory Authority (Finanstilsynet)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



ESTONIA

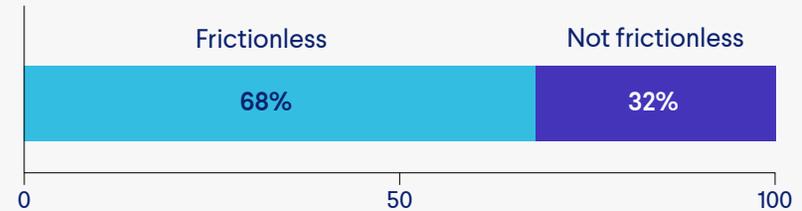
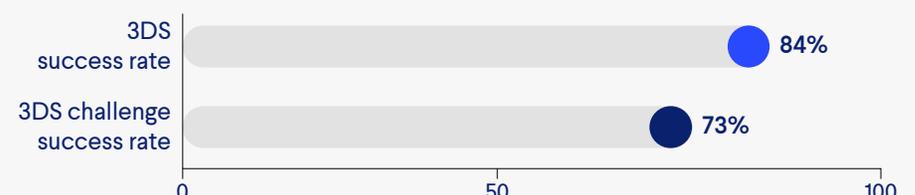
National Competent Authority

Financial Supervision Authority (Finantsinspektsioon)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





FINLAND

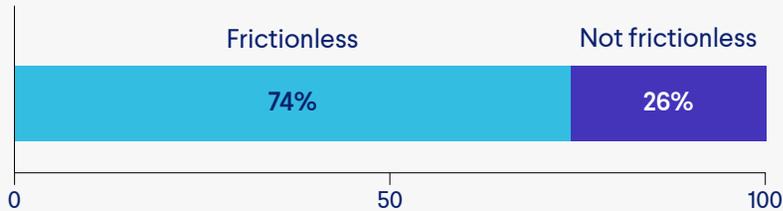
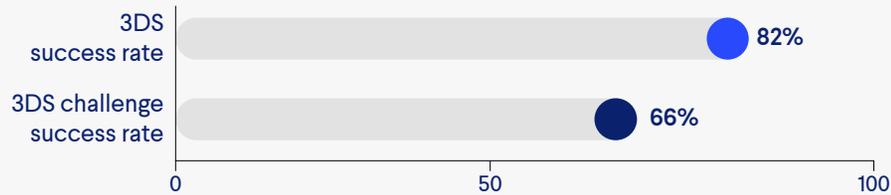
National Competent Authority

Finanssivalvonta (Fin-FSA)

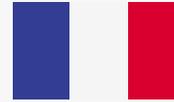
SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



FRANCE

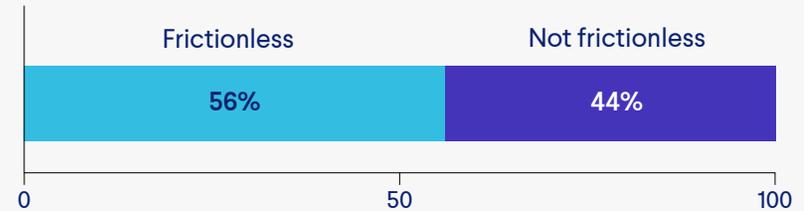
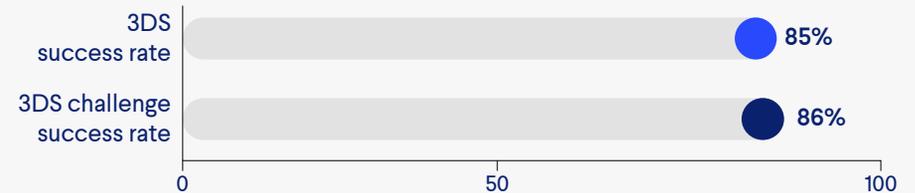
National Competent Authority

French Prudential Supervision and Resolution Authority (Autorité de contrôle prudentiel et de Resolution)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





GERMANY

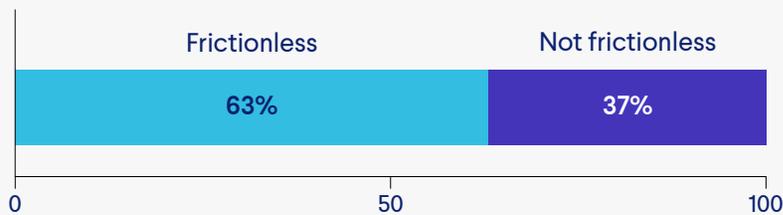
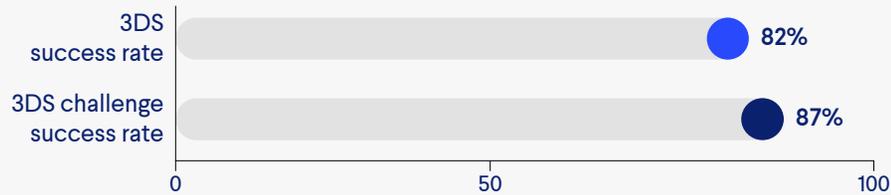
National Competent Authority

Federal Financial Supervisory Authority (BaFin) and Bundesbank

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



GREECE

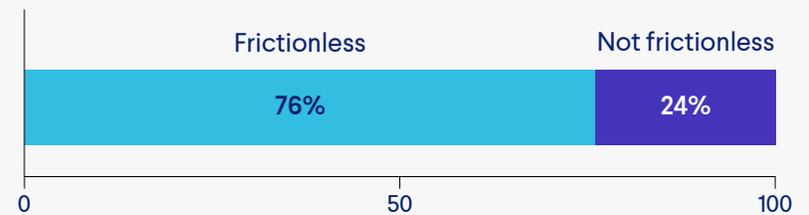
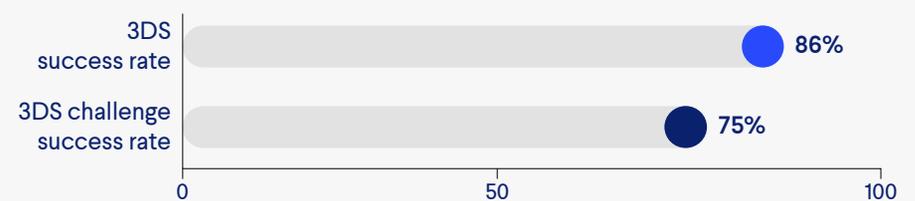
National Competent Authority

Bank of Greece

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





HUNGARY

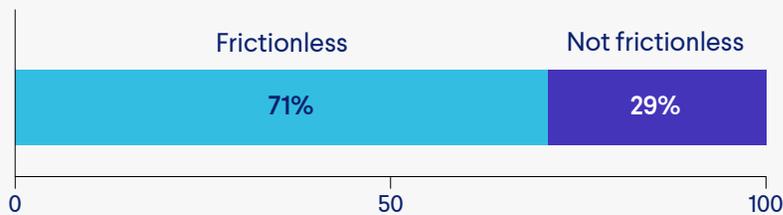
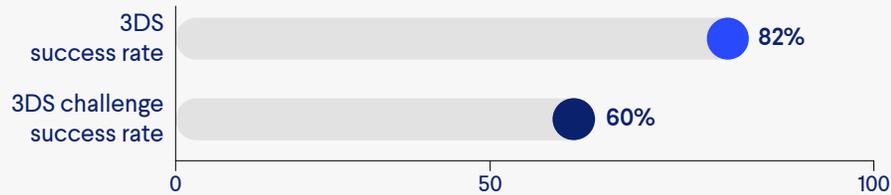
National Competent Authority

Central Bank of Hungary

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



ICELAND

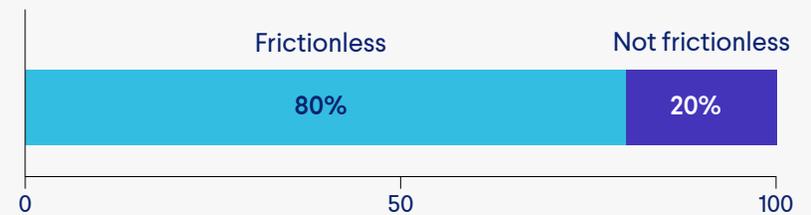
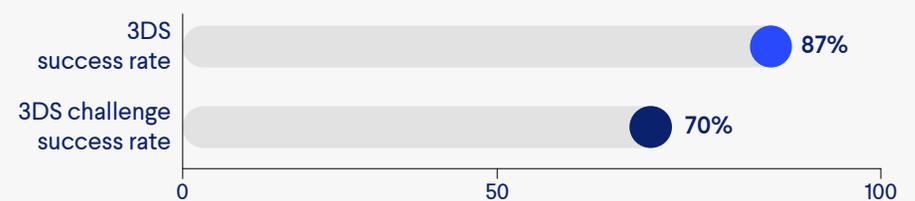
National Competent Authority

Financial Supervisory Authority

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





INDIA

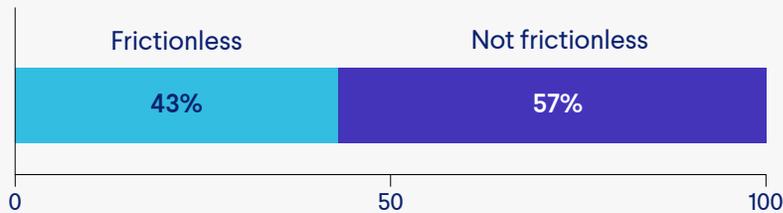
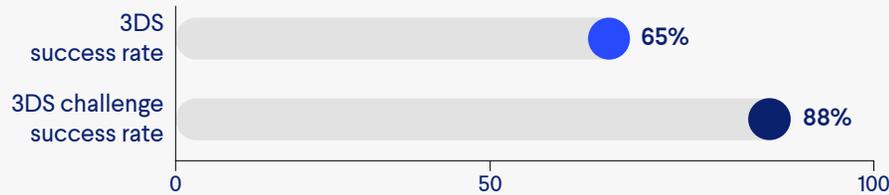
National Competent Authority

Reserve Bank of India

SCA status

Two-factor authentication is required for all domestic debit and credit card transactions over Rs 2000.

