Payment performance

How to use payment data to increase profitability.

Introduction

At Worldline we define Payment Performance as any activity designed to (1) improve the success rate, (2) avoid unnecessary fees, or (3) reduce the operational costs of payments.

Payment Performance activities are sometimes part of long-term strategies (such as designing user-friendly payment pages to be easy for the customer to complete, making sure that the payment methods offered reflect customer preferences or setting up processes for blocking suspected fraudulent transactions). They are also often a reaction to unexpected changes (such as limiting the impact of an ongoing fraud attack or investigating the reasons for a sudden increase in issuing bank declines). In general, Payment Performance involve various degrees of analysis before reaching an insight that has practical applications. In other words, Payment Performance typically include activities that go beyond the minimum of what is required to accept payments. With Payment Performance, we at Worldline unleash the untapped potential of payment data and help customers to increase conversion rates, lower costs and prevent fraud.

The large number of intermediaries and the complex transaction life cycle can make it difficult for merchants to independently get a clear view on performance and cost drivers and how to achieve an optimal setup. With this e-book, we want to give you a better understanding of how you can achieve this optimal setup by using your payment data.

Optimizing performance is a balancing act between different goals in the payment ecosystem. Conversion, fraud exposure and transaction cost are all closely linked, and available tools and strategies will have an impact on all of them. For example, increased security will boost acceptance rates, reduce fraud exposure, and lower transaction cost, but in some markets, adding another step in the payments process could drive customers to abandon the purchase if authentication is not required.

> According to Worldline's survey on Payment Performance, which was distributed to large Nordic companies, 50% of the responding companies believe that meaningful gains could be realized if their payment setup was optimized.

Contents

Summary

By working with payment data and payment performance together with an active partner, you can basically increase your profitability in three ways:

1. Increase earnings by increasing conversion rates.

2. Lower costs by preventing fraud.

3. Optimize costs related to pricing.

Dictionary.

Acceptance rate (acquirer)

The number of approved authorizations divided by the total number of authorization attempts.

Acquirer

The financial institution that is responsible for processing card transactions on behalf of the merchant.

Authorization

The process whereby the acquirewr, on behalf of the merchant, sends a request to the cardholder's bank ("issuing bank") to reserve the funds of the initiated purchase. There are several reasons why an issuing bank may reject an authorization request. The most common decline reasons include insufficient funds, expired card, security settings (e.g. online transactions disabled) and suspected fraud. In many cases, the cardholder is required to pass an authentication step before the authorization request can be sent.

Authentication

The process whereby the PSP or Gateway, on behalf of the merchant, sends a request to the issuing bank to authenticate the identity of the cardholder. Cardholder authentication can take the form of entering the PIN in a point of sales ("POS") environment or two-factor authentication in a secure web page or mobile app when shopping online. For small purchase amounts, where the loss in case of fraud is minor, or subsequent subscription-based payments, where the merchant initiates the payment, cardholder authentication might not be requested. From January 2021, almost all other electronic payments within the EEA are required to be authenticated using Strong Customer Authentication ("SCA").

Cardholder

The consumer who use debit and credit cards from the card issuing bank.

Card schemes

For example Visa and Mastercard, are in charge of the infrastructure that connect all the parts of the ecosystem. They also set up the rules that govern all card-based transactions and monitor compliance. Both Card issuing banks and acquirers have to be part of these schemes in order to manage transactions.

Conversion rate

The conversion rate shares the same numerator as the acceptance rate (the number of approved authorizations). But instead of dividing it by the number of authorization attempts alone, the denominator also includes attempted authentications or additional data available such as the number of customer drop-offs from the checkout. In other words, the conversion rate aims to reflect the ratio of completed purchases to all potential purchases.

Issuing bank

Financial institution who are connected to the card networks and who are responsible for issuing cards to the cardholders.

Merchant

The business who accept the cards as a means of payments.

Payment Gateway

The technical platforms that communicate the transaction information between merchants, card issuing banks and acquirers. In some cases, as with Worldline, the same company can serve as both the acquirer, payment service provider and payment gateway.

Payment Performance

Activities designed to (1) improve the success rate, (2) avoid unnecessary fees, or (3) reduce the operational costs of accepting payments.

Payment Service Provider (PSP)

Sell payment services, like online checkouts or terminals, to the merchants. These are often bundled with other services like settlements and financial reporting.

PSD2

The PSD2 Payment Service Directive is an EU directive aimed at developing the market for electronic payments and creating better conditions for secure and efficient payments.

Strong Customer Authentication (SCA)

A requirement of PSD2, the requirement ensures that electronic payments are performed with multi-factor authentication, to increase the security of electronic payments.

The payment ecosystem.

There are several stakeholders that you must know of within the payment ecosystem. Below is a illustration of how the different stakeholders relate to each other.

