



ABI Conference[®]

Discover's approach to
Digital onboarding – Biometrics and Authentication Systems –
The new security frontier

Nov 7, 2019

About Discover® Financial Services



**Fortune 250
Company**

A Bank, an Issuer, an Acquirer
(unlike other schemes)

A Domestic Scheme

An International Scheme

33 Years

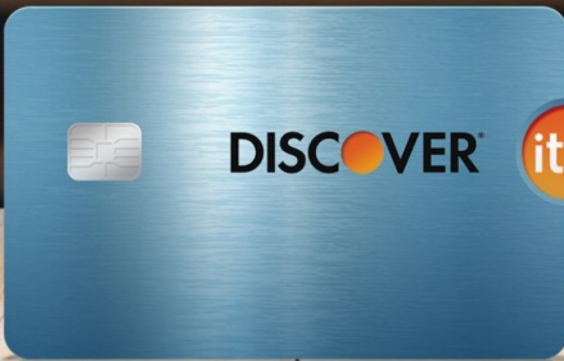
Financial Services Experience
Direct Banking & Payment Services

U.S. Card Issuance

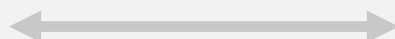
- 62 Million Cards
- \$71 billion in card receivables
- Leading cash rewards program

Lending and Deposits

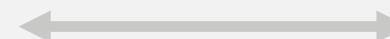
- \$45 billion in consumer deposits
- \$16 billion in personal loans and private student loans
- Cashback checking
- Home equity installment loans



DGN Brings Payments Technology and Innovation



**Innovation
Lab**



**International
Partners**

The Discover® developer portal allows Partners, Fintechs and developers to use APIs and digital assets and innovate by collaborating with Discover



D-PAS Connect



**Secure Remote
Commerce**



Loyalty

**D-PAS (EMV) Contact, Contactless,
Mobile and QR code:**



sistema de tarjetas y
medios de pago, s.a.

SE / HCE / Cloud



**Your
Banking App**

- Certified with the xPays. DDX enables your card to be added to these **digital wallets**, or in your proprietary banking app for contactless and in-app transactions

- Discover's next generation of D-PAS payment specs developed under EMVCo standards with our partners requirements included
- Delivers transit, loyalty, security and provides greater issuer control

- Enhance security and experience of a digital checkout transaction in e-commerce and in-app
- Tokenization for cloud wallets, device recognition and customer authentication
- Applicable in multiple digital applications - mobile wallets, browser payments
- Includes new EMVCo specification for Secure Remote Commerce (SRC)

- Loyalty Matters
- Engage Customers, grow business
- Customize reward programs with your brand front and center
- Easy interaction
- Personalized and configurable earning and redemption capabilities: Points / Miles / Offers / Discounts
- Campaign Management and Reporting

ProtectBuy®

DISCOVER®
GLOBAL NETWORK

Discovers ProtectBuy® 3D Secure Technology



3DS 1.0

Past

- eCommerce-based only
- Cardholder enrollment required
- 100% transactions challenged
- Poor Customer Experience
- High cart abandonment



Increased Merchant
Confidence, Flexibility

3DS 2.0

Now

- eCommerce and mobile
- Risk-based authentication with enhanced device-level intelligence
- Cardholder experience has significantly less friction



Liability Shift
Protection

How

How

- Identity confirmed, real time - fast, secure connection
- Risk-based authentication challenges only the riskiest transactions
- Reduces cart abandonment – Happier Customers



Reduced Fraudulent
Online Transactions

New!

6011
6440
6506

Enhanced Data

New!

✓
✓
✓

Faster
Authentication

New!

Smartphone icon

In-App

Secure Remote Commerce



What is DGN Secure Remote Commerce (SRC)?

SRC is part of our Secure Digital Checkout strategy



Choice of Payment Method

- Simplified and secure digital wallet
- Provides consumer choice
- Enhanced authentication
- Reduce fraud
- Avoid payment breakage



Offers Interoperability

- Based on EMVCo Specifications
- Interoperable integration
- Dynamic data to protect integrity
- Enhanced authentication via device binding
- Increased digital acceptance
- One button for all networks
- Consistent user checkout experience regardless of network



More Secure

- Use tokens instead of PAN secured via a cryptogram



Fixes today's challenges

- **Today –**
- Multiple use cases to support
- Each requires investment to integrate
- Each offers different checkout experience
- **Tomorrow –**
- One way to connect to all networks
- Simplifies consumer checkout,

Cyber Security

DISCOVER[®]
GLOBAL NETWORK

- Not only important for Discover but also down the value chain.
- Merchants and Customers are often the weakest link in term of sensitive data access from cyber attackers
- PCI DSS and tokenization are methods to protect the system and secure the most likely points of attack.
- All Discover partners must be PCI DSS Certified
- Strategy:
- Remove sensitive data completely from the merchant.
- Host payment solutions in the cloud and transfer transaction data from the Merchants in a tokenized form.
- Gives additional protection to large merchants and relieves some PCI DSS complexities for small merchants.

Addressing Fraud



- Up-front applicant vetting: Discover is using more and more third party data sources to help establish identity on customer set up and to ultimately reduce fraud risk .
- More advanced, machine learning models are being leveraged that utilize all the data attributes we collect from the applicant and third parties to give a better risk profile
- When additional documentation is required, Discover is implementing automated document verification software that can determine authenticity and help get the applicant approved much quicker – eg:
 - Creating a mobile version of the State ID / Drivers License stored securely on the phone :
 - Using APIs, and with User permission, websites and apps on the mobile device can access the ID data:
 - Auto - fill applications for credit cards, bank accounts, and loans
 - The ID data is authentic we can make better credit decisions, accepting users for instant credit which would allow them to spend as soon as they are approved. (5-10 minutes) from starting to spend (online or in-store)
 - When purchasing age-restricted items (again, online or in-store), mobile ID can verify age, address, etc.

- On other fronts, Discover is rolling out FIDO authentication for existing customers that allows different biometric modalities for authenticating into Discover's service channels
- On the transactional side, Discover is continuing to implement better and more adaptable behavior risk models to detect fraud earlier
- More advanced, machine learning models are being leveraged that utilize all the data attributes we collect from the applicant and third parties to give a better risk profile
- Finally, Discover allows its customers to instantly freeze spending on credit and debit cards and provide instant feedback through 2-way alerts to validate suspicious activity

Thank You

