



Decision Intelligence – beyond Mastercard

Real-time intelligence for transactions,
regardless of network

PLAYBOOK

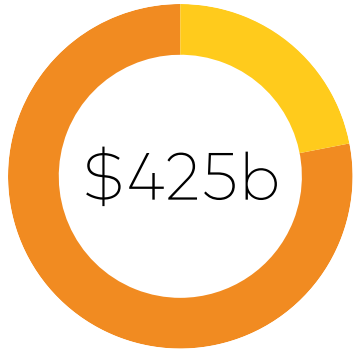
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The payments industry is rapidly evolving



Estimated loss to card fraud
2023–2032 (worldwide)

– NILSON, *Nilson Report Issue 1254*,
Dec. 2023.

Global regulatory trends and spending patterns, combined with the rapid acceleration of the digital economy, have fundamentally changed how financial institutions provide services to empower their cardholders.

Shifts in the payments industry, including consumers using new payment methods, introduce new complexities into the ecosystem. Issuers need to keep up with trends and vigilantly protect portfolios while providing the best customer experience.

At the same time, fraudsters are becoming more sophisticated, making fraud detection more challenging for issuers.

Issuers must update payment platforms for innovation, cost reduction, compliance and data insights amidst legacy system challenges. They must also ensure consistent fraud protection and high approval rates across all portfolios, irrespective of brand or network. The rising operational costs of managing various fraud strategies heighten the demand for issuers to provide value-added services converging across all payment types and channels.



Introducing Decision Intelligence – beyond the Mastercard network

Mastercard Decision Intelligence (DI) is a revolutionary tool for assessing risk and optimizing approvals using a fraud risk score that consistently maintains a high level of accuracy.

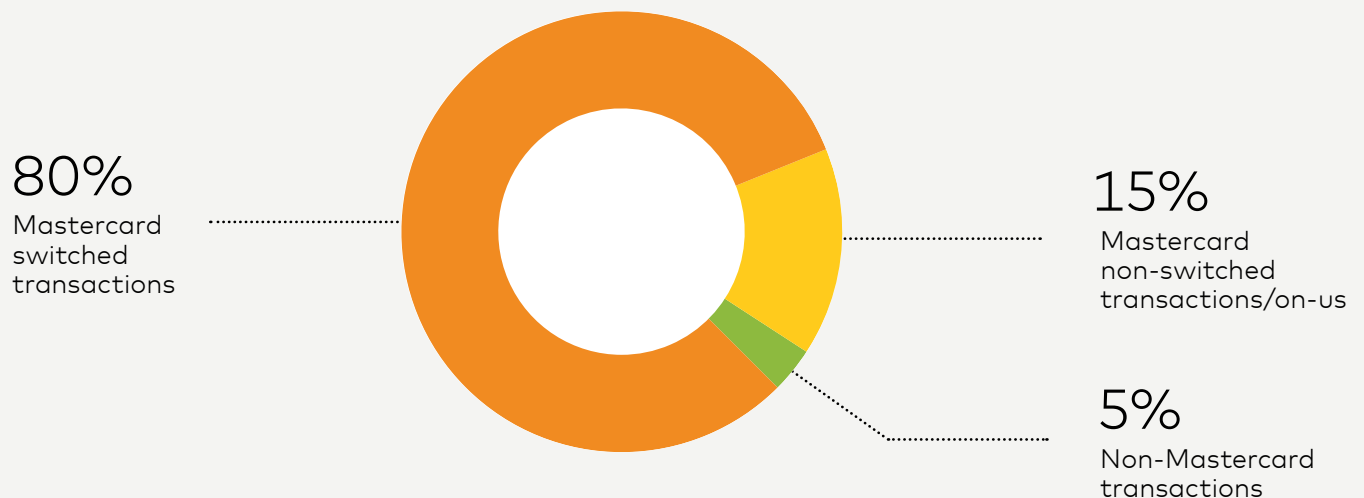
This innovative solution provides cardholders with a consistent experience while reducing issuer costs.