For a small or medium-sized business, the **PSP** or gateway provider often act as the main partner for accepting credit cards and other payment methods.
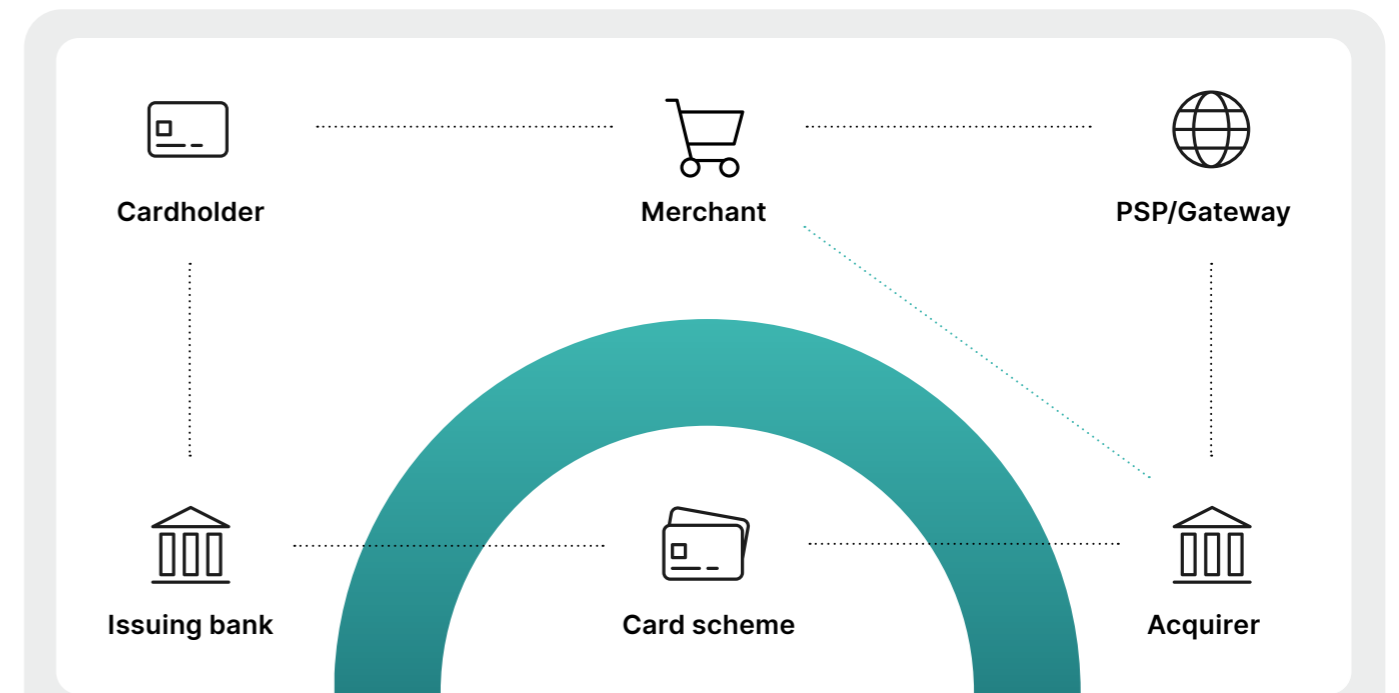
For card payments, the PSP and the **Merchant** are dependent on an **Acquirer** who, via a merchant account, process and collect the merchant's card sales revenue from the **Cardholder**'s **Issuing bank** by using the network of connected banks administered by a card scheme.

The acquirer enters license agreements with the **Card scheme** and needs to comply with the operational regulations set by the scheme. Through direct or indirect agreements with each merchant, the acquirer in turn enforce the scheme rules towards the merchant.

Card payments should be number one

All stakeholders within the payment flow have different priorities but share the incentive to make payments by card a preferred choice in commerce. Below we have illustrated the different stakeholders and their main priority and how that affect card payments.

Cardholder — Merchant — PSP/Gateway

Issuing bank — Card scheme — Acquirer

Card scheme

Increase usage & ensure trust in network

The card schemes need to ensure that debit and credit cards are **attractive payment options** (want to limit avoidable declines and develop new features such as Contactless and 3DS 2.0). They also define **high risk segments** that can hurt the brand as well as thresholds for tolerable fraud rates.

PSP/Gateway

Maximize conversion for the merchant

The gateway or PSP help the merchant set up fraud rules, optimize payment pages and rules for when to use 3D Secure in order to **maximize conversion**.

Issuing bank

Protect the cardholder

The issuing banks protect their cardholders by e.g. **restricting** online purchases where fraud is more common. At the same time, the more cardholders use their cards, the more issuers will earn from interchange fees. Thus, issuers also have an incentive to minimize unnecessary declines.
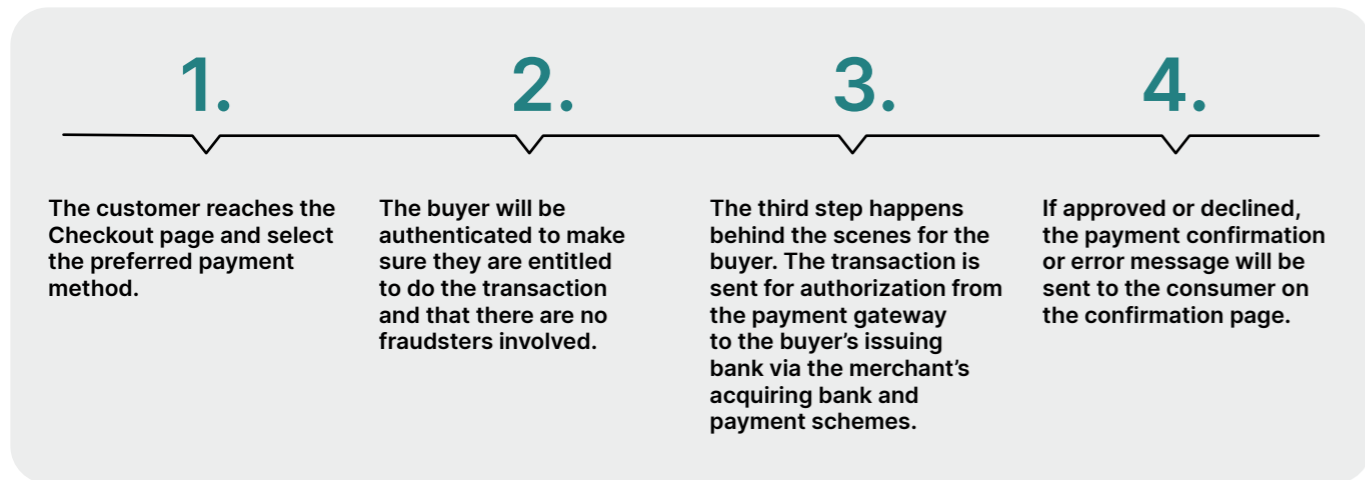
Acquirer

Maximize acceptance rates

The acquirer need to ensure platform **uptime** and can offer **technical features** improving acceptance rates such as tokenization. The acquirer may also minimize merchants' costs by maintaining an accurate scheme fee model.

The payment value chain

Now when we have gone through the payment ecosystem with all its stakeholders, let's have a look at the payment value chain. What happens when a customer clicks on the Pay button online?