3D SECURE PAYMENT DATA



Top card payment methods



IRELAND

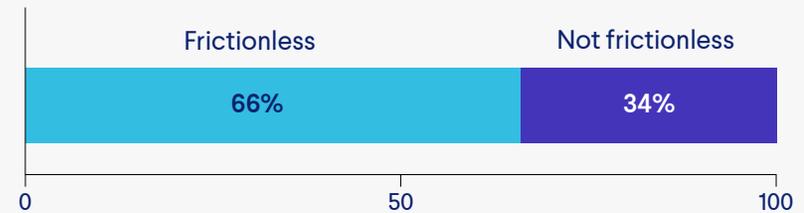
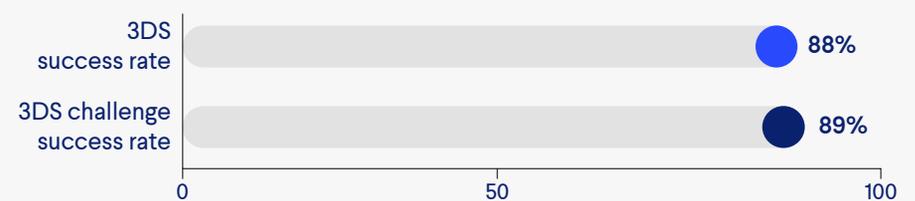
National Competent Authority

Central Bank of Ireland

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





ITALY

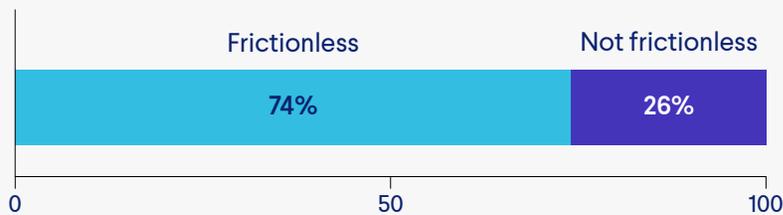
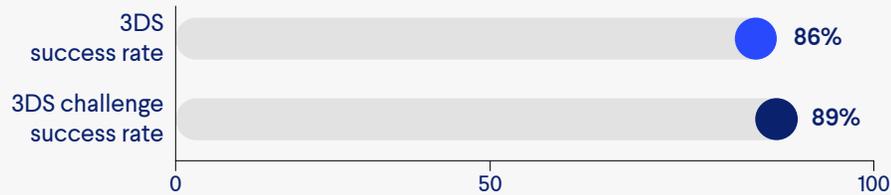
National Competent Authority

Bank of Italy (Banca d'Italia)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods




LATVIA

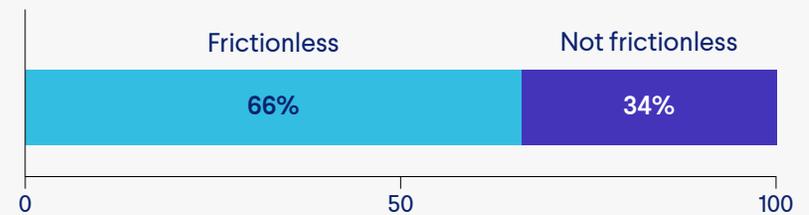
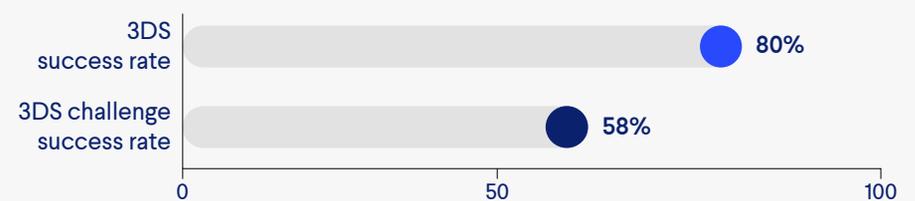
National Competent Authority

Financial and Capital Market Commission (FKTK)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





LITHUANIA

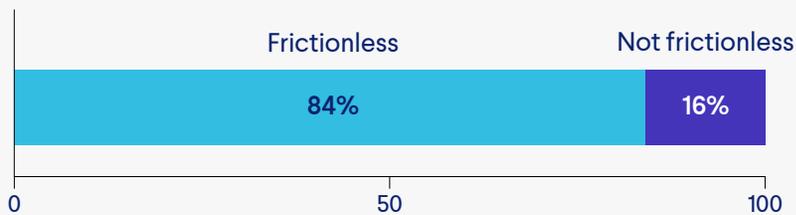
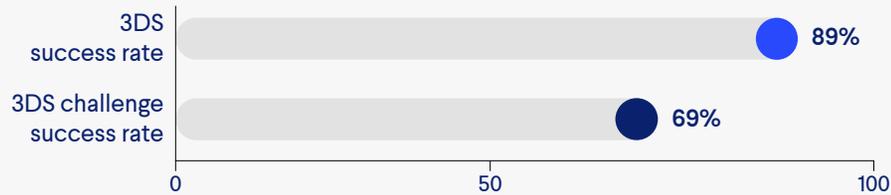
National Competent Authority

Bank of Lithuania

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



LUXEMBOURG

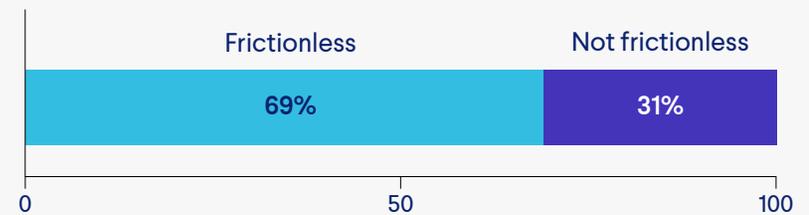
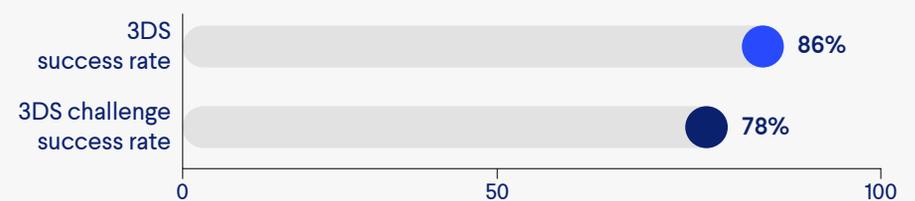
National Competent Authority

Commission de Surveillance du Secteur Financier

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





MALTA

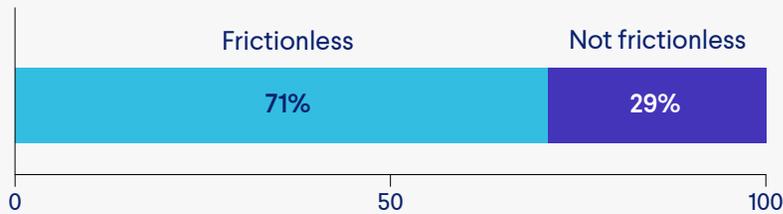
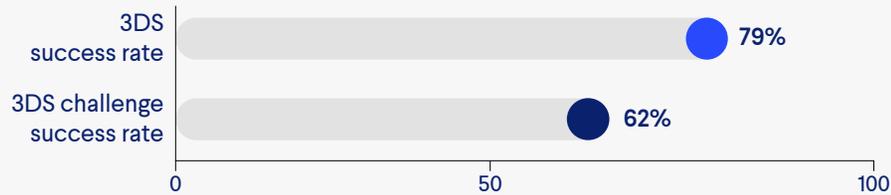
National Competent Authority

Central Bank of Malta and Malta Financial Services Authority

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



NETHERLANDS

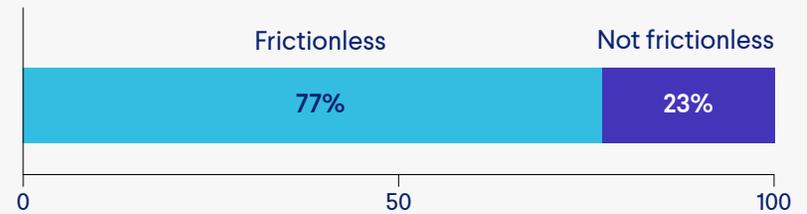
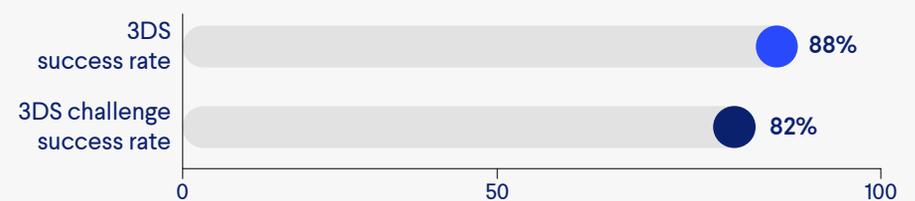
National Competent Authority

De Nederlandsche Bank

SCA status

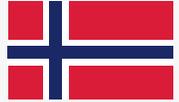
PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





NORWAY

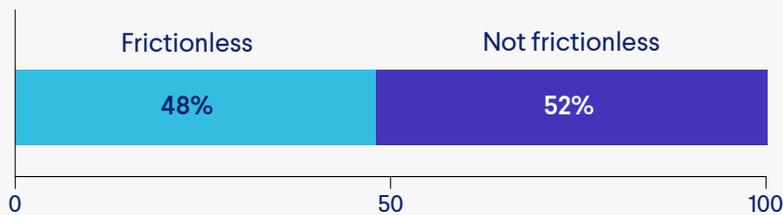
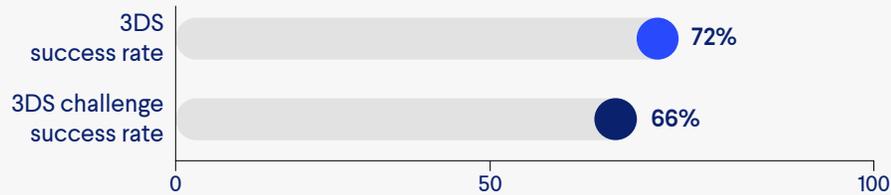
National Competent Authority