Previously, DI exclusively scored transactions on the Mastercard network. Now, issuers can score their entire portfolios with DI and benefit from advanced AI models trained on Mastercard's global network intelligence. This includes all transaction types, including switched, on-us and non-Mastercard network transactions.

Fraud management powered by Mastercard

By relying on one DI score, current Mastercard customers who don't switch 100% with Mastercard can improve their overall risk strategy by scoring Mastercard and non-Mastercard transactions.

Typical Mastercard issuer portfolio*



Issuers can score 20% more transactions, previously unprotected by DI's fraud detection.

**Portfolios vary by customer – this is an illustrative example.*



Reduce false positives

Improve overall model performance by reducing false positives with DI's holistic view.



DI score

DI score can be used independently or in conjunction with existing fraud solutions.



Transaction visibility

Leverage the Mastercard network to gain visibility on all transactions to predict risk and protect against fraud attacks within seconds.



Differentiated insights

DI offers differentiated insights to detect fraud, reduce false positives and provide a better point-of-sale experience.



New customers

New customers can receive the DI score on any transaction regardless of brand.



Single transaction score

Receive a single transaction score that results from a variety of inputs including transaction insights, historical merchant data and real-time behavior patterns.

DI scores on all transaction types and portfolios

DI scores are delivered via the authorization stream and/or accessible, intuitive tools, simplifying risk assessment and reducing costs on all transaction types.

Revolutionizing the way transaction-level fraud is detected and managed

Mastercard DI offers a solution suite powered by advanced AI technology and insights from Mastercard's global network-level consortium.

Issuers using DI can:

- Access risk scores delivered in real time through the authorization message
- Increase genuine, approved transactions
- Reduce falsely declined transactions
- Decline or alert high-risk transactions in real time
- Write custom rules tailored to unique fraud trends

This innovative solution provides issuers with AI models trained on a broader range of fraud patterns derived from global network intelligence. Issuers can access both the risk and reward of every transaction using advanced scoring algorithms and Mastercard's proprietary data they can't access otherwise.



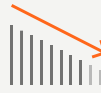
Higher revenue

- Approve more genuine transactions without increasing risk exposure
- Gain a share of the wallet by becoming the go-to payment choice for online shopping



Greater loyalty

- Reduce cardholder inconvenience from erroneous declines
- Increase cardholder satisfaction by approving more genuine transactions
- Deepen consumer relationships through a more consistent, seamless shopping experience across all channels and through innovative product support



Lower costs

- Decrease customer service costs due to fewer declines and more approved transactions
- Retain revenue formerly lost to fraud chargebacks



Regulatory compliance

- Help to facilitate issuers' compliance with their regulatory obligations

A complete view of an issuer's portfolio

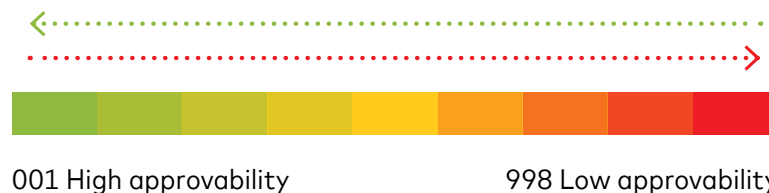
Issuers can take advantage of DI insights in real time, regardless of brand, network or card segment. A full view of each card account's transaction behavioral history enables DI to evaluate the risk opportunities of every transaction and approve more genuine transactions.

This holistic fraud prevention solution offers a full view into fraud, regardless of network, allowing the DI model to more accurately identify abnormal behavior and provide more effective transaction scoring across all portfolios.

The power of transaction intelligence

DI offers real-time decision scoring, unique cardholder and transaction-level insights and reason codes to contextualize risk.

Issuers can leverage both ends of decisioning scores to recognize genuine transactions, increase approvals on low-risk transactions and reduce transaction fraud and false positives.