1.	2.	3.	4.
The customer reaches the Checkout page and select the preferred payment method.	The buyer will be authenticated to make sure they are entitled to do the transaction and that there are no fraudsters involved.	The third step happens behind the scenes for the buyer. The transaction is sent for authorization from the payment gateway to the buyer's issuing bank via the merchant's acquiring bank and payment schemes.	If approved or declined, the payment confirmation or error message will be sent to the consumer on the confirmation page.

The large number of intermediaries, the complex transaction life cycle, and the payment value chain can make it difficult for merchants to independently get a clear view on performance and cost drivers and how to achieve an optimal setup.

There are so many things you can do throughout the whole value chain. However, the following areas will focus mainly on the acquiring part. Now we will look into three different areas where you can use your payment data to achieve the optimal setup and increase profitability:

- **Increase conversion rates**
- **Prevent fraud**
- **Optimize costs**

Pay — Payment page — Authentication — Authorization — Payment confirmation

Earnings
Increase conversion rates.

With the help of payment performance, you can increase your earnings by increasing the number of approved transactions.

Conversion rate is one of the most important measures of the effectiveness of any e-commerce site. In practice, 20% of transactions never reach the completion step. And while merchants invest more and more in their user experiences and try to reduce cart abandonment, they often lack access and ability to interpret acquiring data and drivers of rejected purchases. There are so many things you can do throughout the whole value chain to increase your conversion rate. However, the following will mainly focus on the acquiring part. As an acquirer we have access to all the relevant data about your approved transactions and those authorizations that are declined by the card issuing banks. By analyzing that data, we can gain new insights into why legitimate transactions are declined and find ways to prevent this and in turn increase your earnings. Simply put, we help you accept a higher number of payments by understanding how your payments can be handled in a more effective way, throughout the whole ecosystem.

Acceptance rates vs. Conversion rates

Acceptance rates and Conversion rates measure the success rate of all purchase attempts initiated or all potential purchase attempts registered (i.e. including drop offs before the authentication and authorization stages). The two expressions are often used interchangeably but an important distinction is the scope of purchase attempts considered.

Here we define the acceptance rate as the number of approved authorizations divided by the total number of authorization attempts. Any rejects earlier in the transaction lifecycle, such as failure to authenticate, are thus disregarded. The resulting ratio primarily measures the number of approved payments by the issuing banks where the most common reason for a reject is insufficient funds.

The conversion rate shares the same numerator as the acceptance rate (the number of approved authorizations). But instead of dividing it by the number of authorization attempts alone, the denominator may also include attempted authentications, rejects due to blocked cards or other data available such as the number of customer drop-offs from the checkout. In other words, the conversion rate aims to reflect the ratio of completed purchases to all potential purchases.

Read mot about the difference between authentication and authorization on page 13.

Why does a transaction get rejected?

To increase your turnover and reduce false declines, you need to understand the details of why purchases are rejected.

Here you can see some of the most common rejection reasons and which stakeholder is responsible for the rejection.

Merchant rejects	Rejected by other stakeholders in the transaction life cycle			
Merchant	**PSP**	**Acquirer**	**Scheme**	**Issuer**
Fraud tool	Authentication	Authorization	Authorization	Authorization
• Blacklisted BIN • Blacklisted cardholder • High fraud risk detected (e.g. high amount from a specific country)	• Authentication failed (e.g. due to a cardholder mistake) • Authentication unavailable (technical issue)	• Format errors in authorization request received • 3DS authentication downgraded by scheme	• Issuer is inoperative • Stand in processing (e.g. triggered by suspected fraud)	• Insufficient funds • Expired card • Blocked card • Suspected fraud • Txn type not allowed • Etc.
Transactions not approved by the merchant	**25.0%**	**0.2%**	**0.3%**	**74.5%**

Share of errors and rejections on transactions approved by the merchant

As can be seen, the issuing bank is the stakeholder who rejects the majority of all transactions. They base their decision on hundreds of variables. That can for example be transaction data, card details, or merchant data. If the transaction is rejected, the issuer will respond with a decline code. The code describes the reason for the rejection. In order to understand acceptance rates, it is very important to look at the decline code distribution. If you know what the decline code means, you can learn what the most common reason for rejection is and work actively to reduce them.

According to Worldline's survey on Payment Performance, distributed to large Nordic companies using Worldline's acquiring services, 70% considered Analysis of authorization decline codes to be a very important activity in their Payment Performance work and 20% considered it to be moderately important. 70% of the respondents also state that they would like to spend more time on analyzing decline codes.

Question:
How important are the following in your company's Payments Performance activities?*

Legend:
- Not important
- Moderately important
- Very important
- N/A

Analysis of confirmed fraud data: 50% / 50%
Analysis of authorization decline codes: 10% / 20% / 70%
Optimizing payment pages: 10% / 10% / 80%
Optimizing payment method offering: 30% / 70%
Managing chargeback dispute processes effiently: 50% / 50%

Data from Worldline's survey on Payment Performance, distributed to large Nordic companies using Worldline's acquiring services, collected during September and October 2020.

Authentication vs. Authorization

Authentication and Authorization are two important steps of the payment lifecycle and can easily be mixed up, however they are two separate concepts. Authentication involves verification of the cardholder and authorization involves approval of the purchase. Below we have explained the two concepts in more detail.

Authentication

When cardholders do a purchase either by putting their card into the card terminal or enter their card details into the merchant's checkout page. The first thing the merchant must do is to make sure that the card is valid, has not been reported stolen and check that it is the cardholder who is making the purchase. This is done through something called an authentication.