Financial Supervisory Authority of Norway (Finanstilsynet)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



POLAND

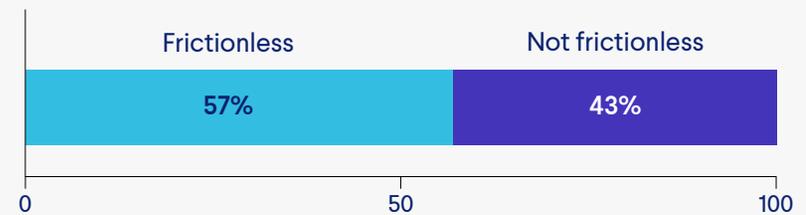
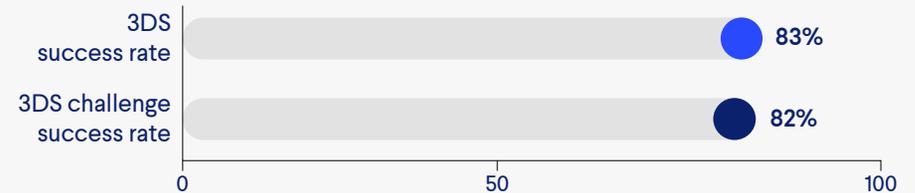
National Competent Authority

Polish Financial Supervision Authority

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





PORTUGAL

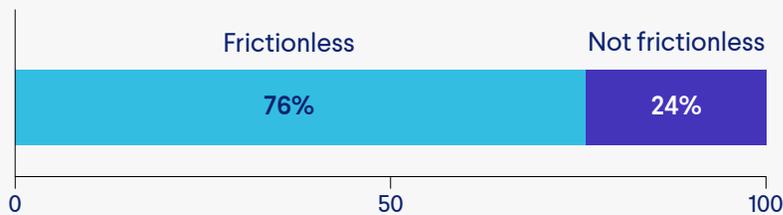
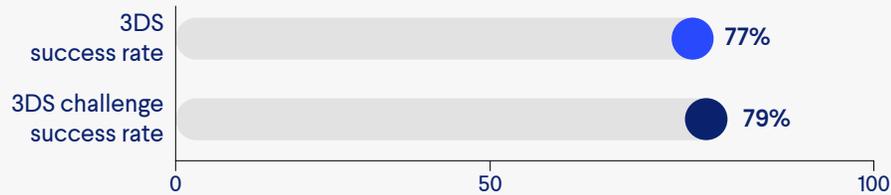
National Competent Authority

Banco de Portugal

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



ROMANIA

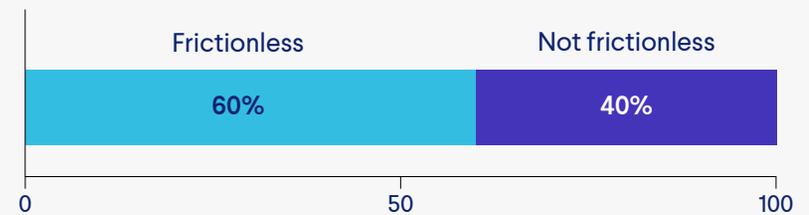
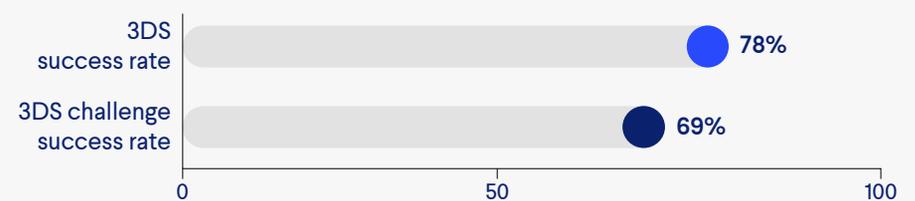
National Competent Authority

National Bank of Romania

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





SLOVAKIA

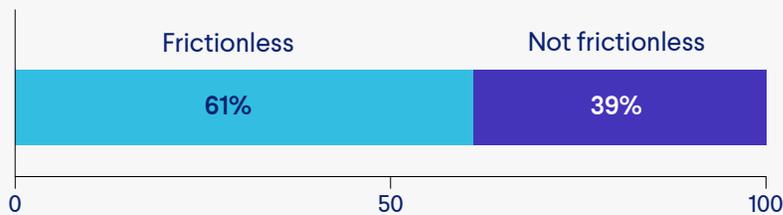
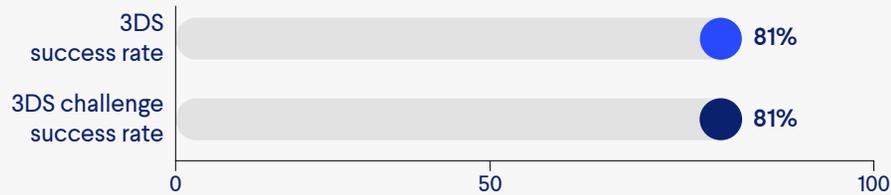
National Competent Authority

National Bank of Slovakia

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



SLOVENIA

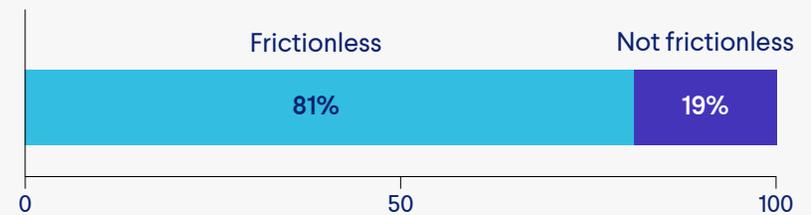
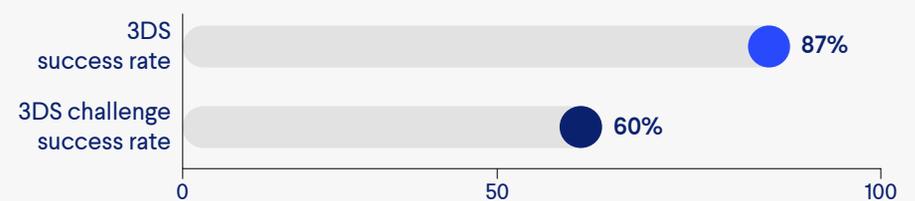
National Competent Authority

National Bank of Slovenia

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





SOUTH AFRICA

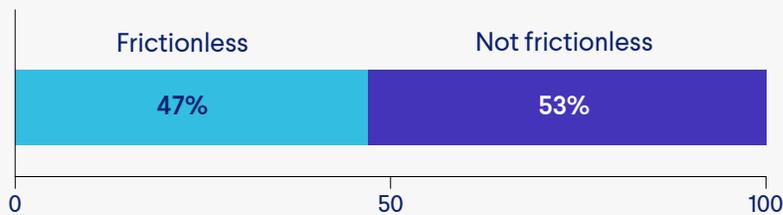
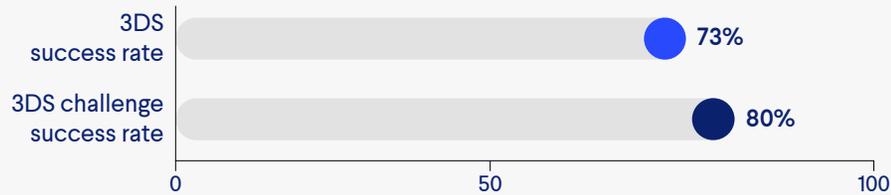
National Competent Authority

Payment Association of South Africa

SCA status

Since 2014, all ecommerce merchants are required to implement two-factor authentication on all credit card transactions.

3D SECURE PAYMENT DATA



Top card payment methods



SPAIN

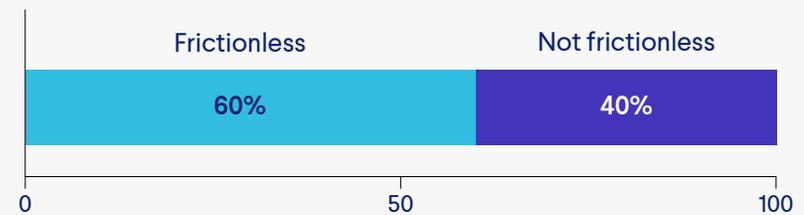
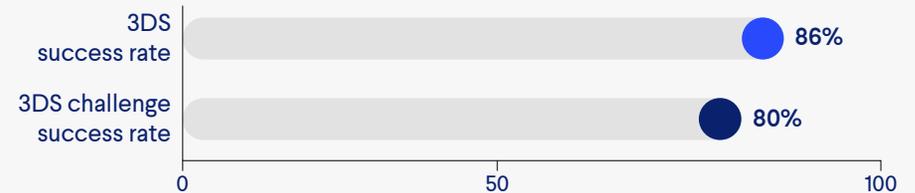
National Competent Authority

Banco de España

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods





SWEDEN

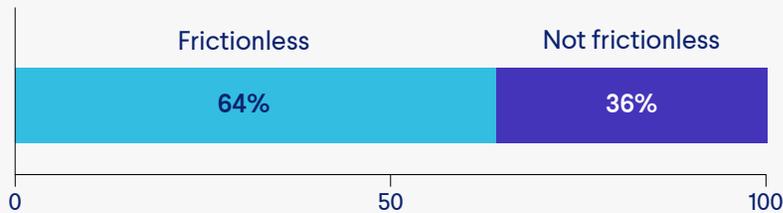
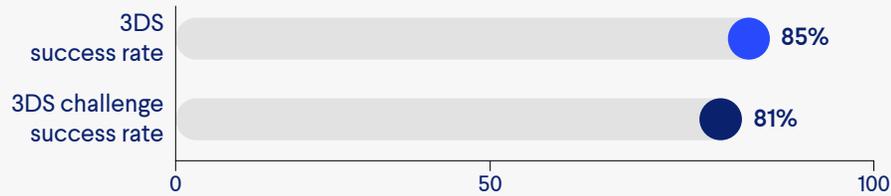
National Competent Authority

Financial Supervisory Authority (Finansinspektionen)

SCA status

PSD2 SCA is enforced for all in-scope transactions.

