



# Arvato Payments Review

Cross-border e-commerce is opening up a world of opportunities for retailers. You can reach out to dozens of new markets, and find millions of new customers. E-commerce also puts a world of choice in the hands of consumers, who think nothing of going abroad to find what they want. They might be looking for a better price, a better selection or better service. Give them what they want, and the world is yours.

But you need to know what you are getting into. The consumers in your new markets can behave completely differently to the ones you know from home. You can't rely on experience from your home market when you are trying to win over and keep customers in another country. That's why we have produced the Arvato Payments Review, to provide you with the knowledge and insights you need when you are expanding into new markets.

## How to succeed in cross-border e-commerce

The Arvato Payments Review brings together extensive quantitative research with insights from our experts to provide the big picture when it comes to Payment Methods, Risk and Fraud, and Consumer Behaviour in 14 of the most vibrant e-commerce markets in the world.

We examined more than 200 primary sources and compiled the most essential information into a convenient guide to each country. By combining the figures from a wide variety of research, we could provide a holistic view – rather than relying on a single source.

Each country guide looks at key demographics and financials, the top online retailers, legal requirements, and consumer behaviour and expectations when it comes to things like delivery and returns. We also look in detail at how consumers prefer to pay in each market, identifying local payment heroes and the optimal mix of payment methods.

As well as success factors, it is also important to understand the downsides. We take a close look at risks in each country in terms of the types of fraud that can emerge and what you can do to minimise your exposure.

In addition to the country guides, you can also compare markets in terms of key parameters to see how they stack up against each other.

## Your customers are comparing you with your competitors

Comparison is at the heart of cross-border e-commerce. Smart consumers shop around, and with online shopping they know of a better deal with the click of a mouse or tap of their phones. The research in our Arvato Payments Review confirms our observation that some markets are more open to shopping across national borders, while others are more content with their local retailers. Why some and not others? For some markets, consumers are simply happy with what they can get locally: the selection, service and prices match their demands, so there is no need. But there are often other factors that play into this.

Trust is one of the big ones. Consumers who are reluctant to shop internationally are often concerned about how warranties and returns will work if they buy cross-border. There might even be an inherent bias towards local retailers, who consumers perceive to be more reliable, or faster, when it comes to delivery. Another important factor here is accessibility: markets such as France and Germany express a clear preference for sites in their own languages.

But even in more conservative markets, cross-border shopping is becoming more popular – when it is done well. It comes down to providing consumers with what they are looking for: better prices, more choice, a richer all-round experience. With the most successful cross-border retailers, consumers don't care if they are domestic or international: they get what they want, quickly, cheaply and efficiently.

The key is to remove as much friction as possible, knowing and anticipating consumer demands and wishes. That boils down to knowledge and insight into the market. What are the legal requirements? Do consumers want a site in their own language? Do they expect next-day delivery? How do they want to pay?

## Finding the optimal payment mix

Payments are at the heart of this review. Our research confirms that local payment heroes are essential for successful business. If you don't use Carte Bancaire in France, or iDEAL in the Netherlands, or offer open invoice in Germany, you are not in the game. The insights we are offering go beyond which payment methods to provide: in some markets, you would be well advised to work with a local card acquirer so you don't miss out on conversions.

A local partner can help in other ways. This is especially important to retailers entering a new market and not only with payments but also logistics and deliveries, returns and customer service. Many retailers choose to work with a partner who can help in one or more of these areas, especially during launch, to assist with local insights and information, payments, logistics, and even service centres. It's a sure-fire way to hit the ground running and establish a good reputation among your new customers.

All this information is vital for you when entering new markets. And you will find it here. Once you know what to expect, your business will have a real competitive edge – regardless of where your customers are.

## Contact

If you have questions or want to know more about what Arvato can do for you, you are welcome to contact Emma Solman, Marketing Manager:

[emma.solman@arvato.com](mailto:emma.solman@arvato.com)

# About the Arvato Payments Review

The Arvato Payments Review provides retailers with country-specific information on payments and fraud-related topics in 14 of the most vibrant e-commerce markets in the world – 13 in Europe plus the USA – so they can make the right decisions in their e-commerce payment strategy.

The e-commerce payments landscape is becoming more and more fragmented. Not only do payment methods vary from market to market but consumers are becoming more sophisticated.

Alongside advances in technology, changes in banking regulation are clearing the way for new players to enter with solutions that are designed around convenience, safety and simplicity – all heavily supported by strong mobile adoption and advances in authentication technology such as biometric identification.

In this rapidly evolving world, retailers looking to expand their business internationally often lack objective insight into local market conditions as well as relevant advice on payments and risk management. The Arvato Payments Review provides that insight and advice.

## Methodology

The Arvato Payments Review has been compiled by Arvato Financial Solutions, a division of Arvato Bertelsmann, and business consultancy mm1. The findings are based on secondary research and analysis by consulting firms such as McKinsey, BCG, and AT Kearney, as well as

reports from payments and e-commerce associations such as the Merchant Risk Council, facts and figures on e-wallets and other payment schemes and providers, and news articles. The Arvato Payments Review also features recommendations and advice from Arvato experts in the areas of payment methods, fraud and risk, and consumer behaviour.

## Arvato Financial Solutions

Arvato Financial Solutions delivers a complete suite of financial services that improve business processes while delivering a better overall customer experience. Cutting-edge solutions covering everything from risk assessment, payments and invoicing to debt collection and management ensure convenience in every transaction. Part of Arvato Bertelsmann, Arvato Financial Solutions is Europe's third-largest integrated financial service provider specialising in the retail/e-commerce, telecommunications, insurance, banking and healthcare industries.

[finance.arvato.com](https://finance.arvato.com)

## MM1

mm1 supports large companies in digital transformation and designing products and processes for an increasingly digital world. Some 50 consultants provide services ranging from developing connected business strategies and business models to ensuring efficient operational implementation. mm1's customers include companies in the telecommunications, media, consumer electronics, financial services and automotive industries.

[mm1.com](https://mm1.com)

# How to read this report

## Important definitions

**Cross border sales:** the percentage of domestic and cross-border e-commerce in a country.

**Ease of Doing Business Index:** The higher a country's ranking in the World Bank Group's Ease of Doing Business Index, the more business-friendly local regulations are when establishing a presence there.

**E-commerce turnover** is defined by the Global Online Measurement Standard for B2C E-Commerce. Accordingly, business-to-consumer e-commerce turnover includes all online transactions between businesses and consumers on desktop computers, laptops, tablets, smartphones, and other devices both offline and online. B2C e-commerce turnover includes value-added tax or other sales taxes, delivery costs and apps, but excludes returns.

**eGDP:** the proportion of goods and services bought online in comparison to GDP. The rankings stated come from e-commerce association Ecommerce Europe.

**Fraud rate:** the percentage of total sales lost because of fraud each year.

**Logistics Performance Index:** The World Bank's benchmarking tool *Logistics Performance Index* is a measure of a country's logistical friendliness with around 160 countries ranked on their trade logistics performance.

**Mobile adoption:** smartphone use as a percentage of the total population.

**Mobile commerce:** the ability to conduct commerce using a mobile device, for example mobile phone, smartphone, tablet or other mobile equipment.

**Manual order review rate:** the percentage of e-commerce transactions manually reviewed by retailers.

## Explanatory notes




**Issuer landscape:** the percentage of traditional 3D Secure and risk-based authentication programs by market.

**Market demographics:** the local population over 15 years of age and the corresponding percentage of internet users and online shoppers.

## Relevant payment methods

The term 'cards' includes both credit and debit cards. The number of consumers using a payment method is indicated by blue dots (one blue dot is equal to 10%).

'Trend' points to the future popularity of a payment method, whereas 'risk' indicates the level of threat associated with a payment method. Arvato uses the following symbols to give its assessment:

-  strong increase expected
-  no change expected
-  strong decrease expected

-  high risk
-  moderate risk
-  no risk

# Austria

## Executive Summary

In comparison with the other DACH markets, Austria is a relatively small e-commerce market with credit card, open invoice and online bank transfer as the prevalent payment methods



One peculiarity to Austria is that addresses are often organised by stairways and apartment numbers, without any names. This can facilitate fraud in urban areas.