DI score

A transaction score and reason code produced by world-class AI technologies and network insights.

Connecting Decision Intelligence to multiple rails and networks

Mastercard Access™, your trusted services network

Mastercard has a rich history of revolutionizing technology to make payments simpler, smarter and safer. Today, we've expanded our network across the digital ecosystem with a multi-billion-dollar investment to empower your business.

Introducing Mastercard Access: a simple, trusted connection to a services network, spanning all payments, brands, networks and rails – streamlining your technology development and simplifying integration.

Connecting non-Mastercard transactions to DI is made possible by using Mastercard Direct Services™, the backbone of Mastercard Access, opening a world of innovative technologies and services.

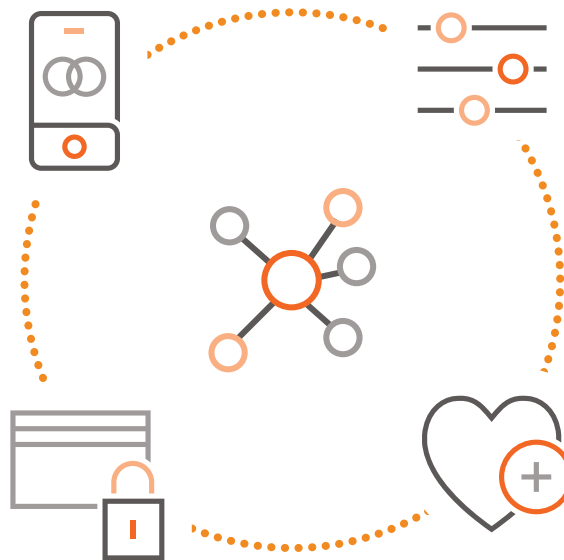
Mastercard Direct Services

Safety & security

- Safety Net
- Decision Intelligence
- Fraud Rule Manager
- Digital Transaction Insights
- Accountholder Authentication Value

Digital services

- Token to PAN Mapping
- Token Controls
- Dynamic Data Validation

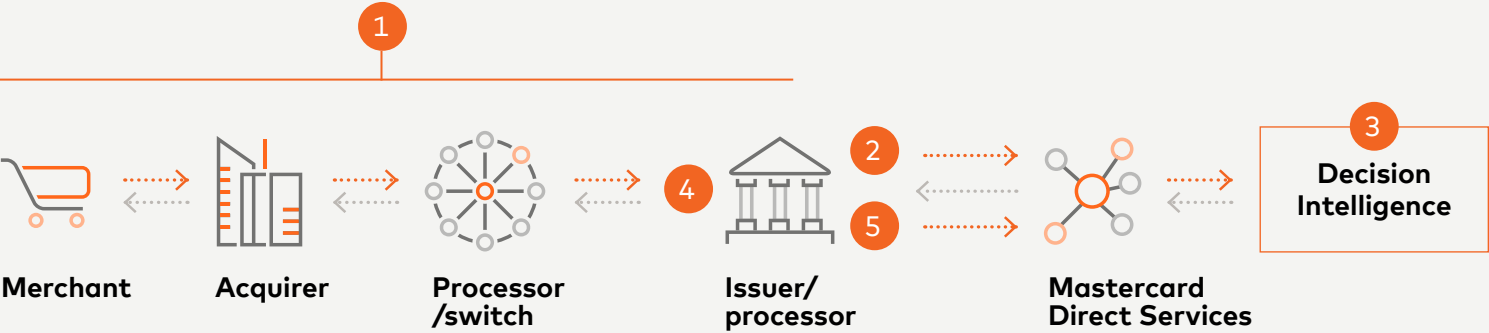


Controls

- Virtualization
- Card Level Controls
- Cardholder Defined Alerts

Cardholder benefits

- Pay with rewards
- Carbon calculator



How Mastercard Direct Services works

1.

The transaction follows its normal flow (non-MA switched, domestic or on-us).
2.