3D SECURE PAYMENT DATA



Top card payment methods



UNITED KINGDOM

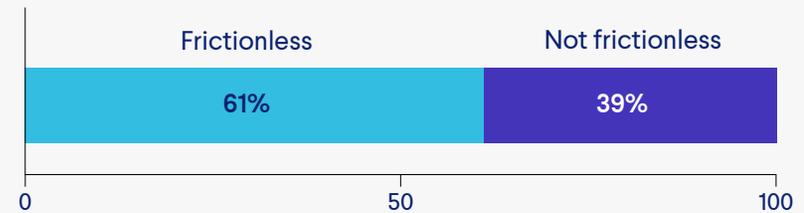
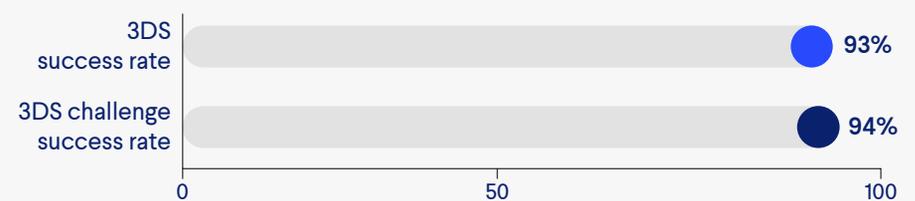
National Competent Authority

Financial Conduct Authority

SCA status

PSD2 SCA is enforced for all in-scope transactions – regardless of the UK's exit from the EU, PSD2 is fully written into UK law.

3D SECURE PAYMENT DATA



Top card payment methods





UNITED STATES

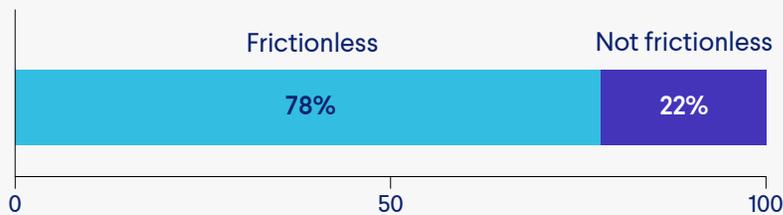
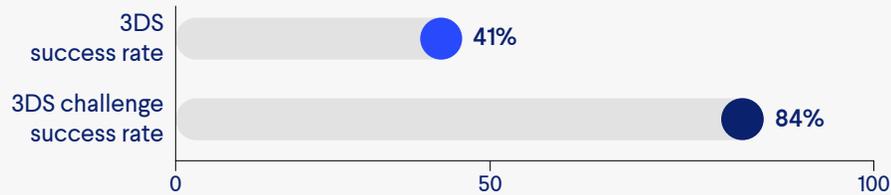
National Competent Authority

Federal Reserve Board

SCA status

No regulation as of yet. Card schemes have discontinued use of 3DS v2.1.

3D SECURE PAYMENT DATA



Top card payment methods



4+ billion
transactions per year

\$62 billion
in transactions processed

300+
merchants protected



SECTION B: REGULATIONS ANALYSIS

THE STATE OF PAYMENTS AUTHENTICATION, REGULATION AND COMPLIANCE AROUND THE WORLD

In this **new section**, Ravelin's **Senior Product Manager for Authentication, Catherine Jones**, takes a detailed look into local regulation, card scheme expectations, and payments culture across the world.

We're considering both recent developments and future expectations and announcements.

You'll also hear from **CEO at Ravelin, Martin Sweeney**, who is sharing six practical steps of advice for merchants and PSPs looking to provide a smoother payment experience and avoid disruption while remaining compliant.

On page 30, you'll find our global map of SCA mandates, too.

KEY POINTS WORTHY OF YOUR ATTENTION

- › 3DS versions before 2.2 are now largely unsupported by card schemes.
- › Visa is changing its dispute ratio metrics affecting merchants and PSPs.
- › APAC is taking steps in mandating authentication.
- › There's slow progress on the EU's PSD3/PSR legislation.

THE STATE OF PAYMENTS AUTHENTICATION, REGULATION AND COMPLIANCE 2025



Card schemes are sunsetting 3DS 2.1 around the world. Visa has announced new metrics and new programs for merchants with high dispute rates. Unsurprisingly, payment fraud continues to rise around the world.

Released in June 2023, EMVCo's 3DS v2.3 looks to increase the convenience and flexibility of how 3DS challenges appear to consumers, as well as where they appear, with Internet of Things (IoT) devices one of the new, non-traditional channels available via the split-SDK model. As one example, Out-of-Band (OOB) transitions are going to be automated. Shoppers will no longer have to receive a notification, switch to their banking app, log in and then find the internal notification to approve a transaction.

It also comes with promises of decreased friction, with ample information exchanged to allow full use of exemptions and risk analysis. There are improvements to how data is exchanged between issuer and merchant, including reducing challenge-induced friction for higher risk transactions. Merchants and issuers will also be able to use WebAuthn and SPC (Secure Payment Confirmation) to give consumers more options, such as biometric authentication and passkeys.

In the world of regulatory compliance, it's fair to say that developments are slow – although they are moving.

Truth is, you can't just translate what works in one market into another. Take the United States and Europe as an example. American consumers are notorious for disliking friction when it comes to their

shopping experience, while their peers across the pond have grown to appreciate a balance.

Even within Europe, cultural differences and diverse attitudes to payments and friction apply.

For example, countries in the Baltics are very well used to friction, to the point of appreciating it as an indication of strong security. But Brits don't like friction. Meanwhile, banks are slower to adapt in Spain and Italy than many other EU countries.

For any company active in regions with shifting regulations, a clear understanding of their payment landscape is instrumental to smooth transition. For example, a lot of these regulations have something to do with transaction value – they might apply to everything over a specific value or exemptions might require a maximum value. Considering your average transaction value can help demonstrate whether it is worth exploring such exemptions.

We'll look at more specific advice for those taking payments very soon. But first, let's explore shifting legislation and developments around the globe.

APAC

In Australia, legislation has remained largely the same since 2019. Although their version of SCA was announced after the EU's PSD2, they managed to implement a similar scheme before the EU – as a single country rather than a union of several, Australia was able to respond more quickly. However, this only applies to merchants found to have high fraud rates in the previous quarter.



Catherine Jones
Senior Product Manager
(Authentication)

Catherine Jones has been with Ravelin for over four years and likes to call herself a payments and authentication nerd. Across her 13 years of experience in the space, she worked on both the operational side of fraud and payments and the PSP/solution side, eventually taking on product management.

Catherine believes that interoperable collaboration is key to safer and smoother payments, and she's fascinated by how people pay and authenticate in different regions and cultures.

When AusPayNet introduced the CNP Fraud Mitigation Framework back in 2019, one of the biggest challenges was that 3DS 2 had very bad performance, especially in relation to 3DS 1. It's not clear why that was, but maybe this is why eftpos decided to build its own Directory Server – to improve authentication rates, knowing that 3DS 1 was going to go.



Hopefully, with eftpos running its own server, authentication rates will continue to improve in the country compared to only using Visa and Mastercard's Directory Servers. Moreover, Australia is also planning to implement tokenization for all payment cards, with the eftpos tokenization platform having rolled out in March 2024 to support wider expansion in 2025.¹



After talking about it for a long time, Japan is currently taking more solid steps to actually do something about regulating payments. Both the Tokyo Olympics and Covid helped pivot consumers away from cash payments into using their cards more in the country. This is likely to have made card fraud more prevalent.

Similar to Australia, Japan-exclusive card scheme JCB has its own 3DS Directory Server, with 831 card ranges enrolled. Compared to some other countries, it feels like a low number of issuers are enrolled – will it be a major challenge to the Japanese market to roll out new regulations?

India has been quite the innovator, from a certain perspective. The Payment and System Settlements Act (PSS) requires authentication on all domestic debit and credit transactions except low-value transactions. These are heavily reliant on one-time passwords (OTPs). The country was the first to introduce additional authentication for online payments, back in 2009.

India also makes use of the unique Aadhaar system of providing UID identification, described by the World Bank as “the most sophisticated ID program in the world”. There is some overlap between this and secure payments, in the sense of consumers using their UID to safely make certain banking transactions. This likely covers some of the use cases of 3D Secure-style authentication elsewhere.

The situation in Singapore is similar, with OTPs being the go-to for all browser-based debit and credit card transactions. However, the country’s banks announced in July 2024 that they are moving away from OTPs and favoring tokenization instead, to protect consumers from social engineering scams, fake websites and phishing attempts.

NORTH AMERICA

In North America, authentication regulations are not

seen as positively, especially so in the US. Owing to consumer attitudes and culture, merchants, PSPs and issuers are terrified they will get it – but at the same time, card schemes love the idea.

There is significant reason to believe that some type of authentication mandate is coming up for the United States though, with card schemes pressuring merchants to adopt 3D Secure and legislators considering following the example of the EU. For example, the Consumer Financial Protection Bureau (CFPB) has heavily hinted² at favoring additional authentication on several occasions.