For online card transactions the security protocol 3D Secure is used to verify the identity of the cardholder and for in-store payments this is usually done by entering the PIN code.
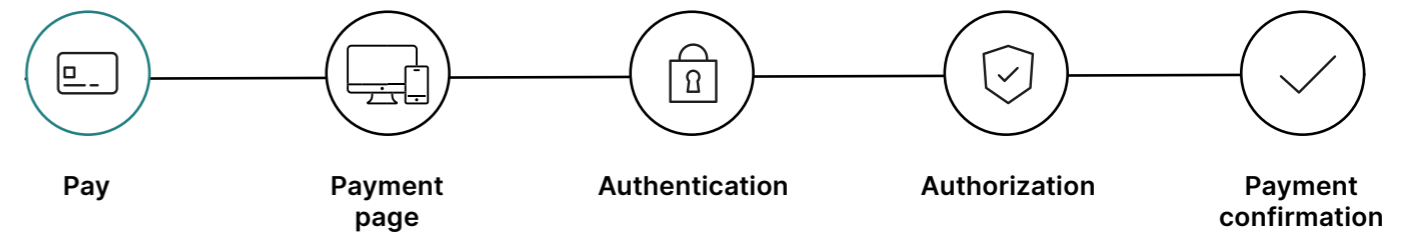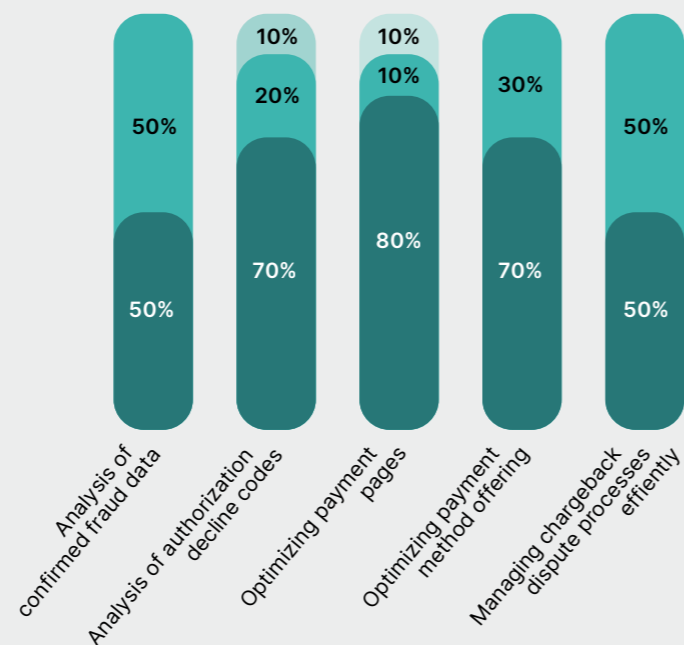
The process starts with the acquirer who takes the authentication data, either from the terminal or checkout page, and sends it to the card scheme via the payment gateway. The card scheme then asks the bank who issued the card to verify that the card is valid and that the security data (i.e. PIN or password) is correct. The card issuing bank then sends its response back to the terminal or checkout page so that the purchase can continue or be declined.

Authorization

Once the card has been authenticated, the acquirer can now ask the card issuing bank to authorize the purchase itself. The authorization follows the same flow as the authentication, but this time the card issuing bank checks that there is money in the cardholder's account and allows the acquirer to "capture" the amount of the purchase. This means that the issuing bank reserves the amount of the purchase on the card holder's account to be transferred later.

Pay · Payment page · Authentication · Authorization · Payment confirmation

Did you know that high ticket values (>100 EUR) have 2.7 percentage points lower authorization approval rates compared to transactions of less than 100 EUR?

PSD2 and SCA

PSD2 stands for Payment Services Directive which is driven by the European Commission to regulate transactions, acquirers, and issuers in Europe. The directive came into force on September 14, 2019. However, the European Banking Authority extended the deadline for the requirement that Strong Customer Authentication (SCA) needed to be implemented for all online payments, until December 31, 2020. The idea behind the new directive is partly to protect consumers from fraud, but also to promote innovation in payments and financial services..

SCA and Exemptions

On a practical level, SCA means that customers must verify their identity by using at least two out of three factors when making a payment. The three factors are: **Knowledge** (i.e. a password or PIN that only the customer knows). **Possession** (i.e. the customer's card or phone) and **Inherence** (i.e. using biometric features like facial recognition or fingerprint).

PSD2 allows certain exemptions from the SCA requirement. One important ground rule of SCA is that the decision to allow an exemption is always made by the card issuing bank. For merchants, this means that you cannot decide yourself if an exemption should be applied or not. So, even if a transaction qualifies for an exemption the customer might still have to make a strong customer authentication, if the card issuing bank chooses to demand it. Read more about exemptions for online merchants here.

To improve your chances to get exemptions you can provide additional data to the PSP. For example, additional data such as consumer data, IP address, past purchase information, or shipping information. This will then be passed on to the issuing bank. It will then give them more confidence in removing the additional authentication steps and reduce friction and thus increase conversion.

> For **instore card payments, customers only have to enter the card's PIN number to fulfill the SCA requirement. The most important exemption from this rule will be for contactless transactions. This exemption means that contactless transactions, without PIN, can be done as long as the amount of the purchase is less than 50€. The exemption is also limited so that customers must enter their PIN after five such transactions, or if the total amount of their contactless transactions is more than 150€.**

What is 3D Secure?

The card networks have decided to use the security protocol 3D Secure to handle SCA for any purchase made with their cards. In practical terms, 3D Secure means that the cardholder, in addition to his card details, must also enter a password to complete his payment.

