

Whitepaper

Drive incremental innovation in debit

Unlocking opportunities for issuers to improve card experiences

Why innovation pays off for debit card programs

Ever experienced a disruption to your Netflix service because your card-on-file had expired?

Ever failed to recognize a transaction on your mobile banking app – only to realize later it was the new crockery you purchased through an Instagram ad?

Ever abandoned an online purchase when you didn't have the time – or the patience – to fill out your card details?

Each of these scenarios gives card issuers an opportunity for what we at FIS® call "incremental innovation." By improving or finetuning one aspect of a card product at a time, your financial institution can ease a whole range of micro pain points for your customers.

Gradually, the cumulative benefits will stack up. And ultimately, your cardholders will credit you and your card program with market-leading levels of convenience, speed and agility – all the hallmarks of innovation.

So, are you ready to innovate in increments, starting with your debit card program?

Innovate to differentiate debit cards

While every card type deserves a healthy injection of incremental innovation, the need to innovate is especially pressing for debit cards.

In the U.S., debit cards first went mainstream in the 1970s. Ever since, they've been a staple spending solution for consumers, who use them most frequently on everyday purchases like gas and groceries. But as a product, the humble debit card has traditionally offered limited opportunities for differentiation.

Unlike credit cards, debit cards don't easily lend themselves to providing transaction-based, interchange-funded rewards. They're tied to a checking account, which can be another restrictive factor. Plus, the speed and convenience that debit cards bring to consumers have long lost their novelty and are table stakes now.

However, Gen Z consumers in the U.S. are increasingly using debit cards as a financial budgeting tool and for discretionary, non-essential purchases. And it's with this cohort that incremental innovation to debit card programs could really pay off and help your institution stand out from the pack.

Maximize the Gen Z debit opportunity

Gen Zers are an increasingly important consumer base for debit. Roughly 30% of the workforce in the U.S. is expected to be Gen Z, further bolstering their potential debit card usage.

But for your debit cards to succeed with younger generations of consumers, you need to get the payment experience exactly right. Gen Zers are increasingly adopting payments products that offer speed, convenience and minimal friction – and unlike previous generations, will readily abandon checkout solutions that don't match up.¹

If a Gen Zer can't make a payment at the click of a button, then you've probably lost their attention and continued loyalty. So, as an issuer, you can't afford many disruptions to the debit card experience, whether they happen during, before or after a transaction.

But what causes these potential disruptions – and which operational challenges must innovation solve for issuers?

Disruption drivers during a debit card transaction: Transaction fraud and false declines

Fraudulent transactions and false declines (on legitimate transactions) are key drivers of disruption to not only debit but also credit card experiences. But the impact on debit is more pronounced as it defeats one of the key purposes of debit cards – gaining immediate access to funds. Fraud and wrongly rejected payments may be inconvenient and undesirable for credit cardholders too, but they're not directly attempting to draw from available funds in a checking account.

To protect debit card transactions and bank accounts from fraud and false declines, you must maximize authorization decisioning for in-flight transactions. Failing to strike an effective balance increases your risk of losing interchange revenue or adding to your operational burden in the form of increased disputes volumes. In the long run, you could also put cardholder relationships and brand loyalty under considerable strain.

¹ [FIS, Make Your Card Program a Magnet for the Next Generation, 2025](#)

Disruption drivers before or after a debit card transaction: Lack of transparency and clarity

While the “during purchase” moment is critical for issuers to get right, the experiences you provide to debit cardholders outside of an in-flight transaction can have significant impacts on customer loyalty and top-of-wallet status.

Having to re-enter card information can be enough to put off consumers from making a purchase, halting a transaction before it happens. Even the experiences you offer well after a purchase are critically important to driving cardholder engagement and increasing lifetime value.

Mobile experiences, in particular, play a vital role in providing peace of mind and clarity, whether cardholders have questions about a previous transaction or are looking to use their transaction history to help manage their finances.

Not providing cardholders with the transparency they need on their transactions, across the channels they prefer, disrupts their experience and diminishes your perceived value as an issuer.

Incremental innovation in action

Several solutions are surfacing to address the risks posed by disruptions during, before and after a debit transaction. As prime candidates for incremental innovation, solving these challenges will also help show “what else” debit can do for your cardholders and differentiate your debit card product.

Solutions to optimize “during purchase” debit

Reduce unnecessary declines by unifying merchant and issuer ecosystems

Legitimate transactions from trusted cardholders often face unnecessarily high decline rates. As 25% of customers choose to use an alternative card in the event of a decline,² this can result in a poor cardholder experience and reduced revenue potential for both issuers and merchants.

A classic example is the decline of recurring card-on-file transactions to a streaming service like Netflix, simply because a card has expired. In today’s subscription-based digital economy, this is a moment of friction that often results in lost transactions as well as dissatisfied cardholders.

An innovative solution is to bring together merchant and issuer ecosystems to optimize authorization decisions and maximize acceptance. By resolving recoverable decline reasons (e.g., expired card) in real time, issuers can confidently approve trusted transactions that would otherwise be lost – without taking on chargeback risk.

This reduces churn and keeps the issuer’s card top-of-wallet, while improving authorization rates and overall portfolio performance – especially for high-value recurring and card-on-file payments.