**Expert tip**  
Make sure that the billing address includes house number, stair number and apartment number

## Card related fraud

N/A

## Relevance of typical fraud scams

N/A

## Risk management tools



**Country-specific tools**

N/A



**Advanced tools**

Device fingerprinting  
3D secure



**Classical tools**

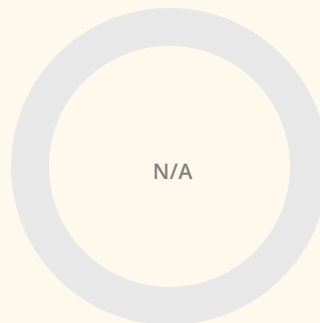
CVN  
Negative lists

## Arvato's take on this market

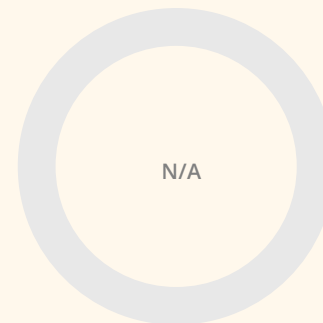
- Payment risk is expected to rise. Almost one in three respondents in Austria believe that risks from the company's debtors will increase over the coming 12 months, more than twice the average for Europe as a whole.
- Open invoice drives conversions but also increases the risk of fraud significantly. It is therefore recommended that retailers work with partners and outsource these risks.
- We observe that fraud strongholds are situated in large cities such as Vienna.
- 43% of Austrian retailers perceive cybercrime as a threat. More than 50% of Austrian merchants have introduced risk management tools to protect themselves against cybercrime.
- The "Stairway Problem": Apartment house addresses are often organised by stairways and apartment numbers without any names. This creates an issue with address fraud.
- Divergent shipping and billing address: Austrian law only allows retailers to pursue action against the person registered at the billing address, not the shipping address.

## Card authentication

3D secure adoption rate

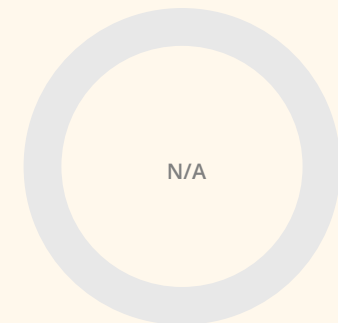


Issuer landscape



## Manual order review rates

In percent of total transactions



# Belgium

## Executive Summary

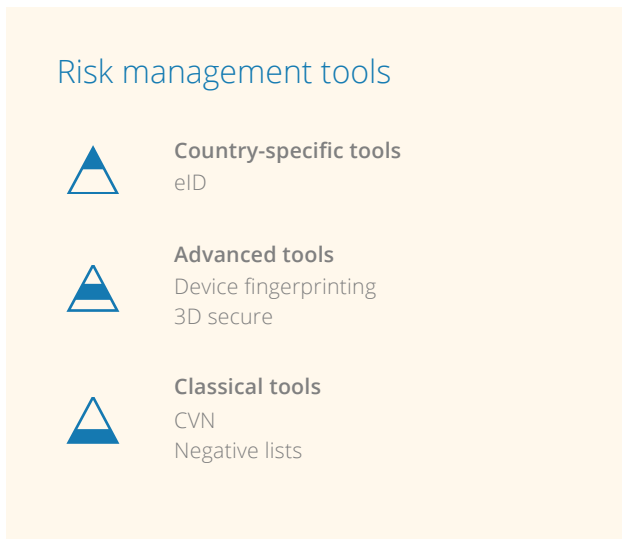
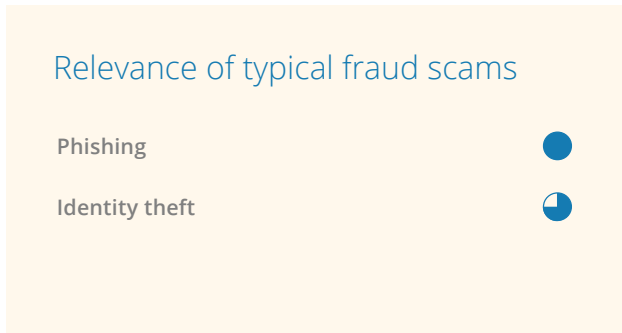
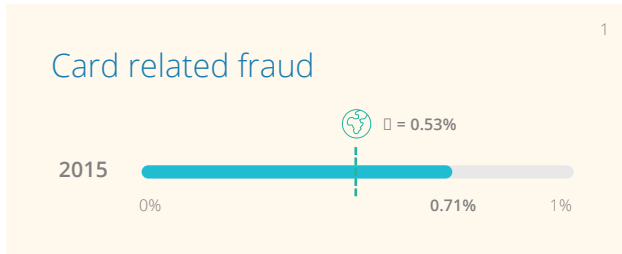
After a slow start, Belgium is now one of the fastest-growing e-commerce markets in the world. It is relatively easy to enter without offering additional local payment methods right away





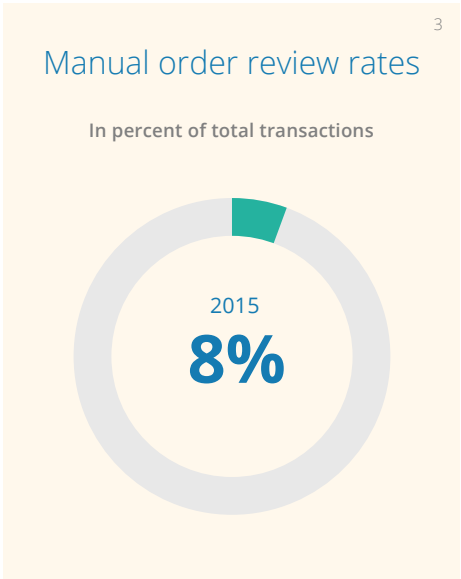
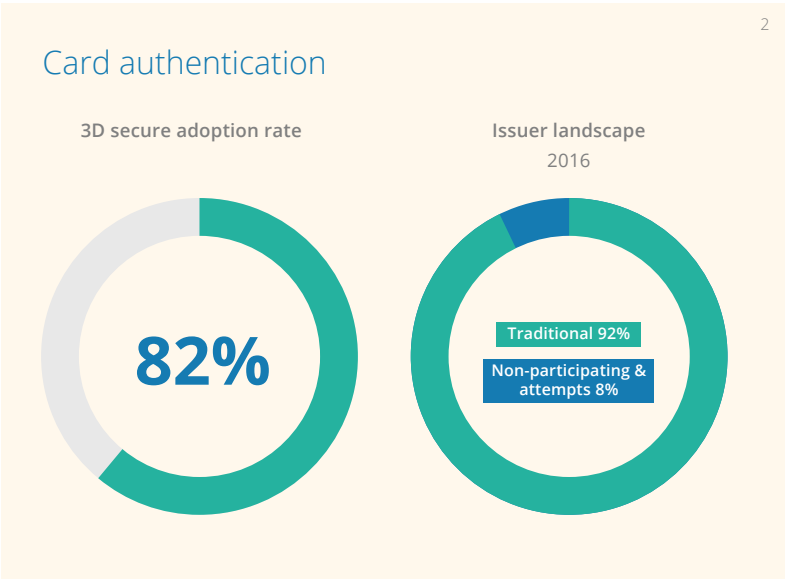
Government-issued electronic identity cards (eID) provide secure proof of identity, and are therefore used in the ID authentication purposes. Only 8% of the population have been victims of online fraud.

**Expert tip**  
Bancontact is second in popularity to cards: more than 80% of all online merchants accept this method.



### Arvato's take on this market

- In Belgium, 91% of Belgian consumers have not experienced online banking fraud. However, 1% have been victim several times, while 8% have been defrauded at least once.
- Bancontact is a highly secure debit-card payment method with strong consumer authentication, making fraud risks negligible.
- A combination of internal (e.g. negative lists) and external tools (e.g. 3D-Secure) seems most appropriate for reducing fraud. The government-issued electronic identity card (eID) provides greater proof of identity and is therefore used for consumer authentication purposes.



# Denmark

## Executive Summary

Taking into account both domestic and international e-commerce shopping, Denmark is the biggest e-commerce market in the Nordics, with tremendous growth rates: travel is the strongest segment online. Denmark also has the highest card share in the Nordics. The national debit card, Dankort, still dominates the online payment market






Fraud is generally low, with identity theft the most common type. Fraudulent delivery addresses given for pay-after-delivery options are a risk.