With PSD2, the issuing bank can challenge transactions. It means that as a merchant, if you do not have 3D Secure activated by the end of 2020, your valid transactions may be declined. So make sure you have activated 3D Secure for your account, otherwise transactions may get blocked automatically.
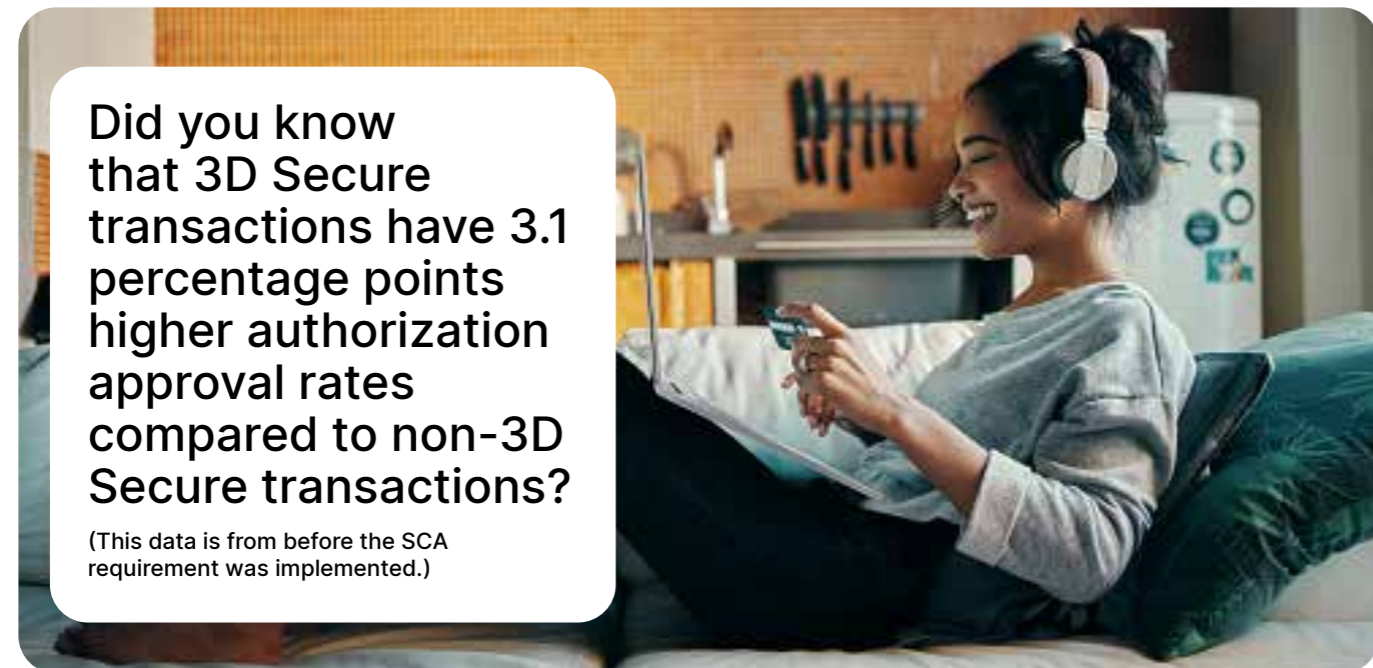
> Did you know that 3D Secure transactions have 3.1 percentage points higher authorization approval rates compared to non-3D Secure transactions?
>
> (This data is from before the SCA requirement was implemented.)

Acquiring acceptance rates

The differences in acquiring acceptance rates come down to two main areas: The technical setup of the acquirer and The partnership management of the acquiring teams.

The technical setup

Transactions can be blocked due to technical reasons such as the uptime of the acquiring engine itself or the connections to the rest of the value chain. Next to careful release management, an acquirer can implement back-up mechanisms such as routing or fallback mechanisms.

The partnership management

It is important to actively look in-depth at the declined transactions and take action on the root causes. For example, some issuers decline cross-border transactions or non-3D Secure transactions for certain card types. By actively managing their payment partners, such as Issuers, Schemes and PSPs, acquirers can make big differences in terms of acceptance rates.

Ultimately as a merchant you want to get insights in your own transaction data so you can take action on declined transactions and optimize your business by improving your profitability.

Worldline as partner

Worldline's team helps our customers get insights into their transaction data and understand the details of why purchases are rejected. This is done by continuously developing our analytics capabilities and looking at how we can walk the extra mile for our merchants. We leverage data and work closely with all stakeholders to identify business and technology driven changes that boost performance. At Worldline, we work proactively to suggest concrete actions to our merchants on how they can improve their setup.

What you can do to increase conversions

Here are some things you can do in order to increase your conversion rate:

1 **Get insights** into your transaction data.

2 **Look at the decline code distribution** and understand the decline codes provided by the issuing banks.

3 **Use 3D Secure** to increase authorization approval rates.

4 **Provide additional data** to the PSP to improve the chances to get exemptions.

5 **Choose the right payment methods** for your business. For example, if you have very expensive products or services, consider offering your customers to pay by invoice since high ticket values have lower approval rates.

Customer case

Did you know that we helped an international airline increase their acceptance rates by 7 percentage points, from 87% to 94%?

Worldline's team saw that one Nordic country showed significantly lower acceptance rates compared to the merchant's other markets. When digging further into the data, one issuer bank was found to drive 70% of the declines.

Worldline initiated a dialogue with the bank to understand why their acceptance rates were so much lower than other banks. After an iterative process, the bank agreed to change their processing routines. The result was that the airline's acceptance rate increased by an impressive 7 percentage points, from an already strong 87% to an outstanding 94% acceptance rate.

The right analytical approach, combined with acquiring expertise and investment in relationships throughout the ecosystem, can drive tangible improvements for merchants. Worldline has a data-driven approach to acquiring that uses analytical tools to help customers thrive by leveraging the hidden value in customers' data.

Costs
Prevent fraud.

With the help of payment performance, you can lower your costs by preventing fraud.

With the rise of e-commerce comes an increase in fraud. As such, the authentication of your customers is a crucial step in the payment flow. There is a strong connection between increasing acceptance rates and preventing fraud. They both stem from analyzing your payment data.

Your payment data can be a valuable tool for both detection and prevention. By looking at authorizations, acceptance rates and the reason for declined transactions you can discover patterns that can indicate large scale and organized fraud attempts.

Worldline monitor and analyze all suspicious activity to find patterns in the fraudsters approach. That way, you do not have to wait for the fraud to be reported before you set in countermeasures.

Card fraud

Card fraud is a general term for all types of frauds where cards are involved. Within card fraud there are several different fraud types such as Lost/Stolen Card, Counterfeit Cards, CNP, Card Not Received etc. Most card frauds are done by using stolen card details either via e-commerce or Counterfeit Cards. One of the most common types of fraud is e- commerce fraud, called CNP (Card Not Present) fraud. The best way to prevent these kinds of frauds is to have 3D Secure.

Merchants with physical stores should be careful if the customer/fraudster is distracting in order to either enter the card number in the terminal or force it in another way. The terminal is a document of value that it is important to have control over as it happens that fraudsters steal terminals which they then use.