Many now think, “We’ve got to start using 3DS more on our own terms, or we’ll be forced to use it in less pleasant ways”. PSD2-style SCA doesn’t seem to be a good cultural match for the USA.

It’s the country that invented Apple Pay, but also one that still uses bank checks. They are really innovative in making sure that payments are frictionless and secure but also have a payments industry that’s quite old-fashioned and slow. Personally, I don’t see how banks would be able to keep up with PSD2 SCA in the United States.

Though consumer attitudes might be somewhat different, Canada is on par with the USA in terms of authentication regulations. The country is lagging behind much of the rest of the world both in terms of what’s enforced and what’s announced.

In both countries, it’s card schemes such as Visa and Mastercard rather than lawmakers who are influencing merchants to consider adopting 3D Secure checks and challenges for online payments.

LATIN AMERICA

Plenty of rumors are coming out of South America that things will happen, but nothing is concrete yet. For example, Mexico was supposed to introduce

authentication legislation, yet this has not come to pass.

One could attribute this to so-called “immature” markets but that would be unfair. These countries tend to do things differently and quite innovatively, in some cases.

For instance, Brazil has Boleto bancário – a unique, cash-based payment system regulated by the Central Bank of Brazil, which has been reported as making up 10–15% of ecommerce payments today. It is likely that neighboring countries might be considering a similar system for themselves, following Brazil’s example.

Meanwhile, we saw recent attempts to deploy cryptocurrency and blockchain-related payments solutions – but they have as of now failed.

EUROPE

We know that the European Commission’s PSD3 legislation is coming in the EU – we have known for years. However, not much has happened since the consultation was initially announced back in May of 2022.

This isn’t surprising. The EU tends to be slow when it comes to regulation but what does come out has a big impact on global payments and sets an example. Around the world, everyone’s eyes are on this, so the EU has chosen to take its time once again.

You will remember that PSD3 has, so far at least, been more about allowing the EU to supervise and enforce SCA centrally instead of relying on country-state-level regulators, as well as about open banking.

But there is an argument in favor of expecting PSD3 to address the increase in account takeover (ATO) attacks. The argument goes that because PSD2 SCA helped safeguard payments significantly, fraudsters



shifted their focus to other markets, such as America, as well as to other attack vectors. PSD2 kicked into effect at the same time when the US introduced EMV chip and PIN, and fraudsters tend to work on a globalized level.

By all accounts, PSD2 did reduce payment³ fraud in the countries of the EEC. But in the wake of PSD2 implementation, some expected ATO attacks to increase as a result. It is difficult to gauge exactly how much this legislation contributed to the rise of ATOs. We can point to other developments, such as customers saving bank card details in their online accounts more than ever, as well as occasional insufficient protection from companies, as also instrumental.

It would be interesting to know if PSD2 has had an impact on how everyday consumers choose to pay, especially in Europe. Barclaycard Payments metrics indicated that 17% of European ecommerce transactions were soft-declined since the introduction of SCA mandates⁴. Merchants did take note, but did this affect consumer behavior as well?

It will also be interesting to see what the UK will choose to do in relation to new legislation implemented by the EU. ■

At a bare minimum, your 3DS provider should be telling you:

- › what's working
- › why it's working
- › how it's working
- › what's not working
- › why it's not working
- › what can be improved

RAVELIN'S ADVICE TO MERCHANTS AND PSPS

Following on from the above, what can merchants do to provide a smoother payment experience, and avoid disruption and friction while remaining compliant?

1. Evaluate the impact on your payment landscape.

Try to get a sense of what the impact of new legislation is going to be to you in particular. What percentage of payment methods do you have where SCA may be required? Do you have a 3DS provider and do they operate in the region you are looking at?

2. Know your markets.

It's good to learn lessons from other countries, as a merchant or PSP, if you want to get ahead. For example, in Belgium⁵, card was not as popular a payment method prior to the implementation of PSD2 SCA. As a result, more transactions than expected failed because merchants had not prioritized to do SCA.

3. Share your data – but also take heed.

Data visibility is not just important; it can be beneficial and give you an advantage over your competitors. You shouldn't just look to meet regulations; you want to use them to your advantage. And the way to do this is to share data with your acquirers, 3DS providers, and issuers. However – and it's a big however – you still need to be careful who you share your data with. Make sure there are benefits to you before you do it, and keep in mind any data minimization obligations – under GDPR for example.

4. Learn from 3DS data.

In a similar vein, data sharing should be reciprocal. The idea is not just to share your data but, where possible, to make full use of the data you receive



Martin Sweeney
CEO at Ravelin

With a background in software engineering and physics, Martin Sweeney believes in harnessing the power of technology to solve real-world problems.

Martin co-founded Ravelin to put cutting-edge artificial intelligence to good use in the fight against fraud: "What I really get my kick from is building something that solves a problem," he explains. "We do this every day at Ravelin."

back to create a positive feedback loop that feeds into your own fraud decisioning, as well as powers future 3DS-related decisions.

5. There's resilience in optionality.

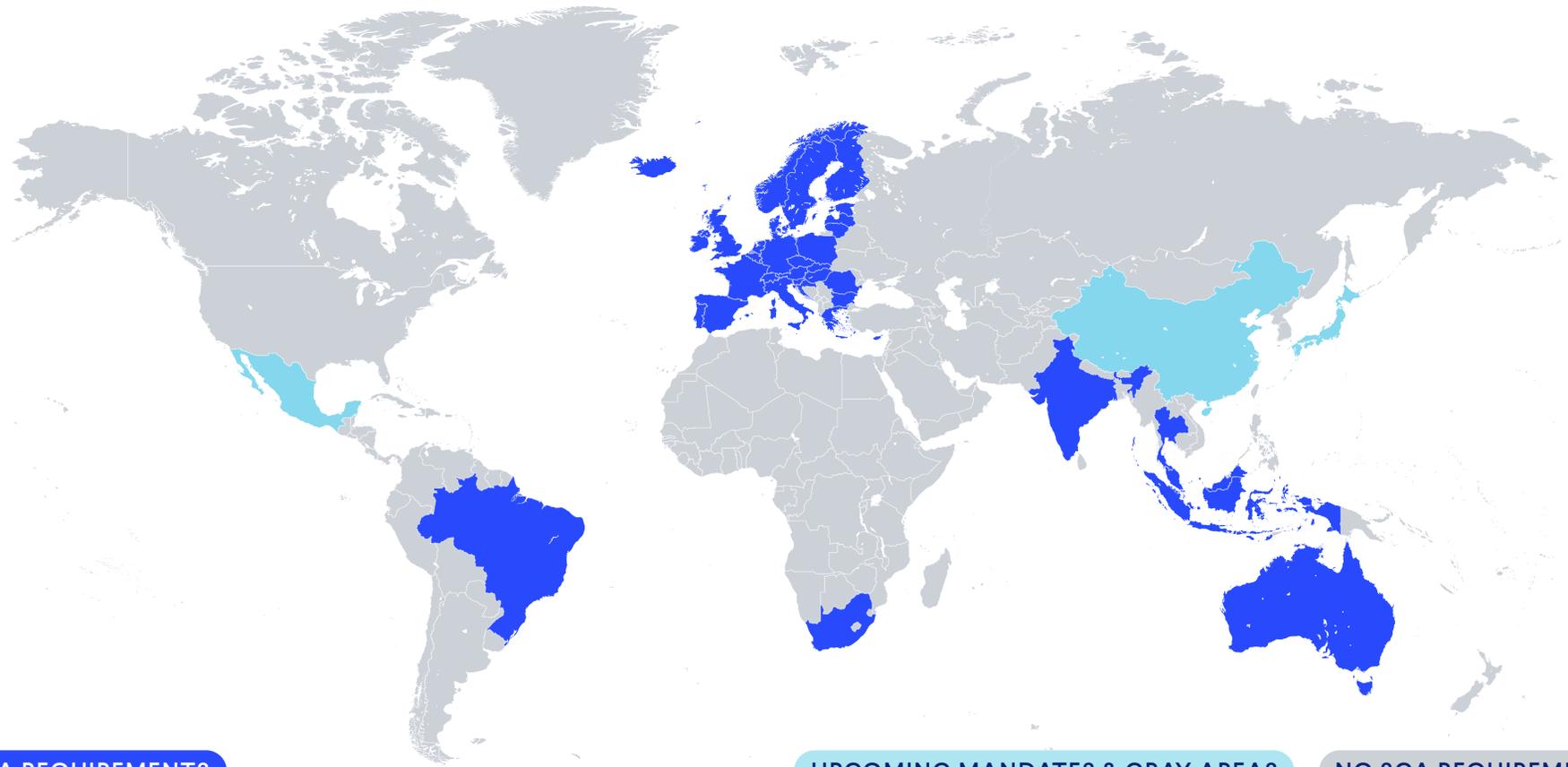
Having multiple payment providers can open up possibilities for smoother transactions. Don't go all in and use one PSP – a certain provider might have better support in one area, and another at certain times of the week. Consider multiple providers, and even orchestration to simplify the choice.

Keep an eye on developments and plan ahead. Especially if you're new to this.

A proactive 3D Secure partner such as Ravelin can work with you to ensure not just that you're compliant with SCA mandates but that you are making the most of the wealth of data exchanged over 3D Secure servers.

Because knowing your customers and their payments can enable you to optimize your systems – and ultimately sell more. ■

SECURE CUSTOMER AUTHENTICATION MANDATES AROUND THE WORLD



SCA REQUIREMENTS

Austria, Belgium, Bulgaria, Croatia, Republic of Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Monaco, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, UK

Australia, Brazil, India, Indonesia, Malaysia, Singapore, South Africa, Thailand

UPCOMING MANDATES & GRAY AREAS

China, Japan, Mexico

NO SCA REQUIREMENTS

SECTION C: ATTITUDES TO AUTHENTICATION, PAYMENTS AND PAYMENT FRAUD

MERCHANT ATTITUDES TO AUTHENTICATION, REGULATION, PAYMENTS AND PAYMENT FRAUD

In this section, you'll find previously-unreleased data from Ravelin's original research into merchant attitudes to payments.