² [Ethoca, How to achieve ‘top-of-wallet’ status in the digital payments age, October 2024](#)

Fight fraud with dynamic CVV tools

Online fraud is now a dominant threat in card payments. With over 70% of all card fraud occurring in card-not-present (CNP) transactions,³ static three-digit CVV2 codes on traditional cards are easily compromised and re-used online.

With dynamic CVV security tools, issuers can save millions annually in fraud losses and related costs, while improving the cardholder experience.

Each online transaction is validated with a fresh, time-bound code, allowing you to gain greater confidence in approving legitimate purchases while stopping fraudulent attempts tied to compromised credentials.

Factor in merchant data as inputs to fraud decisions

Clear, correct and real-time data is at the center of every authorization decision. But for decades, poor or missing merchant data has plagued the payments ecosystem, leading to false declines, higher chargeback rates and cardholder confusion.

Quite simply, issuers often don't have access to the same level of data for decision-making as merchant checkout, such as mobile device binding IDs and IP addresses.

Meanwhile, the 3D Secure (3DS) liability shift has resulted in issuers declining transactions at a significantly higher rate, leading to an increasing number of false declines. In one study from 2024, the authorization rate for transactions seeking 3DS authentication was 500 basis points lower than those authenticated only through two-factor authentication.⁴

An ideal solution for issuers is an innovative capability that enhances existing fraud decisioning tools with API-enabled additional merchant data. Real-time data sharing closes the information gap between merchants and issuers, enabling more accurate approvals and fewer false declines across e-commerce transactions.

Solutions to optimize “before and after” debit experiences

Deploy simplification tools for CNP checkouts

Did you know that as many as 30% of shoppers abandon their carts when required to re-enter credit card information?⁵ Or that 18% exit the purchase flow because the checkout experience feels too long or overly complex?⁶

To simplify payment processes for consumers, issuers should consider digital wallet-based solutions that replace manual PAN entry at checkout with a simple card selection, creating a faster, more secure and frictionless purchase experience for both consumers and merchants.

Positioning an issuer's card as a “ready-to-go” option at checkout increases usage and relevance. And by removing the need to manually enter card details, issuers can significantly reduce checkout friction, improving completion rates and cardholder satisfaction.

Access cardholder-facing transaction details for transparent merchant data

Confusion about transactions is one of the main reasons for cardholders to initiate disputes, with 79% of consumers claiming to have reported at least one unrecognized transaction to their bank.⁷

Providing richer transaction detail is the answer. To this end, data cleansing tools can help issuers surface detailed, normalized merchant information to cardholders on digital or card statements and other channels.

By providing cardholders with precise location data, standardized merchant IDs and clearer transaction descriptors, you reduce the risk of unrecognized charges and can ultimately lower dispute volumes and improve the customer experience.

Your incremental innovation strategy starts here

As debit cards continue to gain popularity with Gen Z, any possible disruption to debit experiences is well worth solving for. If your financial institution is ready to reinvigorate and future-proof your debit program through incremental innovation, get in touch with FIS to learn more.

Learn more

³ [Datavisor, Card Not Present \(CNP\) Fraud: Detection & Prevention, 2026](#)

⁴ [Stripe, Surprising findings from our analysis of 3DS transactions in the US, August 2024](#)

⁵ [99firms, 20 Shopping Cart Abandonment Statistics, August 2025](#)

⁶ [TechRepublic, The Ultimate Guide to Checkout Optimization for Ecommerce Teams, January 2026](#)

⁷ [Ethoca, Transaction Clarity Helps Reduce Disputes & Credit Card Chargebacks, October 2024](#)

Money at rest. Money in motion. Money at work.™

Our **technology** powers the global economy across the money lifecycle.

Money at rest

Unlock seamless integration and human-centric digital experiences while ensuring efficiency, stability, and compliance as your business grows.

Money in motion

Unlock liquidity and flow of funds by synchronizing transactions, payment systems, and financial networks without compromising speed or security.

Money at work


Unlock a cohesive financial ecosystem and insights for strategic decisions to expand operations while optimizing performance.

About FIS

FIS is a financial technology company providing solutions to financial institutions, businesses and developers. We unlock financial technology that underpins the world's financial system. Our people are dedicated to advancing the way the world pays, banks and invests, by helping our clients confidently run, grow and protect their businesses. Our expertise comes from decades of experience helping financial institutions and businesses adapt to meet the needs of their customers by harnessing the power that comes when reliability meets innovation in financial technology. Headquartered in Jacksonville, Florida, FIS is a member of the Fortune 500® and the Standard & Poor's 500® Index. To learn more, visit FISGLOBAL.COM. Follow FIS on LinkedIn Facebook and X (@FISglobal).


 fisglobal.com/contact-us

 linkedin.com/company/fis

 x.com/fisglobal

This material is for information purposes only of the intended recipient. We have taken care in the preparation of this information but will not be responsible for any losses or damages including loss of profits, indirect, special or consequential losses arising as a result of any information in this document or reliance on it (other than in respect of fraud or death or personal injury caused by negligence). Terms and conditions apply to all our services. The content of this material may not be reproduced without prior consent of FIS.

© 2026 FIS.
FIS and the FIS logo are trademarks or registered trademarks of FIS or its subsidiaries in the U.S. and/or other countries. Other parties' marks are the property of their respective owners. 4463737

 **Advancing the way the world pays, banks and invests™**