> In Sweden in 2019, a total of 106,483 CNP frauds were reported. CNP frauds accounted for 44% of all reported fraud crimes in 2019 and was thus the single largest crime category.
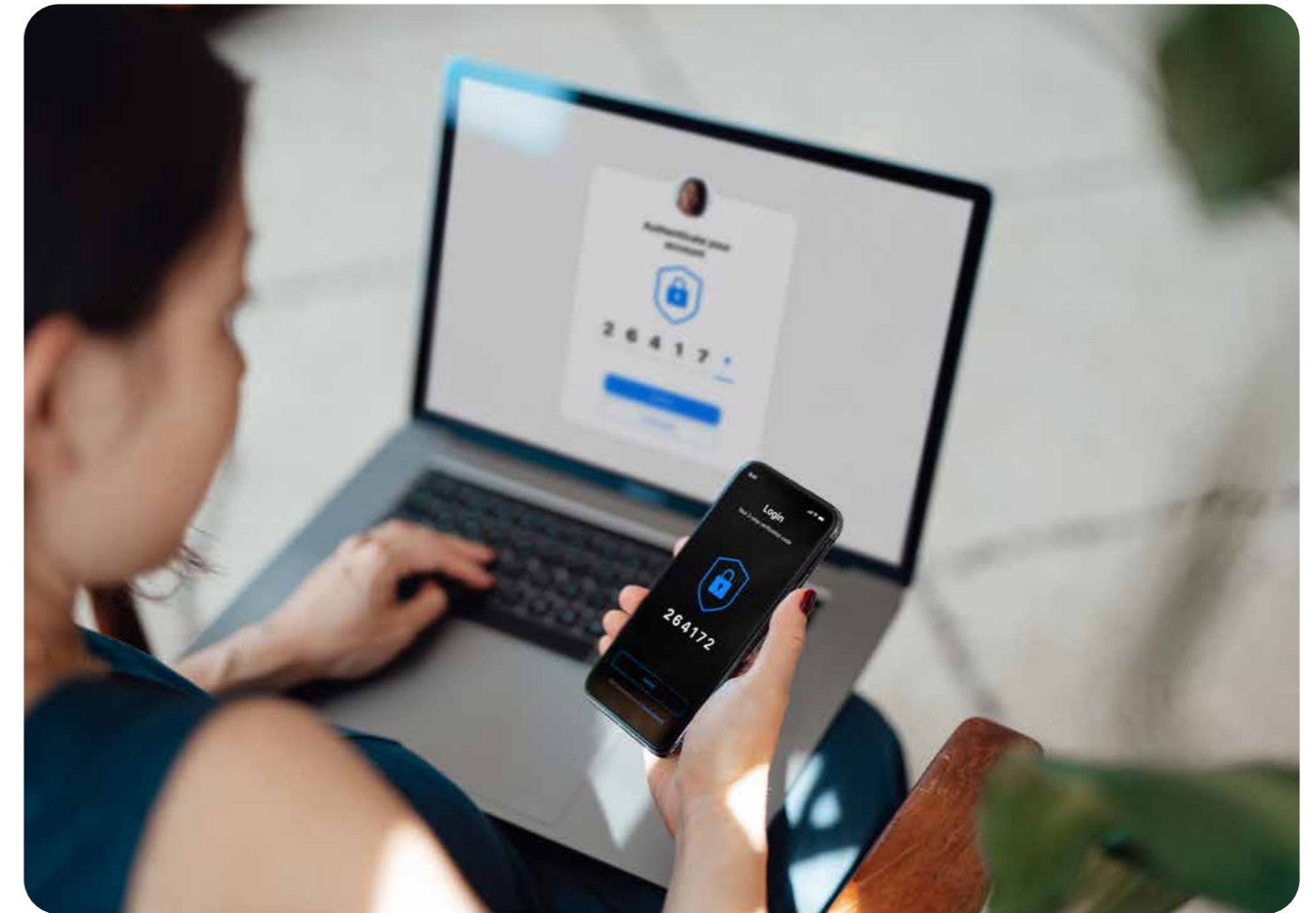
Why you should have 3D Secure

If you offer 3D Secure on your web shop, it is most often the card issuing bank that takes the financial responsibility in the event of fraud. Even if the card issuing bank does not itself support 3D Secure, you as a merchant thus have the same protection in the event of fraud. Please note, however, that 3D Secure does not stop all fraudulent payments, but that you as merchant avoid the financial loss in the event of these frauds.

Since the implementation of the SCA requirement, offering 3D Secure is in most cases not a choice for merchants any more but a requirement. (If you as a merchant do not offer 3D Secure, you take full responsibility for fraudulent purchases and lose both the money and the delivered goods in the event of a fraud.)

Exemptions

One of the core differences in 3D Secure 2.0 vs. 3D Secure 1.0 is that the issuer can use a lot of data points from the transaction to determine the risk of the transaction.

Your acquirer has the option to include a request for an SCA exemption when the card is being authenticated. 3D Secure 2.0 allows over 100 data points to be sent along with the authentication data. When the issuer receives this data, they can choose to either approve or decline the exemption request. If the exemption is approved the customer can make a "frictionless" purchase, without SCA. If the exemption is declined the customer is instead asked to perform SCA directly in the payment window.

The use of exemptions also affects liability in the case of fraudulent transactions. If the issuer approves an exemption that is requested by the acquirer it is the acquirer and merchant who are liable if the transaction is fraudulent. The issuer can also choose to exempt a transaction from SCA without a request from the acquirer. In this case the issuer will be liable for any fraud.

> In 2018, payment fraud cost businesses and consumers 22 billion* USD globally.
>
> *According to yStats

Fraud prevention tools

It is important for merchants to pay attention to fraudulent activities and keep an eye on their potential financial losses.