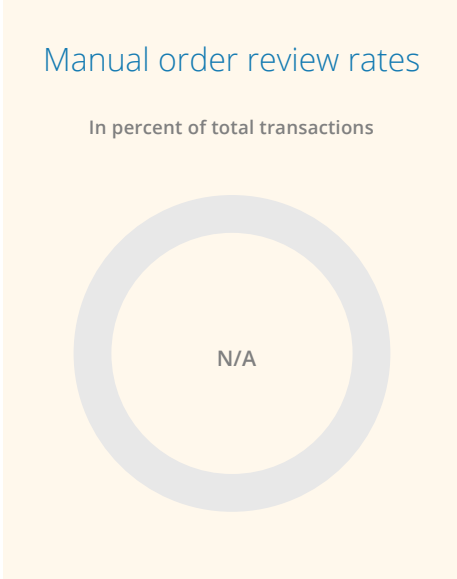
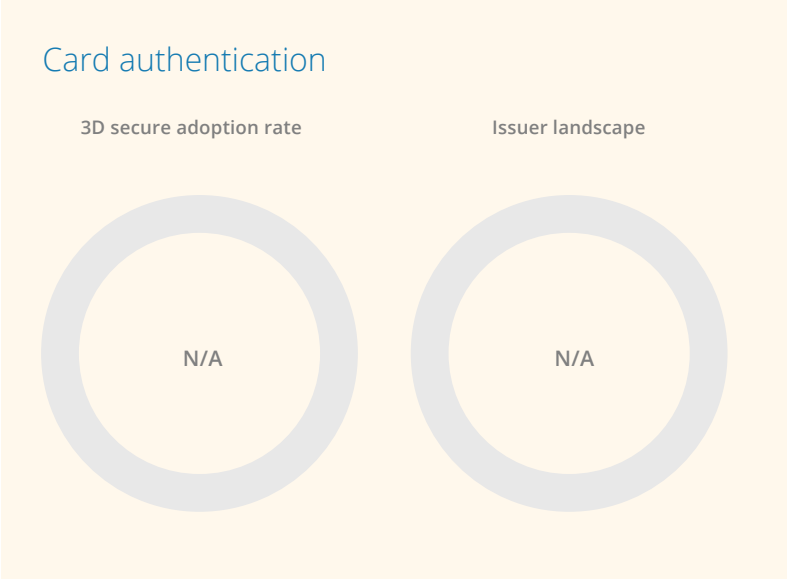
**Expert tip**  
Make sure you meet the Danish requirements in terms of payment. Offer easy return policies.

Card related fraud  
N/A

Relevance of typical fraud scams  
N/A

- ### Arvato's take on this market
- The Nordics do not represent a particularly high risk in card fraud and research by go2checkout.com shows that Norway, Sweden and Denmark score as some of the lowest fraud risk areas globally (by IP address of perpetrators).
  - In 2014, Denmark was the country with the lowest percentage of fraudulent e-commerce transactions. However, fraud does exist, with identity theft appearing to be the most common type of fraud.
  - For card payments, all major issuers allow consumers to block online purchases or purchases from specific markets.
  - 3D Secure is widely used among merchants, and the electronic ID solution Nem-ID could also be advisable for retailers in fraud-vulnerable segments. However, it is worth noting that the solution is based on one-time keys which can impact overall ease of checkout and conversion rates.
  - Offering pay-after-delivery options, on the other hand, will drive conversions, but also increase the risk of fraud. In particular, fraudulent delivery addresses are used, and goods are bought with no intention to pay (only to resell goods); not just by Danish citizens but also by foreigners entering Denmark, acquiring a Nem-ID and then leaving after the frauds have been committed.
  - Mitigate this by using a financial partner to outsource these risks - in the Danish market this is a standard part of the overall financial agreement between a retailer and an open-invoice provider.

- ### Risk management tools
-  **Country-specific tools**  
Nem-ID
  -  **Advanced tools**  
Device fingerprinting  
3D secure
  -  **Classical tools**  
CVN  
Negative lists



# Finland

## Executive Summary

With young consumers already used to cross-border shopping, older segments of the Finnish population are now catching on quickly to online shopping. The Finnish e-commerce sector is still dominated by online bank transfers and card payments, and is yet to fully exploit the benefits provided by other APMs



Until recently, Finland has had a relatively low proportion of fraudulent transactions, but this is changing. Finnish statistics show that fraudulent online payments grew 167% from 2015 to 2016.

**Expert tip**  
Offer free returns and adapt to the local language.




Card related fraud

N/A

Relevance of typical fraud scams <sup>1</sup>

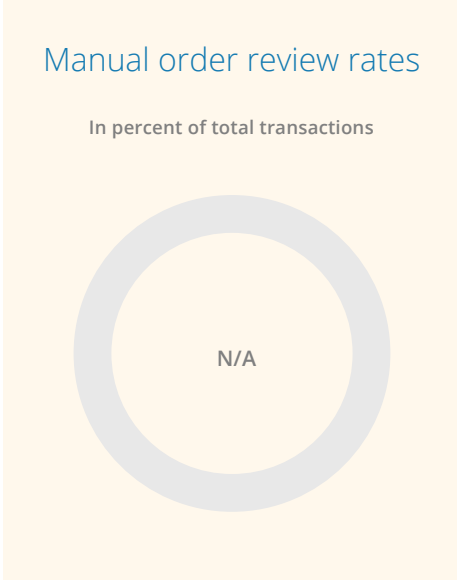
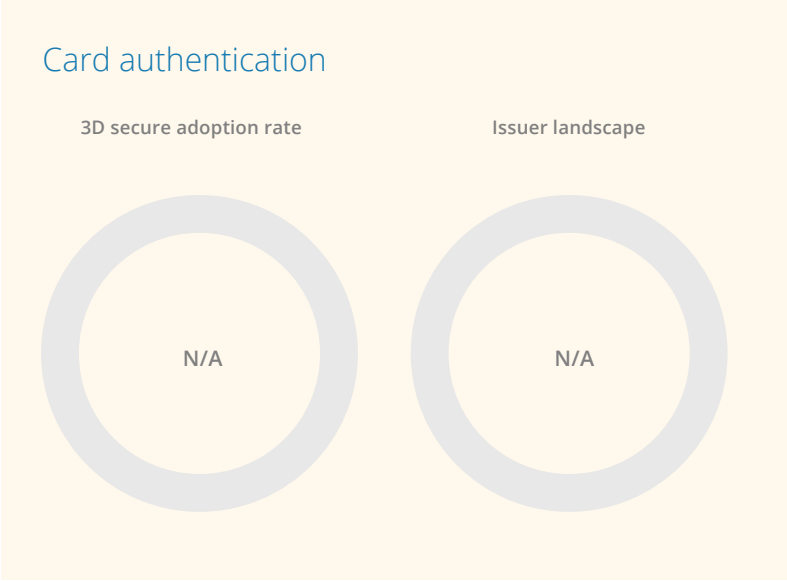
- Identity theft ●
- Clean Fraud ◐
- Phishing ◑

Risk management tools <sup>1</sup>

-  **Country-specific tools**  
TUPAS
-  **Advanced tools**  
Device fingerprinting  
3D secure
-  **Classical tools**  
CVN  
Negative lists

Arvato's take on this market

- In 2014, Finland had the third-lowest rate of fraudulent e-commerce transactions. Yet, there are some common fraud scams worth noting:
  - Identity theft, especially the use of a stolen SSN to shop online. Mitigate and reduce this by accepting only deliveries to an official address, or "collect at store" with ID check.
  - Stealing card data and then pretending to be an official, asking for the PIN for security reasons, or simply using the stolen card for purchases and asking for delivery to pick-up stations.
- For card payments, all major issuers allow consumers to block online purchases or purchases from specific markets.
- All online bank transactions must be authorised with the strong identification method TUPAS, a joint initiative of all banks in Finland. Card issuers also require merchants to use TUPAS for a II card transactions if a liability shift is desired by the merchant. Strong authentication can be circumvented but then the merchant is liable for losses.
- Offering open invoice will drive conversions, but also increase the risk of fraud. Mitigate this by using a financial partner to outsource these risks – in Denmark, for example, this is a standard part of the overall financial agreement between a merchant and an open-invoice provider.