When the transaction reaches the issuer/processor, the issuer/processor makes a **service request** for fraud scoring through Mastercard Access.
3.

The transaction is scored and returned to the issuer/processor (**service response**).
4.

The issuer approves or declines the transaction.
5.

If the issuer/processor declines the transaction, they send a **decline advice** to Mastercard.

Flexibility geared to your infrastructure

Issuers have three connectivity options to integrate with the Mastercard network via Mastercard Access and Mastercard Direct Services: MIP and ISO, MIP and API, or Cloud and API.

	MIP and ISO	MIP and API	Cloud and API
Customer segments	Issuers, issuer processors, domestic switches, governments	Issuers, issuer processors, domestic switches, governments	Issuers, issuer processors, domestic switches, governments
Customer use cases	Existing Mastercard customers with an established MIP connectivity	Existing Mastercard customers who have an upgraded MIP and configured firewall	Existing Mastercard customers migrating to the cloud, new customers that have a native cloud presence
Development effort	High	Medium	Low-medium
Estimated implementation timeframe	12–16 weeks	10–12 weeks	6–8 weeks
Key tasks	Submit service enrollment form, complete MIP capacity assessment, configure port and establish connectivity, define routing code for ISO, test and certify	Submit service enrollment form, complete MIP capacity assessment code for DSA API; test and certify	Submit service enrollment form, complete MIP capacity assessment code for DSA API, test and certify
Resources	MIP connectivity and ISO mapping	MIP connectivity and developer zone	Developer zone



Implementation considerations

Implementing the most innovative decisioning strategies is fast and easy. Work with your Mastercard representative to sign up for the service and start accessing the power of DI across your portfolios in a few days.

1. Sign up for the DI enrollment form.
2. Develop code to Mastercard standards.
3. Complete DI via Access BIN participation form and submit it to your Mastercard contact.
4. Establish the type of connectivity required; if MIP/open API, provide critical data elements required for DI.
5. Map authorization messages to ISO 8583 message format.
6. Develop and test non-switched fraud reporting use case.
7. Ensure account ranges are live in MPS with DI and match the account; ranges to be implemented by DMP for DI via Mastercard Access.
8. Perform online testing and obtain certification.
9. Submit sample transaction file with ~100 records to Mastercard for validation.
10. Submit fraud file for non-switched transactions.



Pre-sale



Onboarding



Implementation



Post implementation



Consistent model refreshes

Customer journey

The customer journey for new DI customers is a high-touch process involving multiple teams across the Mastercard organization.

1. Pre-Sale

Our team works with you to determine your needs and identify your bank's transaction types and the desired DI performance. They will present their findings to your team.

2. Onboarding

Collaboratively, we determine your needs and define the ranges of your desired risk analyses.

3. Implementation

Configure the desired connectivity and begin testing while identifying account ranges and configuring the necessary flags to receive risk scores and other authorization tasks. Once these are complete and enrolled, you are ready to go live.

4. Post-implementation

With Mastercard, you can expect weekly model monitoring, quarterly performance and governance reviews. You will have an opportunity to enroll in additional services or other accounts in your portfolio.

5. Consistent model refreshes

Once the model is in full production, we can easily build, refresh, or adjust it to match the traffic volume. We will assess your grid capacity, conduct silent testing and migrate the model as desired.



Conclusion

Previously available to only members of the Mastercard network, Decision Intelligence is now available to Mastercard's global network-level consortium for all transaction types, including switched, on-us and non-Mastercard.

By expanding this service to all issuing banks, Mastercard provides an accessible, intuitive solution to risk assessment. Issuers can save money, improve the customer experience and simplify operations by receiving one score to be used for risk management across all portfolios.

Issuers receive DI scores for all transaction types, including switched, on-us and non-Mastercard. Connectivity options are available to best suit your organization's technology infrastructure.



To learn more contact one of our [AI experts](#) → Visit our [website](#) →



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