Hence, merchants should use fraud detection. The data already captured for 3D Secure 2.0 is also extremely valuable for fraud prevention tools. Risk management algorithms are based on statistics of past behaviors as well as merchants' or consumers' data. Your payment data can for example give you information regarding if there are specific issuers or specific transaction types that drives the majority of your fraud related declines.
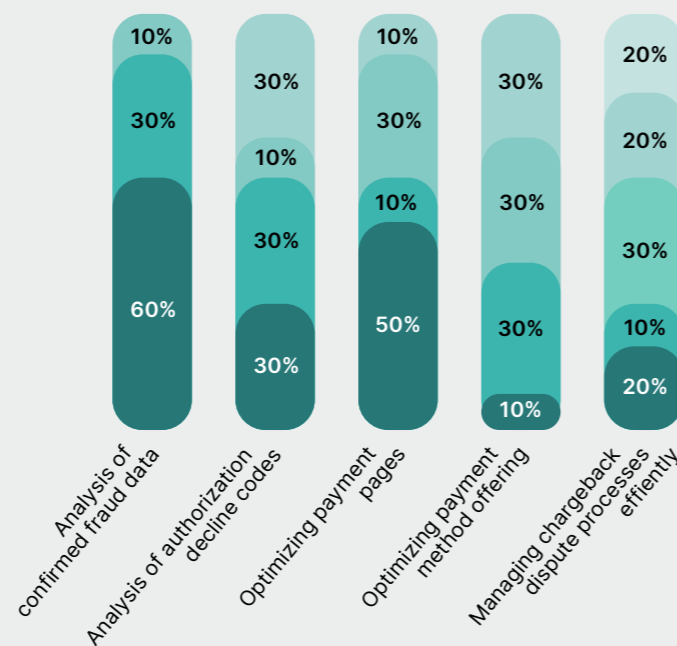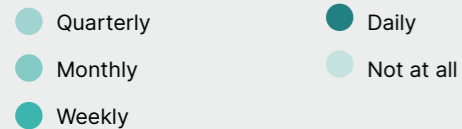
Together with your PSP, you as a merchant can decide that specific transactions should not be approved in order to prevent fraud. You can for example decide to add velocity checks and to reject and blacklist specific card BINs, card countries, IP addresses, and cardholders.

Velocity checks (sometimes referred to as velocity controls) are a fraud prevention mechanism widely used by e-commerce merchants. The tool is designed to flag potential fraud based on the rate at which a buyer submits multiple transactions. Fraudsters who discover a valid card number typically try to empty the card on all money. They run repeated transactions in an attempt to get as much out of the stolen data as possible. To prevent this, velocity checks exist to help you identify and intercept this activity. They enable you to review customer data based on a variety of factors including: Email Address, First/Last Name, Device, IP Address, Billing Address, Shipping Address, and Card Number.

As a merchant, you can improve your credibility by consistently sending reliable transactions. This will increase your chances to be considered a safe partner and enable frictionless flow for the future.

According to Worldline's survey, 60% of the responding companies analyze confirmed fraud data on a daily basis.

Question: How often do your company analyze the following?*

- ● Quarterly
- ● Monthly
- ● Weekly
- ● Daily
- ● Not at all

	Analysis of confirmed fraud data	Analysis of authorization decline codes	Optimizing payment pages	Optimizing payment method offering	Managing chargeback dispute processes effiently
	10%	30%	10%	30%	20%
	30%	10%	30%	30%	20%
	60%	30%	10%	30%	30%
		30%	10%	30%	10%
			50%	10%	20%

Data from Worldline's survey on Payment Performance, distributed to large Nordic companies using Worldline's acquiring services, collected during September and October 2020.

Worldline as partner

At Worldline we have a highly experienced team of experts within risk, fraud, and disputes. They help our customers handle their payments as safely as possible.
Our team constantly monitor our customer's transactions in order to detect and prevent suspected fraud. We monitor and investigate all suspicious transactions and we are attentive to new developments and new types of fraud on the market to constantly stay up to date.
If you are affected by payment fraud or if a customer files a chargeback claim, our experts will help you. We guide you through every step of the process and make sure that it is handled as smoothly as possible.

What you can do to prevent fraud

To make it more difficult for fraudsters, it is important that you have good knowledge of the transactions that are carried out in order to be able to recognize and stop fraudulent purchases. Here are some things you can do to prevent fraud:

- **Have 3D Secure 2.0** on your web shop.

- **Use fraud prevention** tools.

- **Add velocity checks** as fraud prevention mechanism.

- **Compare the country** in which the card was issued with the delivery address and IP address.

- **Check that not the same customer** performed denied attempts but with other cards.

- **Observe and insert barriers** for unnatural purchase patterns.

- **Blacklist** certain card BINs, card countries, IP addresses, and cardholders.

Costs
Optimize costs.

With the help of payment performance, you can lower your costs by optimizing them from a pricing perspective.

The pricing of card transactions is a complicated mix of different fees from the different parts of the payment ecosystem. Worldline wants to give merchants insights to what they are actually paying by employing a more transparent approach to pricing for acquiring and by using advanced tools to optimize the costs of merchants.

The transaction process

At first glance, card payments can seem uncomplicated: Money is withdrawn from the customer's account and deposited into the merchant's account, and the customer walks away with their product. In reality, however, card transactions are a lot more intricate and rely on a network of banks, acquirers, gateways and card schemes. And while this complicated process is not directly visible to the merchant, it does affect them in one clear way: the cost of the transaction.

Throughout the transaction process, the different parties involved all charge their own fees. All of these fees are then bundled together by the acquirer who withdraws the amount before depositing money in the merchant's account. Since merchants do not see the individual fees, they often lack insight into how the cost of a transaction is actually structured. The cost of the transaction, called the merchant service charge, that is deducted by the acquirer from the transaction value includes the following:

Interhange fees	Scheme fees.	Acquiring fee
Issuing bank	Card scheme	Acquirer

European scheme fees

The key to reducing card transaction costs is understanding which factors lead to higher scheme and interchange fees, and how they impact the final cost for the merchant. In the European Economic Area (EEA), for example, there are caps on interchange fees for consumer cards. This results in relatively low interchange fees and small variations between countries and hence, there is limited potential for interchange cost optimization. But by looking closer at the drivers behind scheme fees, large benefits can be created for European merchants.