This was gathered as part of our [Fraud and Payments Survey](#), conducted annually to better understand the experiences, pain points and expectations of enterprise merchants who accept payments online.

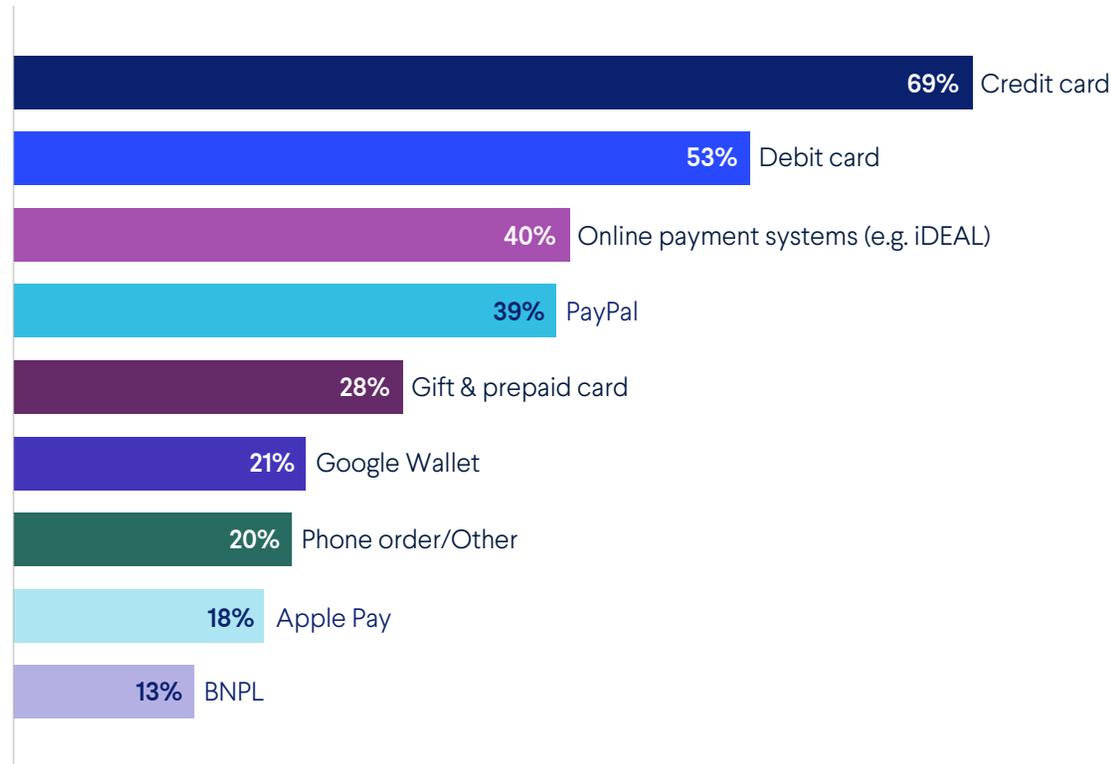
We'll explore findings across payment methods, authentication, SCA mandates and payment fraud, including chargebacks.

FINDINGS WORTHY OF YOUR ATTENTION

- › Credit cards identified as the **riskiest payment method**, with online payment systems such as iDEAL surprisingly ranking at number 3.
- › 77% of merchants are **authenticating more than before** – and 75% expect to authenticate more than today in the next year.
- › The vast majority are “very” or “somewhat concerned” over the **impact of challenges on conversion**, including as part of PSD3.
- › Increases are expected by most merchants in online **payment fraud and chargebacks**.
- › **Website payments** lead the way in fraud rates – and omnichannel makes fraud easier to commit, according to respondents.

PAYMENT METHODS

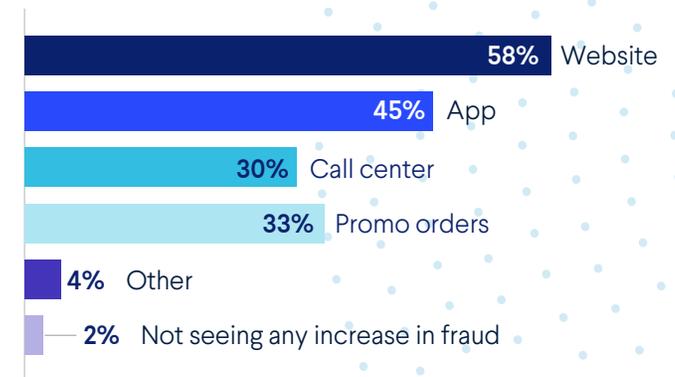
WHICH PAYMENT METHODS INCUR MORE RISK FROM FRAUD?



“Which payment methods have you found are linked to the most fraud (of any type) for your company? Choose the top 3.”

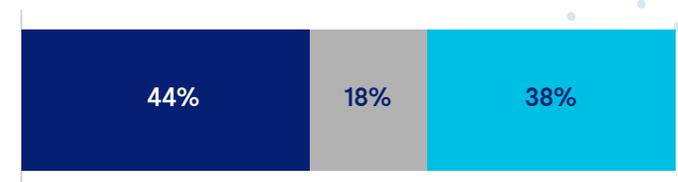


ON WHICH ORDER CHANNELS HAS FRAUD INCREASED THE MOST?



“Which order channels are you seeing the biggest increase in fraud from? Choose up to 2 answers.”

IS MULTICHANNEL/OMNICHANNEL MORE RISKY?



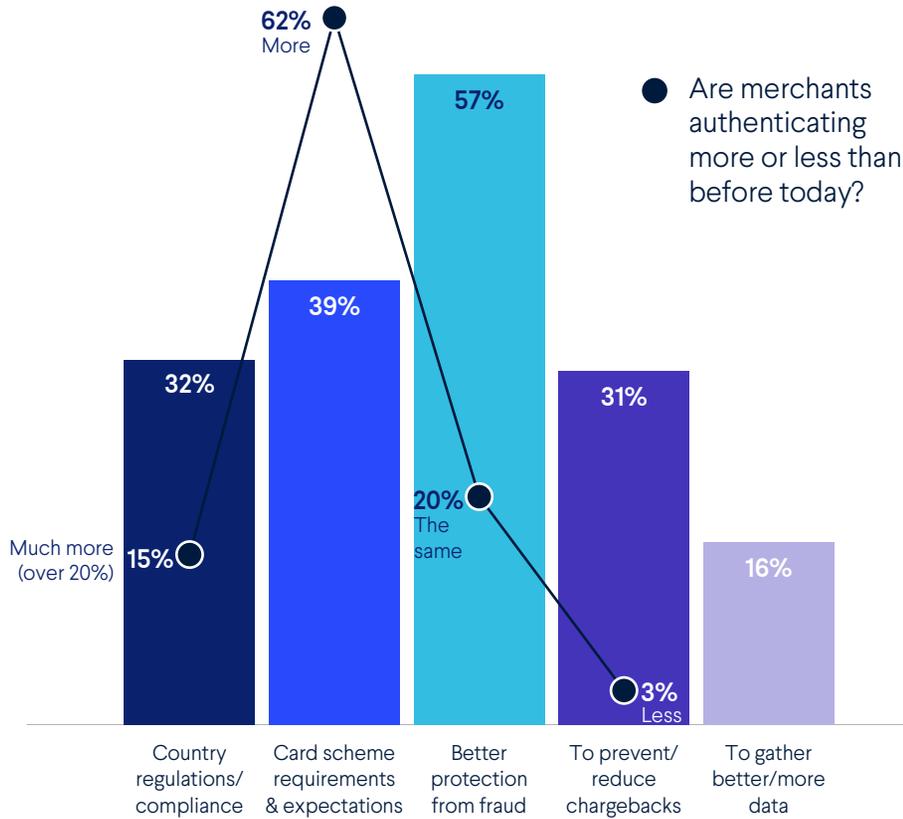
- Yes – fraud is likelier
- No difference to fraud
- No – fraud is less likely

“If you are providing a multichannel or omnichannel shopping experience, do you think it affects fraud at your company?”



3D SECURE AUTHENTICATION

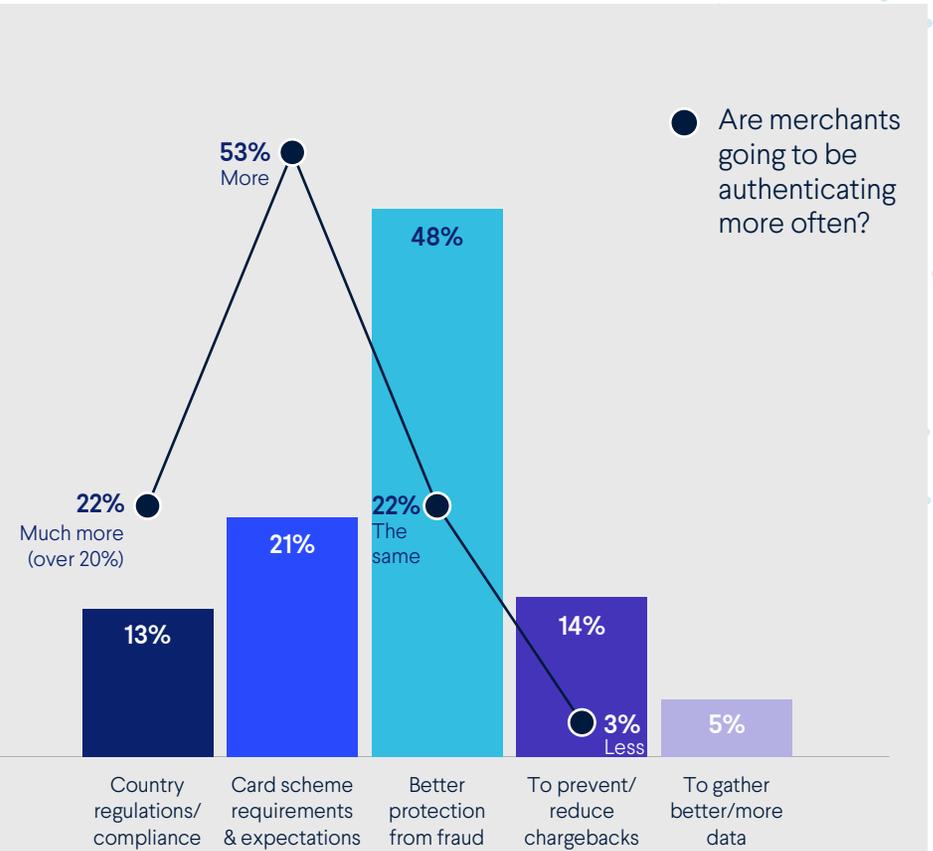
MERCHANTS' REASONS FOR USING 3D SECURE



THE PAST/PRESENT

"What are your primary reasons for using 3D Secure? Select up to 2 answers."