# France

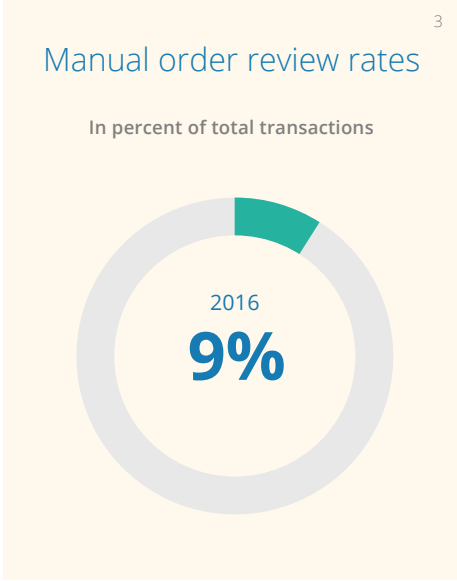
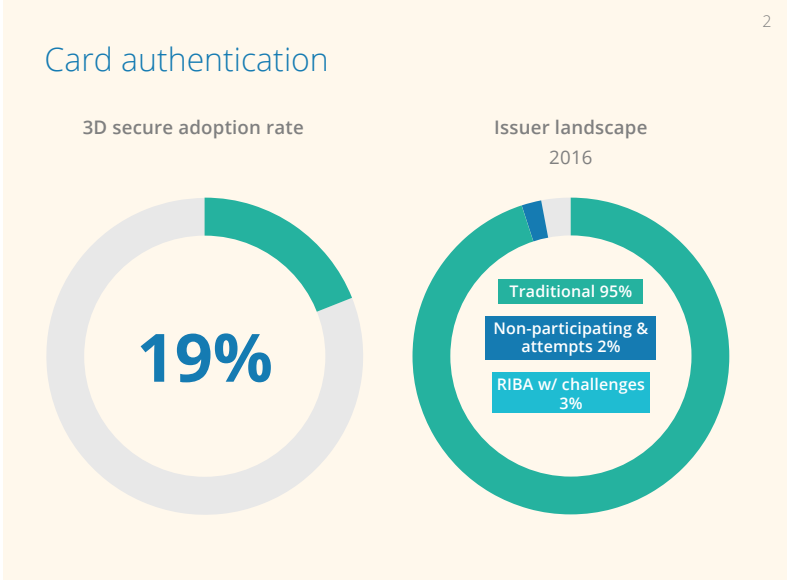
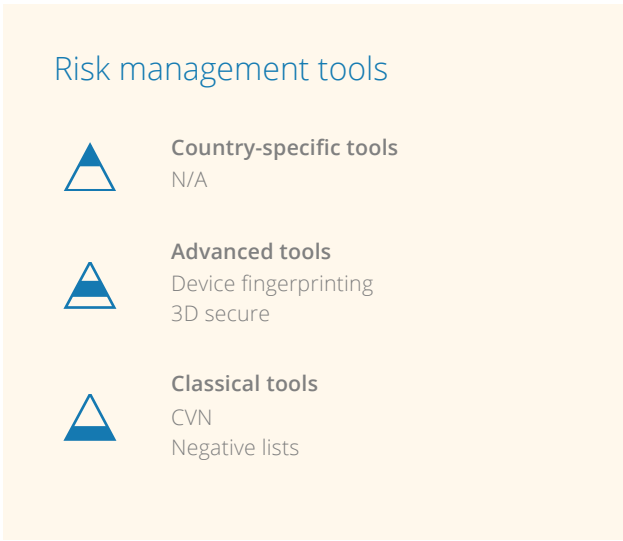
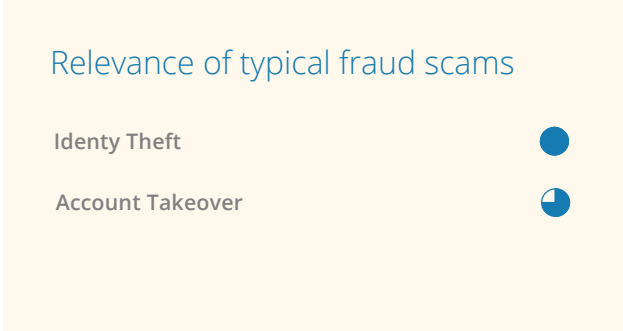
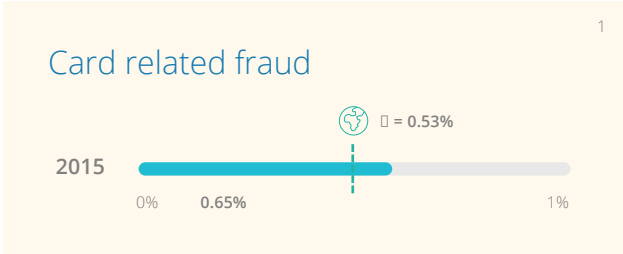
## Executive Summary

France is a mature e-commerce market with modest growth rates. French payment methods are strongly geared towards the use of Carte Bancaire



The adoption of 3D Secure is significantly lower than in other European nations, which contributes to a relatively high rate of identity theft.

**Expert tip**  
Paylib could be an interesting alternative to risky credit cards, especially in mobile environments.



# Germany

## Executive Summary

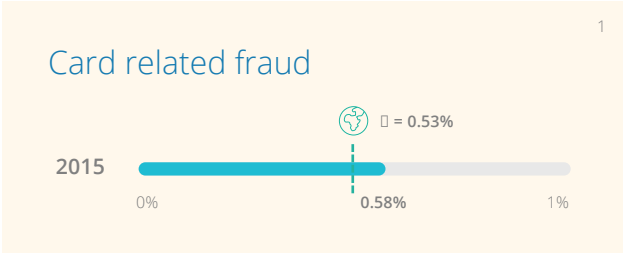
Germany is the second-biggest e-commerce market in Europe, with tremendous growth potential. The country's diverse payment landscape is dominated by local payment methods with challenging complexities





Open invoices drive sales, but increase the risk of fraud. Partnering with digital invoice providers is the evolving solution for retailers.

**Expert tip**  
An easy online payment process is extremely important for German consumers.

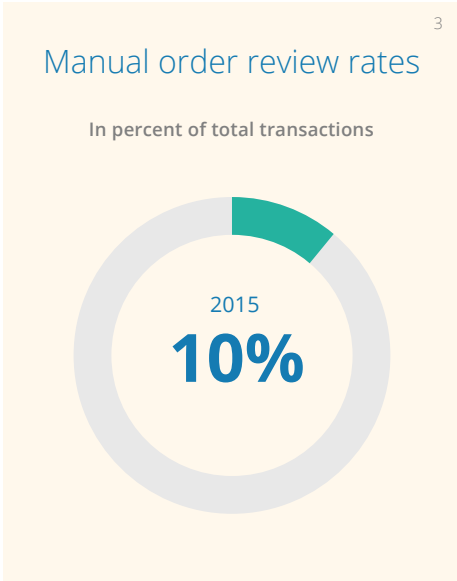
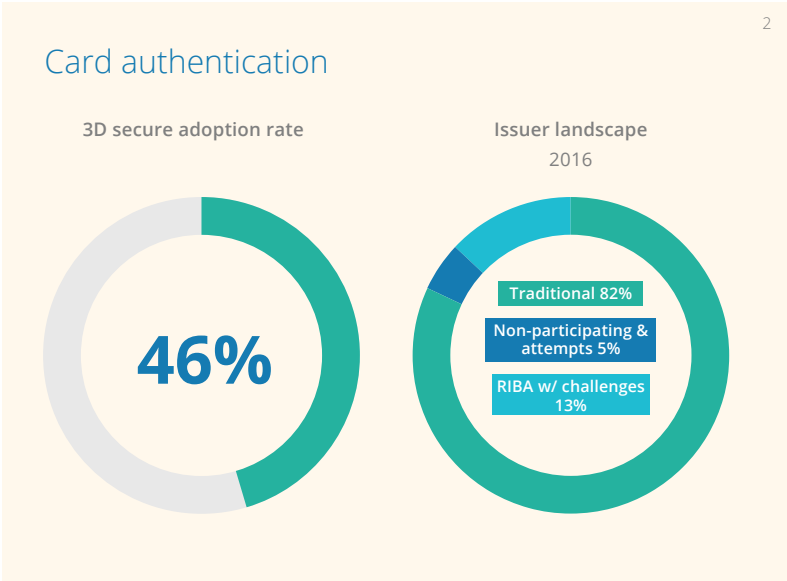


### Relevance of typical fraud scams

N/A

- ### Arvato's take on this market
- 38% of retailers manually review every order from a new customer.
  - More than 50% of those who have introduced risk-management tools work closely with at least one risk-management service provider.
  - Offering open invoice drives conversions but also greatly increases the risk of fraud. It is therefore advisable to work with partners and/or outsource these risks.
  - Strong brands may want to choose a white-label partner to offer secure open-invoice payments under their own brand without any risks, while less powerful brands could choose a reliable branded payments partner such as Afterpay or Klarna.