One example of how this can be done is by looking at merchant location. In general, scheme fees are significantly higher for cross-border transactions, where the card was issued in a different country than where the merchant is located. For online retailers that have branches in several countries this can be a big headache as well as an opportunity. For these types of retailers, Worldline can use our pan-European acquiring in order to optimize transaction flow and minimize costs by rerouting transactions so that they are handled as domestic. Instead being processed as cross-border the transactions are sent through the merchant's local "legal entity" so that the they are now classified as "domestic" instead, which usually means lower scheme fees. In other cases, the same effect can be reached without actually processing the transaction as domestic but by just routing it to another country where the scheme offers lower fees.

Worldline helped an international travel company increase its domestic flows in this way. By doing that we were able to lower their annual scheme fees by 44%, while also increasing acceptance rates by 3.5%.

US interchange fees

In the US, the payments landscape looks different. Domestic interchange fees in the US, especially for consumer credit cards, are significantly higher than in the EEA, and depend on qualification to various interchange programs. As an acquirer, we do what we can to help our merchants qualify for the best interchange program available in order to keep costs as low as possible. For an airline, for example, qualifying a transaction for the cheapest interchange program can be the difference between paying an interchange rate of about 1.75% for consumer credit cards or a "standard" rate of 2.95%. As you can imagine, that represents significant savings.

However, qualifying for the best programs out there can be tricky. The issue for many airlines is that they have a large number of partners, sales channels and different booking platforms, where payments are processed in different systems with different reporting formats. So, even when we know how to qualify for the cheapest interchange program, we can only do that if those transactions are being processed in just the right way in all the systems. That means complying with all program requirements for data fields, formatting, timeliness and more.
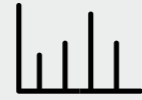
Two price models

Blended pricing

The simplest price model for acquiring is called blended pricing. With blended pricing the merchant pays a fixed fee for their transactions called the Merchant Service Charge. The benefit of this model is its predictability and ease of forecasting, as well as the protection it offers merchants from increases in scheme- and interchange fees. For these reasons, blended pricing is usually preferred by small and medium sized merchants. The downside of this model, however, is that acquirers charge a premium in order to cover the risk of scheme fees or interchange fees being raised.

Interchange++

The other price model is called Interchange++. In this model, the price for every transaction is calculated by adding the interchange fee, scheme fee and the acquirer's margin for that specific transaction. This model is usually preferred by larger companies because the cost for individual transactions is generally lower, the merchant gets more transparent reporting and will benefit directly from optimizing their costs through payment routing. However, the merchant is exposed to risk in terms of cost increases by the card schemes.

Worldline as partner

At Worldline, we do our best to show our merchants how they can lower their fee costs through payment optimization. To do that we have created advanced tools that allow us to analyze, identify and optimize scheme cost components leading to increased transparency and lower costs for the merchant. With regards to interchange fees, the key is to make sure that every transaction qualifies for the interchange program with the lowest possible cost. As an acquirer we use our expertise to request the best possible interchange program for each transaction and ensure that we send along the correct data needed to qualify for that program.

Advanced scheme fee model

Worldline has designed an advanced scheme fee model which is able to assign scheme fees on a very granular level depending on the characteristics of individual processed transactions. This scheme fee model makes use of approximately 200 different fixed- and variable fees which are applicable for different types of transactions. The model is continuously updated as new fees are announced or existing fees are revised by the card schemes. Through this model, we can always charge our merchants the correct amount for each transaction and provide them with transparent reporting despite the inherent complexity of scheme fees. Accuracy and transparency in scheme fee application is vitally important as many acquirers tend to overcharge the merchants by using ineffective estimation models.

Scheme fee simulation

Worldline has also created a unique scheme fee simulator which can be used to assess the transaction flows of both prospects and current merchants. Through this simulator one can use actual transaction data to model different scenarios in order to identify the individual underlying scheme fees which make up the costs. Analysis on this level enables us to more easily identify cost optimization possibilities, increase the understanding of cost drivers and to transparently present the costs to merchants. This way, we make sure that we deliver the lowest possible costs as transparently as possible to our existing merchants and prospect merchants. For airlines, or indeed any merchant who has an interchange++ price model, these kinds of optimization efforts offer an obvious advantage. Making sure that transactions are processed the right way leads to big cost reductions that benefit the merchant directly and can sometimes even help boost top-line revenues through higher acceptance rates. In essence, that means you pay less while getting paid more, what's not to love?

Customer case

Let us tell you about how we helped one of our airline customers lower their average interchange rate on domestic US card transactions from 2.26% to 1.73%.

In order to do that, we had to look through their entire payment ecosystem to make sure all parts were delivering the correct data needed to qualify. The reasons for a transaction not qualifying for an interchange program can vary, from delays in settlement or a mismatch between authorized sale and settled amount to a lack of address verification or other data that is simply missing or mislabeled.

By going through the transaction flows from all the airline's sales channels and payment systems we could see which parts did not fulfill the requirements. And by addressing those issues we saw that we could greatly increase the number of transactions that would qualify for the cheapest possible interchange program. Just days after the first completed updates we could already see that we had successfully given the airline 0.40%-1.20% lower interchange rate per transaction on certain card types.

Thus, an analysis of their US interchange fees showed that by qualifying for the best programs, the airline could lower their average interchange rate on domestic US card transactions from 2.26 % to 1.73 %, saving them hundreds of thousands of dollars every year.

About Worldline

Worldline [Euronext: WLN] is a global leader in the payments industry and the technology partner of choice for merchants, banks and acquirers. Powered by c. 18,000 employees in more than 40 countries, Worldline provides its clients with sustainable, trusted and innovative solutions fostering their growth. Services offered by Worldline include in-store and online commercial acquiring, highly secure payment transaction processing and numerous digital services. In 2022 Worldline generated a revenue close to 4.4 billion euros.

worldline.com

Corporate purpose

Worldline's corporate purpose ("raison d'être") is to design and operate leading digital payment and transactional solutions that enable sustainable economic growth and reinforce trust and security in our societies. Worldline makes them environmentally friendly, widely accessible, and supports social transformation.

For further information
WL-marketing@worldline.com