MOTIVATORS FOR AUTHENTICATION MOVING FORWARD

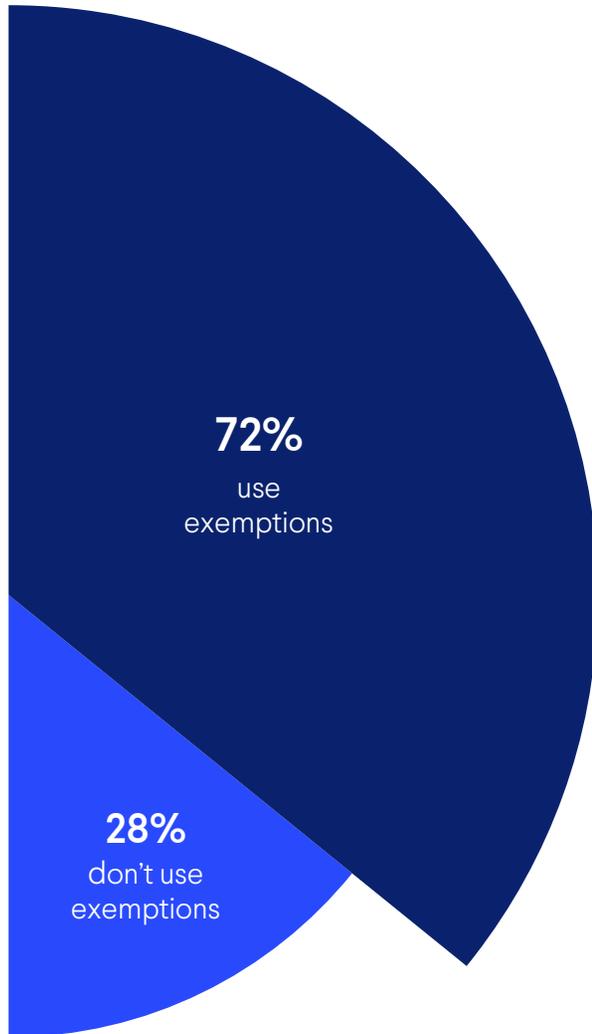


THE FUTURE

"If you answered 'increased' or 'significantly increased' to 'Are you expecting the amount of traffic you send to authentication to change', what's the main reason?"

REGULATION – PSD2, PSD3 & SCA

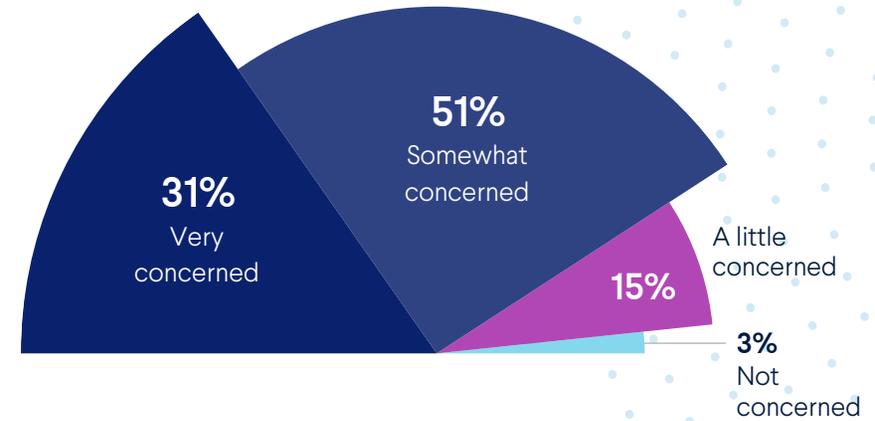
USE OF 3D SECURE EXEMPTIONS



"Do you currently use 3D Secure exemptions as part of your authentication strategy under PSD2?"

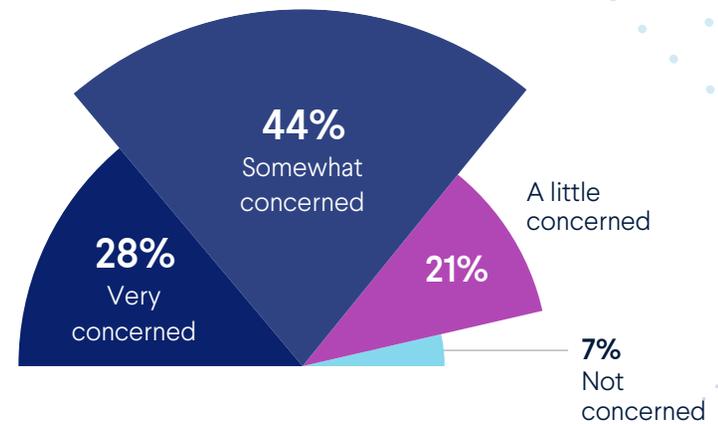


SENTIMENTS AROUND AUTHENTICATION CHALLENGES' IMPACT ON CONVERSION



"How concerned are you about the impact of authentication challenges/checks such as 3DS on conversion?"

SENTIMENTS AROUND THE UPCOMING PSD3

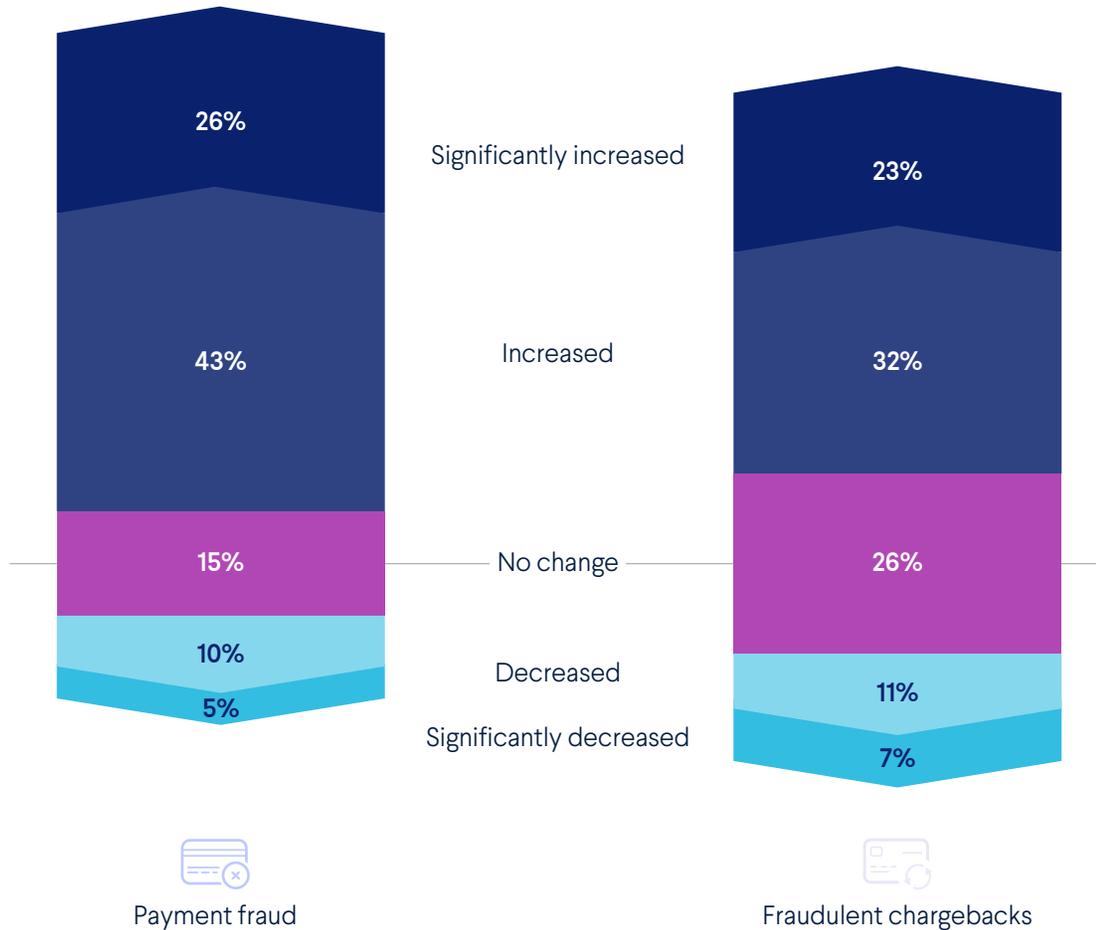


"Are you concerned about the upcoming PSD3/PSR legislation negatively affecting your business?"