- ### Risk management tools
- Country-specific tools**  
N/A
  - Advanced tools**  
Device fingerprinting  
3D Secure
  - Classical tools**  
CVN  
Negative lists



# The Netherlands

## Executive Summary

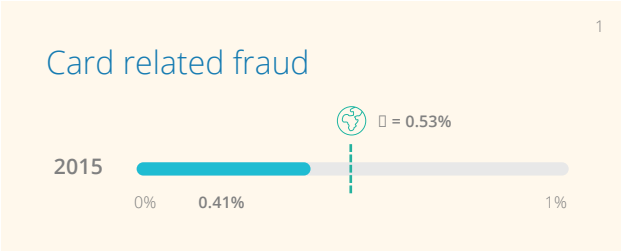
The highly developed Dutch e-commerce market has the advantage of widespread, affordable and easy-to-handle payment methods for retailers





Consumers view iDEAL as more secure than card payments, but Dutch banks are reducing card risk and fraud with new identity tools like iDIN and DigiD.

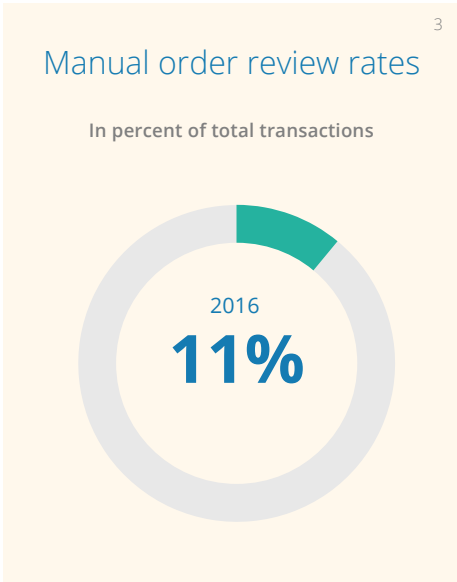
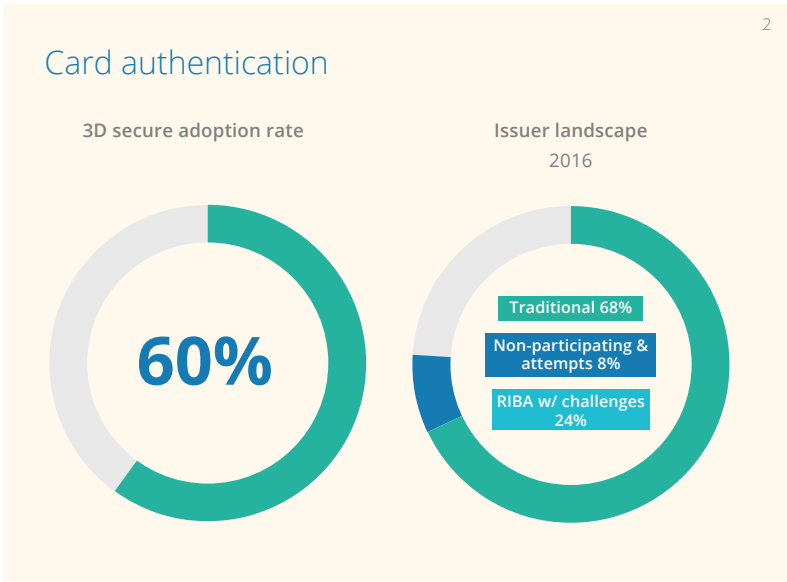
**Expert tip**  
90% of the Dutch population can use iDEAL in a mobile environment.



- ### Typical fraud scams
- Phishing ●
  - Identity theft ●

- ### Risk management tools
- Country-specific tools**  
iDIN & DigiD
  - Advanced tools**  
Device fingerprinting  
3D secure
  - Classical tools**  
CVN  
Negative lists

- ### Arvato's take on this market
- 15% of Dutch consumers are very concerned about online banking fraud according to data compiled by Statista.com in 2014. A further 39% are "fairly concerned", partially explaining the success of iDEAL, which is perceived to be more secure than cards online.
  - The figure also might explain the relatively high 3D Secure adoption rate of approximately 60%.
  - With new identity tools, like iDIN and DigiD, Dutch banks are trying to remove some of the risk and fraud friction consumers and retailers experience in the e-commerce market.
  - We observe that fraud strongholds are situated in large cities such as Amsterdam and Rotterdam.



# Norway

## Executive Summary

Norway, a relatively small country but with one of the highest purchasing powers and internet penetration levels in the world, has a booming e-commerce market.

Credit cards dominate the payments landscape, while PayPal is also relatively strong



Open invoices drive sales, but increase the risk of fraud. The outsourcing of risk to an open invoice partner is a standard part of financial agreements in Norway.

**Expert tip**  
Provide an opportunity in the shop to select and save the preferred payment method.




### Card related fraud

N/A

### Relevance of typical fraud scams

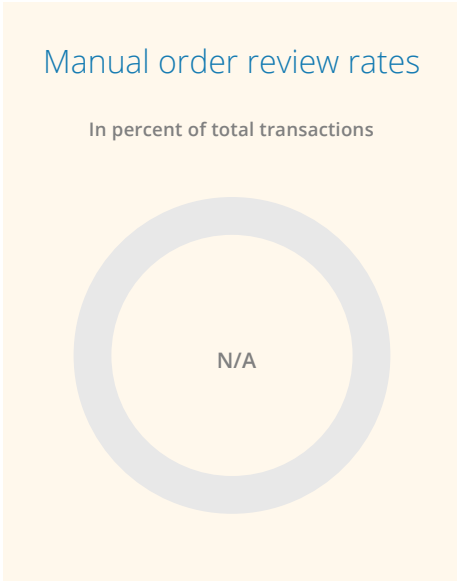
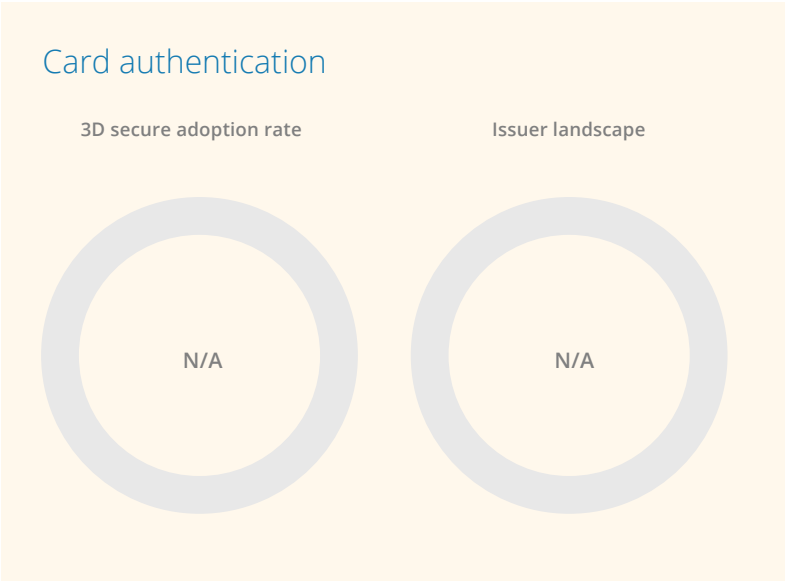
- Identity Theft ●
- Phishing ◐
- Clean Fraud ◑

### Risk management tools

-  **Country-specific tools**  
BankID
-  **Advanced tools**  
Device fingerprinting  
3D secure
-  **Classical tools**  
CVN  
Negative lists

