

Article

How dCVV is reshaping debit innovation and defeating CNP fraud

Unlock higher approvals, reduced loss and strengthened trust



Card-not-present (CNP) fraud is one of the most persistent and costly challenges facing debit issuers today. As e-commerce volumes grow, fraudsters increasingly target static card credentials that can be captured, reused and sold at scale – creating billions of dollars in exposure for financial institutions. Traditional controls have struggled to keep pace with sophisticated bot attacks, large-scale data breaches and the industrialization of credential theft.

Amid this rising threat, **Dynamic CVV (dCVV)** technology has emerged as one of the most effective innovations in modern debit security. Delivered through FIS' partnership with Keyno, dCVV replaces the static three-digit CVV printed on the back of cards with a code that refreshes automatically every few hours and is accessible only through the cardholder's mobile device.

A breakthrough in debit fraud prevention

Static CVV codes are the weakest link in CNP authentication. Once stolen, these codes can be reused indefinitely – or until the card is reissued. dCVV fundamentally changes that dynamic using three techniques:

- The code rotates every few hours, rendering stolen credentials quickly useless.
- Merchants are not permitted to store dCVV, eliminating the risk that compromised databases expose the dynamic code.
- Cardholders retrieve their current code through a secure mobile app, browser or push notification, ensuring only the legitimate user can access it.

This change significantly shortens the window of opportunity for fraudsters. Case studies demonstrate **up to a 95% decrease in CNP fraud** after implementation.

A turnkey path for issuers

A key strength of the dCVV model is its straightforward implementation process.

- It's compatible with **existing debit cards**, eliminating the need for costly reissuance programs.
- Integration is seamless through SDKs or APIs without requiring significant infrastructure modifications.
- Cardholders can easily activate dCVV via their bank's app.

For issuers battling changing fraud tactics, dCVV offers a security enhancement that is both highly effective and low in friction.

Proven results

Beyond fraud mitigation, dCVV helps issuers improve authorization quality and uplift cardholder engagement.

- **Approval rates increased from 95.9% to 99.4%** after dCVV adoption in one large-scale deployment.
- Financial institutions report **16% increases in spend**, as cardholder trust improves.
- A Caribbean issuer saw fraud **eliminated within months** of enrolling all debit and credit cards.

Source: Visa

Use cases

dCVV works seamlessly across common CNP scenarios including:

- **Online checkout**, replacing the static CVV for each transaction
- **Digital wallets and tokenized environments**, where tokens are used at enrollment and carry the transaction
- **Card-on-file merchants** like subscription services, which validate the dCVV once, then use recurring indicators without needing future codes
- **Phone orders** when merchants request CVV validation

Its flexibility makes it one of the only fraud solutions that improves security **without disrupting the customer experience**.

A critical component of the future debit security stack

As fraud rapidly shifts online, with four out of five payment card fraud cases now happening in CNP channel, issuers need tools that significantly reduce exposure while supporting digital-first customer experiences. dCVV is uniquely positioned to become a core element of modern debit programs because it:

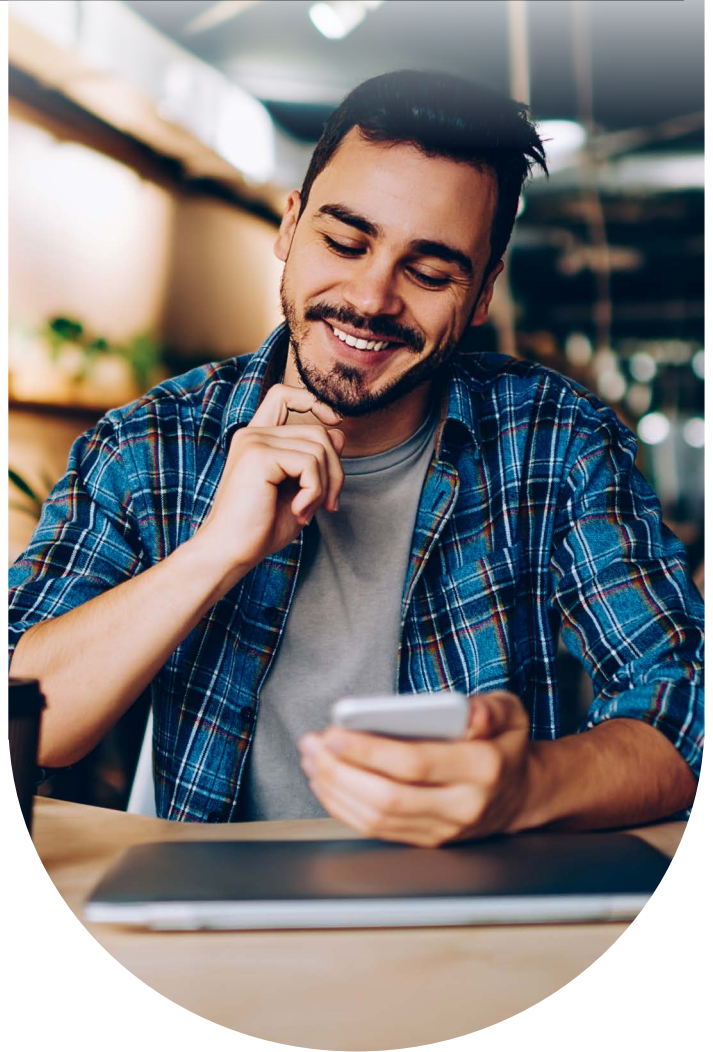
- Reduces fraud losses
- Cuts operational burdens by minimizing disputes and reissued cards
- Improves authorization decisions
- Strengthens customer trust and satisfaction
- Prepares issuers for a future of tokenized, intelligent and AI-mediated transactions

In a world where credentials are constantly compromised, **dCVV replaces static risk with dynamic protection**, giving issuers a practical, proven pathway to securing their digital transactions.

Source: Keyno

Learn more about how FIS® in partnership with Keyno can help you implement dCVV at your financial institution.

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