TRENDS IN CHARGEBACKS & PAYMENT FRAUD

MERCHANT-REPORTED CHANGES TO PAYMENT FRAUD IN THE PAST YEAR



69% of merchants report an increase in **payment fraud**

56% of merchants report an increase in **fraudulent chargebacks**

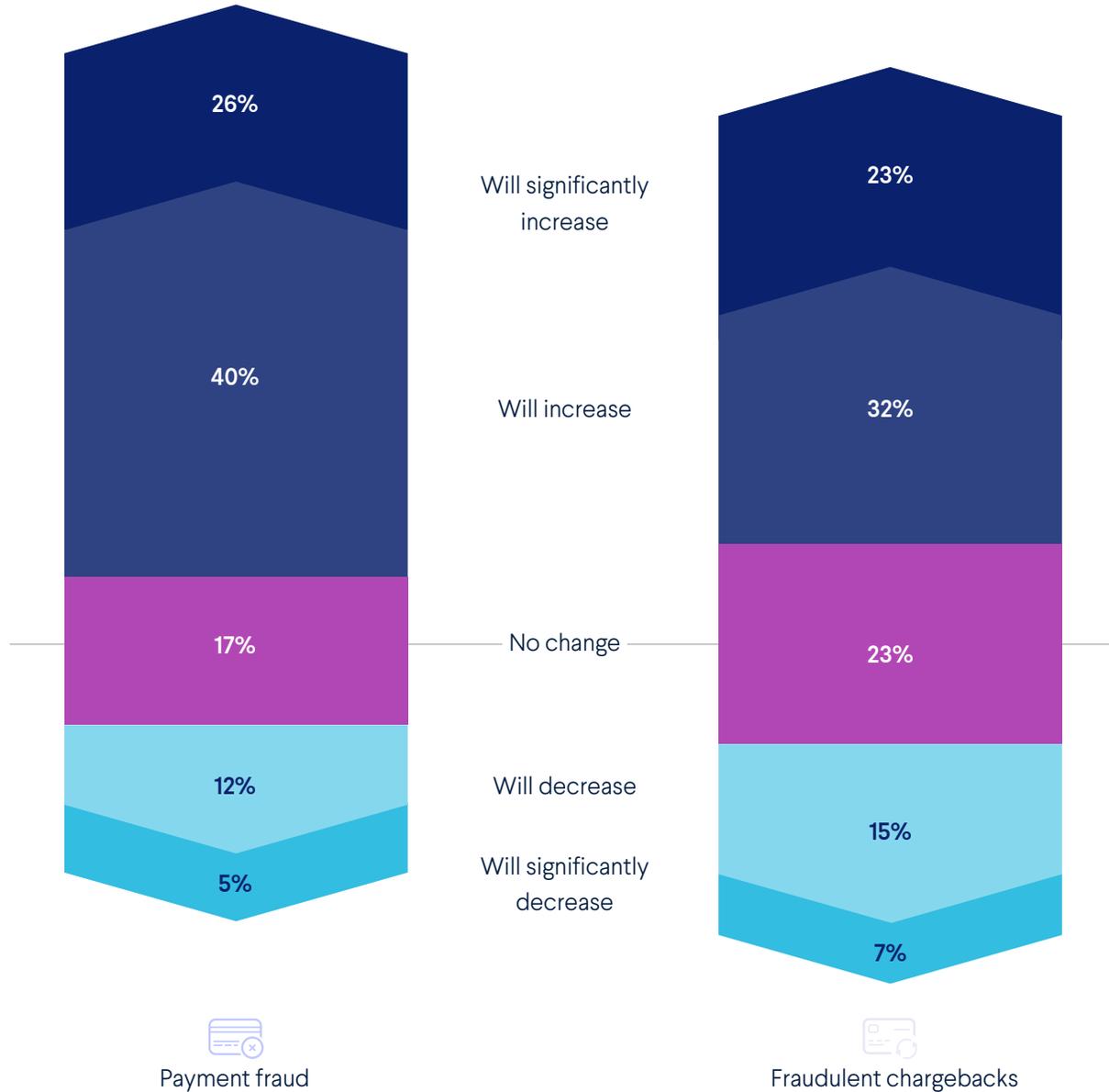
Merchants ranked **payment fraud** at #1 and **fraudulent chargebacks** at #3 when considering the types of fraud that **pose the most risk** to their business



"In the past 12 months, how has this type of fraud changed at your company?"



PAYMENT & CHARGEBACK FRAUD PREDICTIONS



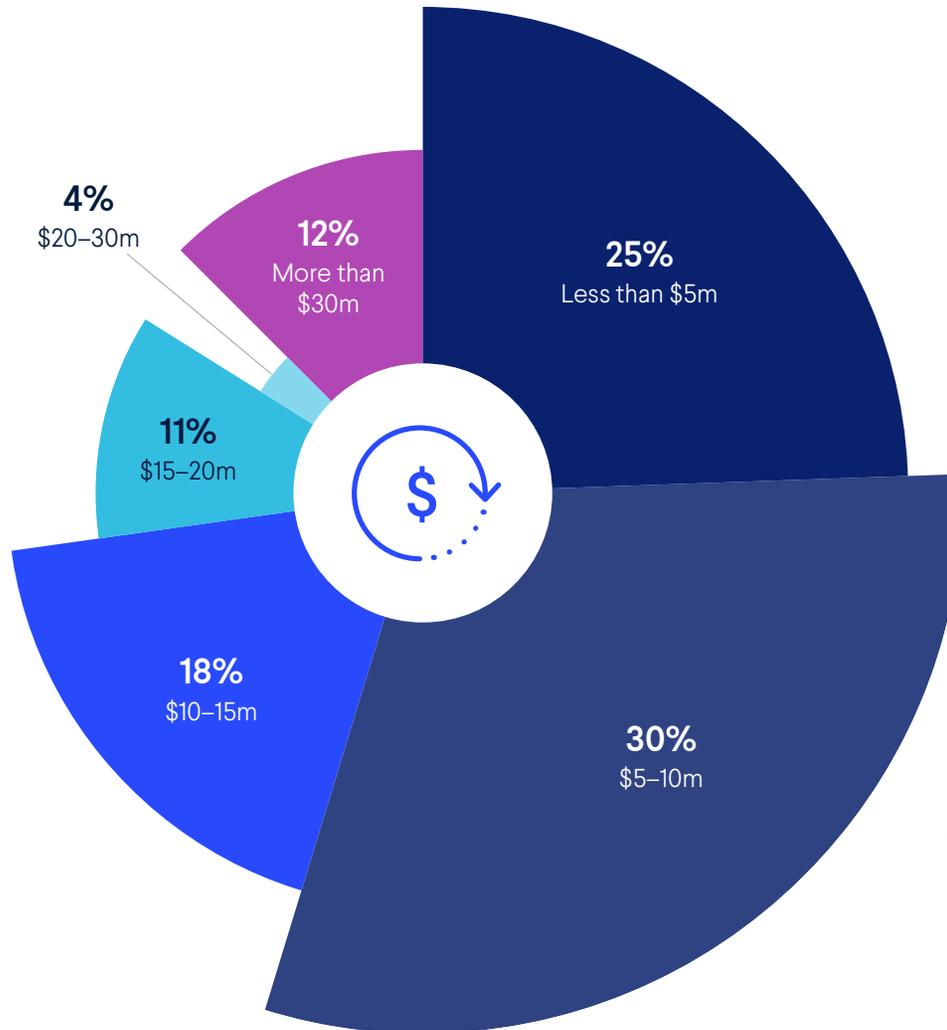
The average merchant challenges **42%** of disputes...

...and is successful with **49%** of those dispute challenges

"Which types of fraud do you think will increase in the coming 12 months, and by how much?"

THE COST OF FRAUD

HOW MUCH DOES FRAUD COST COMPANIES EVERY YEAR?



39% of respondents said that they have heard concerns about fraud from their company's Payments team



For over **27%** of companies, fraud costs more than \$15m every year



"Giving your best estimate, how much does fraud cost your company annually?"

METHODOLOGY

SECTION A

For Section A, Ravelin pulled and is sharing anonymized internal data from payment fraud and optimization recommendations, as well as managing authentication itself, to calculate all metrics: 3DS authentication rates, 3DS challenge authentication rates, frictionless authentication rates, card payment preferences by country. The reported data is based on transactions seen across Ravelin's Payment Fraud, Transaction Optimization, and 3D Secure products from January 1 to the last day of July 2024.

SECTION B

For Section B, we have conducted a review of up-to-date legislation and announced legislation in corresponding countries, as well as card scheme requirements and bulletins, in order to present and comment on the latest and upcoming regulations and expectations.

SECTION C

For Section C, we are presenting the findings from our online survey of 1457 fraud and payments professionals from around the world. Participants belonged to the C-suite or fraud/risk, finance/payments, compliance/operations or product teams. Survey participants all worked for businesses with more than \$50 million in annual revenue and/or over 500 employees, which sell their products either online or both online and offline. They were asked questions around their observations, attitudes and predictions related to fraud and payments in the past 12 months, at present, as well as in the future.

REFERENCES

- 1 <https://www.rba.gov.au/payments-and-infrastructure/debit-cards/expectations-on-tokenisation/index.html>
- 2 <https://www.consumerfinance.gov/compliance/circulars/circular-2022-04-insufficient-data-protection-or-security-for-sensitive-consumer-information/>
- 3 https://ec.europa.eu/commission/presscorner/detail/en/qanda_23_3544
- 4 Figures presented at MPE Berlin 2022
- 5 <https://thepaypers.com/digital-identity-security-online-fraud/cmspi-releases-sca-economic-impact-assessment-august-2021-analysis--1251875>



Thank you for reading our Global Payments Report

Ravelin builds AI-native solutions to help companies accept payments with confidence, learning from your historical data to inform a payments strategy that works for your specific needs and goals – and no-one else's.

Get in touch today to discuss 3D Secure, transaction optimization, or payment fraud – as well as wider fraud prevention including refund abuse, account takeover attacks, promo abuse and supplier fraud.

Book a call at ravelin.com/contact-us.

Questions? Comments?

Please write to marketing@ravelin.com.

We frequently release new findings in fraud and payments.

Make sure you follow us on **LinkedIn** or by signing up at ravelin.com.