### Arvato's take on this market

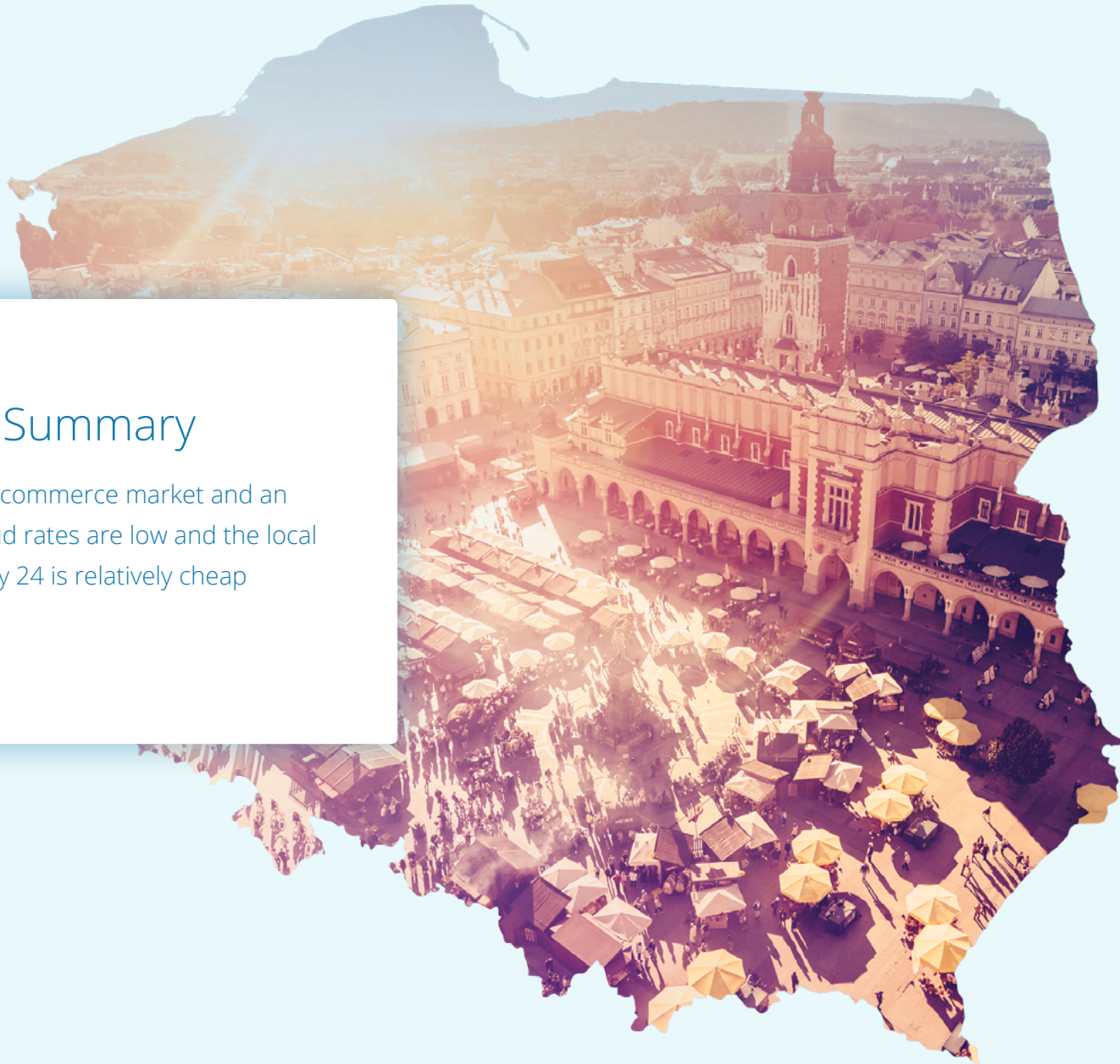
- The Nordics don't represent a particularly high risk in card fraud: research by go2checkout.com shows that Norway, Sweden and Denmark score as some of the lowest fraud risk areas globally (by IP address of perpetrators).
- For card payments, all major issuers allow consumers to block online purchases or purchases from particular markets.
- 3.5 million Norwegians are already using the strong authentication method Bank-ID, which is recommended for merchants in fraud-vulnerable segments. Thanks to its high penetration and ease of use, such a solution is unlikely to have a negative impact on conversions. 3D Secure is also widely used among merchants.
- Offering the popular payment method open invoice drives conversions, but will also increase the risk of fraud. Mitigate this by using a financial partner to outsource these risks – in the Swedish market, for example, this is a standard part of the overall financial agreement between a merchant and an open invoice provider.



# Poland

## Executive Summary

Poland is a fast-growing e-commerce market and an opportunity for retailers: fraud rates are low and the local payment hero Przelewy 24 is relatively cheap



With secure bank transfers the most popular payment method, Poland has levels of card fraud far below the EU average.

**Expert tip**  
Online banking Przelewy24 is by far the favourite payment method in Poland.




**Card related fraud**  
N/A

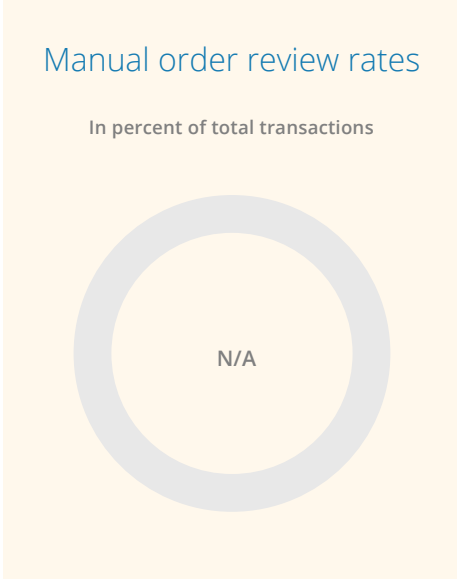
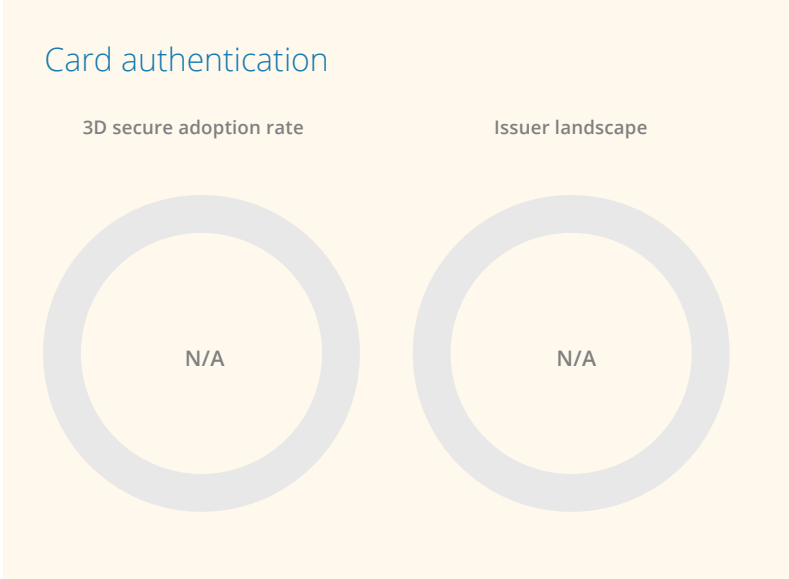
**Relevance of typical fraud scams**  
N/A

**Arvato's take on this market**

- To date, Poland has experienced relatively low levels of card fraud. Just 18% of consumers have experienced card-related fraud in the past five years.
- In mid-2013, the Visa fraud index showed that fraud in Poland had fallen to 4 cents per €100 spent on Visa cards, only 10% of the European average.
- Nevertheless, a combination of internal tools (such as negative lists) and external ones (such as 3D-Secure) seems most appropriate in keeping fraud at bay.

**Risk management tools**

-  **Country-specific tools**  
N/A
-  **Advanced tools**  
Device fingerprinting  
3D secure
-  **Classical tools**  
CVN  
Negative lists



# Spain

## Executive Summary

Spain is the largest e-commerce market in Southern Europe with great potential in digital business such as travel and ticket sales



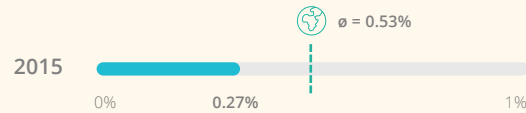


As both e-commerce and fraud are on the rise, more advanced fraud tools are becoming more popular, and should be adopted.

**Expert tip**

As Spaniards love to shop cross-border, the country is a promising target market for increasing sales.

## Card related fraud



1

## Arvato's take on this market

- Fraud strongholds are situated in large cities like Madrid.
- A combination of internal (such as negative lists) and external tools (such as 3D-Secure) seems most appropriate for reducing fraud.
- With e-commerce and fraud on the rise, more advanced fraud tools are becoming more popular and should be adopted.

## Relevance of typical fraud scams

N/A

## Risk management tools



**Country-specific tools**

N/A



**Advanced tools**

Device fingerprinting  
3D Secure

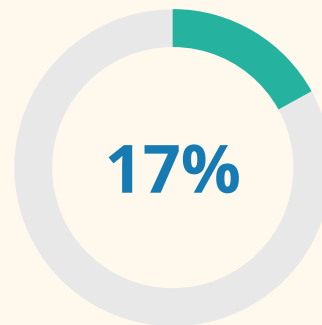


**Classical tools**

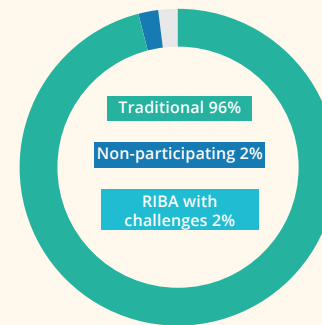
CVN  
Negative lists

## Card authentication

3D secure adoption rate



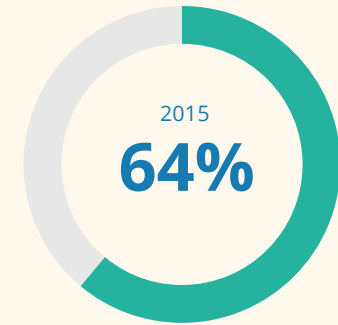
Issuer landscape  
2015



2

## Manual order review rates

In percent of total transactions

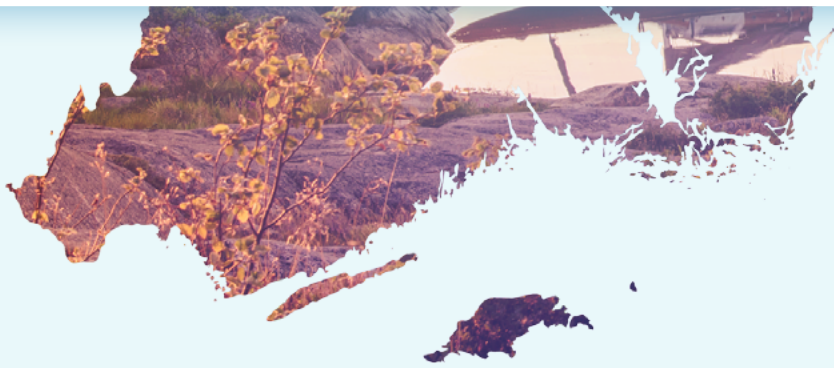


3

# Sweden

## Executive Summary

Sweden, one of the most cash-free countries in the world, is the largest e-commerce market in the Nordics and leading the way in pay-after-delivery. With a thriving FinTech scene and many early adopters, Sweden is a testing ground for payment solutions



Robust and popular authentication solutions make shopping online secure. However, fraud and identity theft are increasing, in part due to the transparency of public records, with personal information readily available online.

**Expert tip**  
Provide an opportunity within the shop to select and store the preferred payment method.

## Card related fraud

N/A

## Relevance of typical fraud scams

- Phishing ●
- Clean Fraud ◐
- Identity Theft ◑

## Risk management tools

-  **Country-specific tools**  
N/A
-  **Advanced tools**  
Device fingerprinting  
3D secure
-  **Classical tools**  
CVN  
Negative lists

## Arvato's take on this market

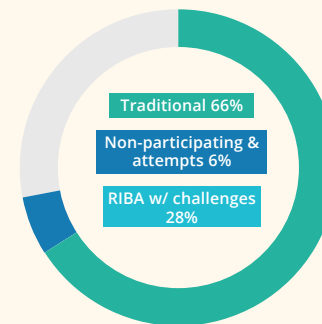
- The Nordics do not represent a particularly high risk in card fraud, and research by go2checkout.com shows that Norway, Sweden and Denmark score as some of the lowest fraud-risk areas globally (by IP address of perpetrators). However, fraud is increasing in Sweden, primarily within identify theft.
- For card payments, all major issuers allow consumers to block online purchases or purchases from specific markets.
- 6.5 million Swedes use the strong authentication method Bank-ID, which is advisable for retailers in fraud-vulnerable segments. Due to its high penetration and ease of use, Bank-ID is unlikely to have a negative impact on conversion. 3D Secure is also widely used among retailers.
- Offering the popular payment method open invoice drives conversions, but will also increase the risk of fraud. Mitigate this by using a financial partner to outsource these risks – in the Swedish market, this is a standard part of the overall financial agreement between a retailer and an open-invoice provider.

## Card authentication

3D secure adoption rate



Issuer landscape 2016



## Manual order review rates

In percent of total transactions



# Switzerland

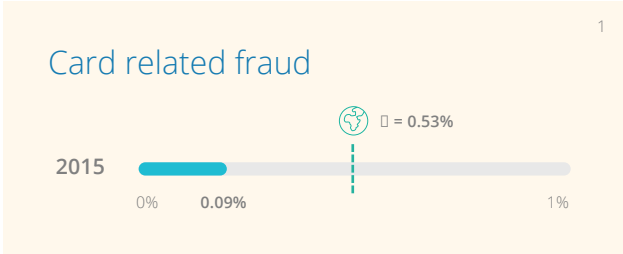
## Executive Summary

Switzerland has one of the highest internet usage rates worldwide, coupled with great purchasing power, but is constrained by consumers' reluctance to change



Switzerland has some of the lowest e-commerce fraud levels in the world. To maintain this market security, the Swiss are hesitant to share personal information.

**Expert tip**  
Use payment guidance to promote online payment methods.

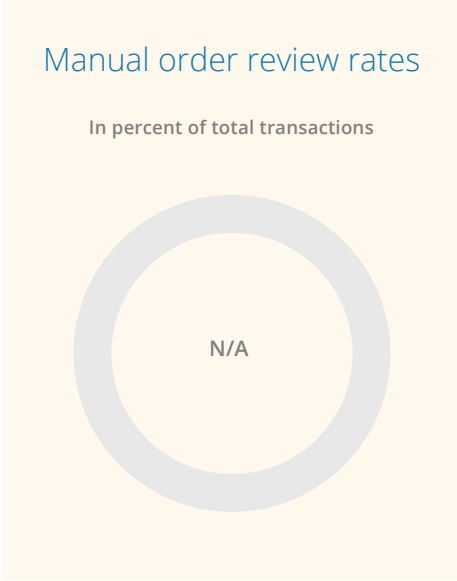
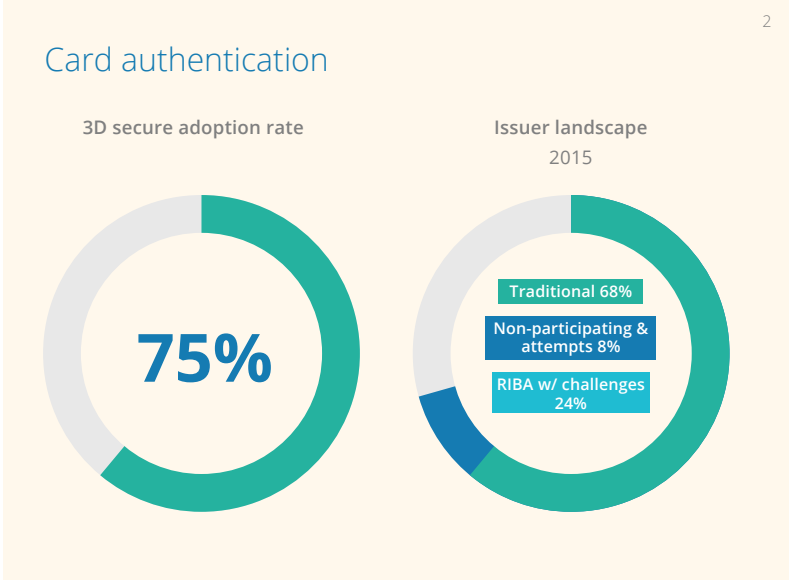


- ### Relevance of typical fraud scams
- Clean Fraud
  - Phishing
  - Account takeover

- ### Risk management tools
- Country-specific tools**  
Transakt
  - Advanced tools**  
Device fingerprinting  
3D secure
  - Classical tools**  
CVN  
Negative lists

### Arvato's take on this market

- Transakt is a new mobile verification app used by certain banks to verify all payments made online.
- Switzerland has one of the world's lowest fraud rates: in 2014, it made the top 5 in a list of countries with the lowest rates of fraudulent e-commerce transactions.
- Open invoice drives conversions but also massively increases the risk of fraud. It is therefore advisable to work with partners and outsource these risks.



Sources: 1) Swisscard (2015) // 2) MRC (2016/2015), Cardinal Commerce (2016).

# United Kingdom

## Executive Summary

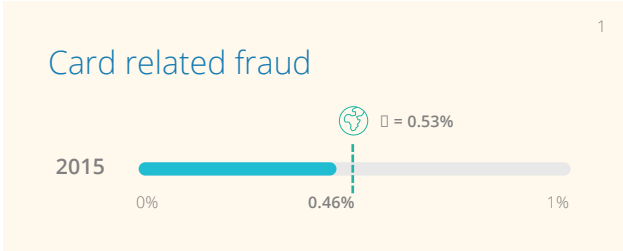
The UK is one of the most established e-commerce markets in Europe, backed by a strong logistics network.

Consumers spend 9.2% of the country's GDP on purchasing goods and services online



3D authentication is mandatory for MasterCard and Maestro, though British card issuers typically take a flexible approach, employing 3D primarily for high-risk transactions.

**Expert tip**  
Speed and simplicity are very important to consumers during check out.

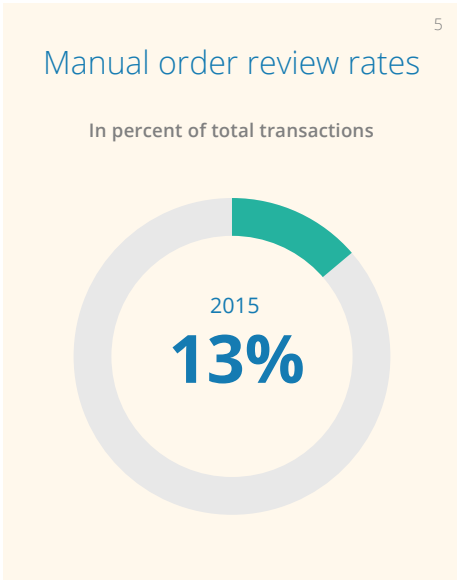
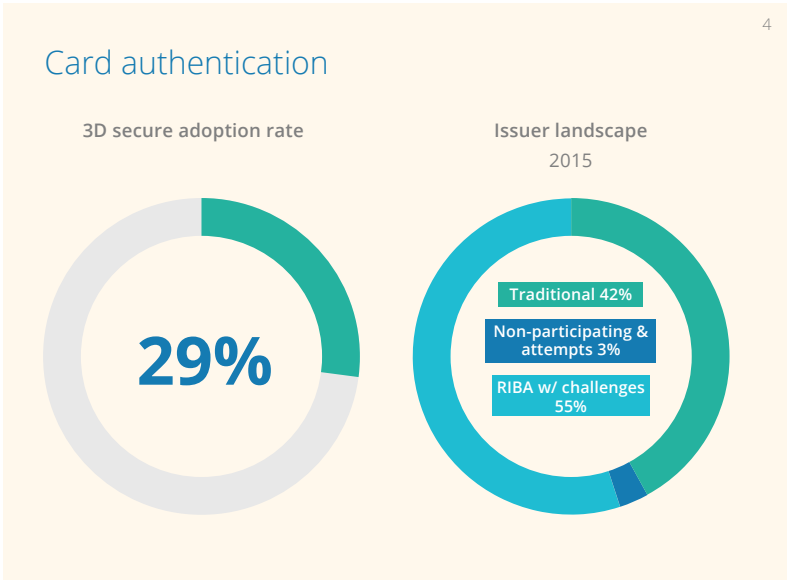


### Relevance of typical fraud scams

N/A

- ### Arvato's take on this market
- The UK is the only European country where Address Verification Support (AVS) is supported by Visa and MasterCard issuers.
  - 3D Secure is mandatory for merchants wishing to accept MasterCard/Maestro cards.
  - Issuers in the UK typically take a flexible approach to 3D authentication, however, and apply the tool primarily for high-risk transactions only.
  - Fraud rates are significantly higher with credit cards than with debit cards.
  - Fraud strongholds are concentrated in large cities such as London.

- ### Risk management tools
- Country-specific tools**  
AVS (also for Visa, MC)
  - Advanced tools**  
Device fingerprinting  
3D security
  - Classical tools**  
CVN  
Negative lists



# United States

## Executive Summary

The largest market in the Western world in terms of population, the US is still dominated by card payments and is yet to fully exploit the benefits of APMs

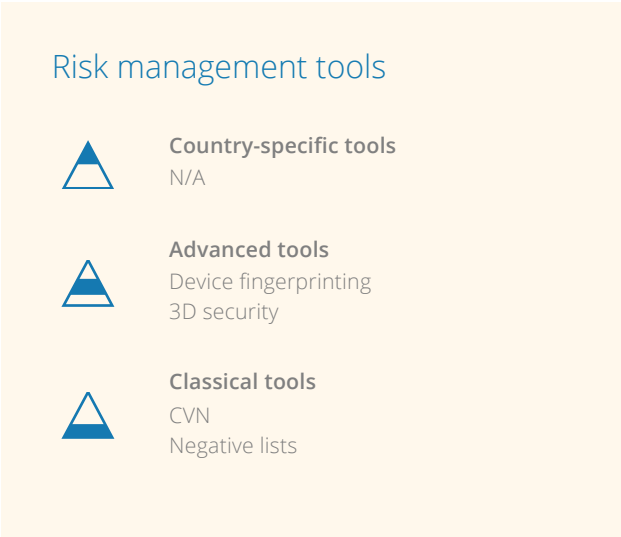
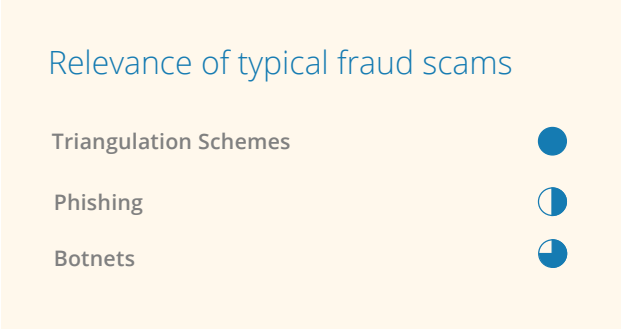
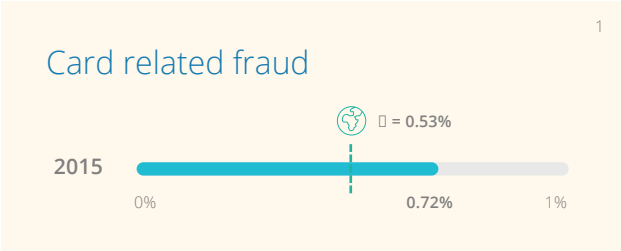






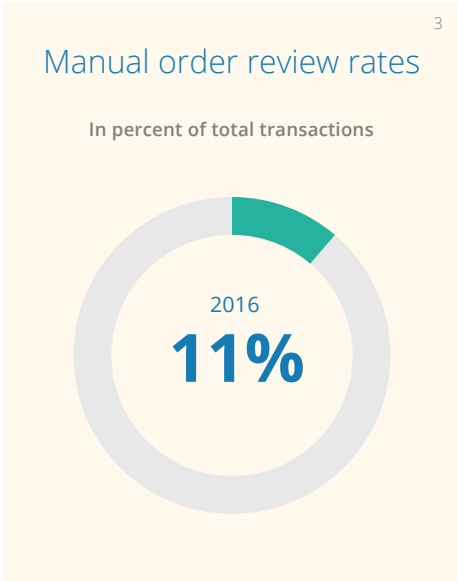
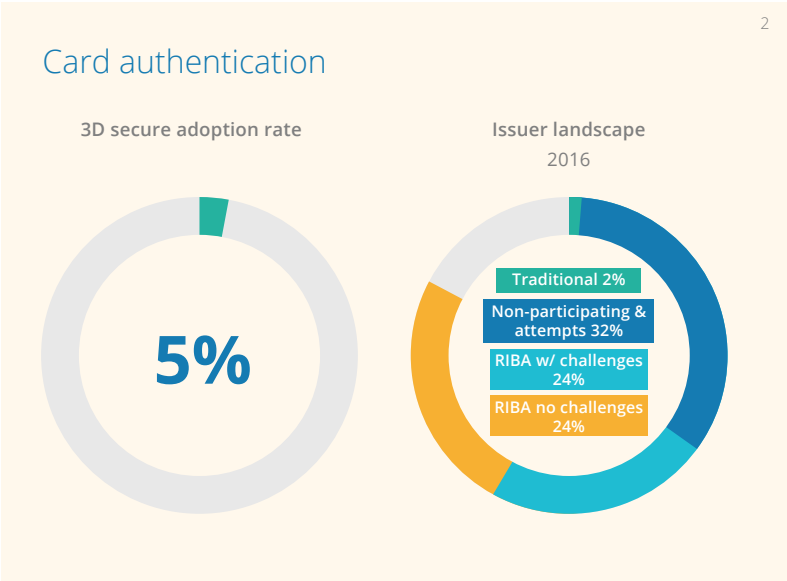
American retailers are less likely to have consumer authentication than their European counterparts.  
The majority of fraud on US purchases are committed from abroad.

**Expert tip**  
Apple Pay & Google Wallet are taking market share from PayPal.



### Arvato's take on this market

- Most fraud on US purchases is committed from abroad.
- North America is the region where merchants are least likely to use consumer authentication.
- 81% of merchants perform a manual order review, and while on average 2.3% of all orders are rejected, around 10% are false positives.



The data contained in this report comes from a wide variety of sources, including financial reports, industry publications, blogs and news stories. During the course of our research we have consulted more than 200 national and international studies. You will find them here under the headings E-Commerce and Payment & Fraud. While every effort has been made to make sure the information presented in the report is reliable, we cannot be held responsible for its veracity. We do, however, stand by the opinions expressed in the report unreservedly.

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