Agenda

• Thank you
• Introduction
• Authentication
• Demo
  – 3D Secure
  – PIN Debit
• Thank you
Introduction

• Authentication
  – Eliminates / reduces fraud & repudiation
  – PCI effect
  – Chip card impact – migration to CNP
• Most authenticated transactions?
• The infrastructure for authentication exists!
• Every transaction could be authenticated
• Alternative payment brands use it
• Secure Remote Payment Council - launch
3D Secure – What is it?

- Authentication protocol – technology neutral
- Centers responsibility – issuers
- Benefits
  - Lower fraud & repudiation
  - Issuers – KYC / authenticate Customers / protect their brand / Durbin – revenue source
  - Consumers - confidence / safer transactions
  - Merchants
    - Fraud liability shift – chargeback protection
    - Lower interchange ≈ 20 bps
- How many brands license the protocol?

www.cardinalcommerce.com
3D Secure Brands
New Technology Challenges

• Issuer systems
• Centralized directory servers
• Merchant integrations – complex
• Consumer education
• User interface – rough
  – Pop-up windows
  – Limited messaging
  – Inflexible presentation
Progress

• International growth strong
  – Europe
  – APAC
  – USA…not so much

• Brand mandates – Maestro – 600 million

• Governmental / regulatory mandates
  – Reserve Bank of India
  – APAC – Australia, Japan and New Zealand
  – Brazil
  – Others in process
3D Secure - Demo
3D Secure - Demo
3D Secure - Demo
3D Secure - Demo
common integration method
3D Secure - Demo
3D Secure - Demo

[Image of a webpage showing a MasterCard SecureCode login screen with a credit card image and a pop-up asking for the MasterCard SecureCode password.]
3D Secure - Demo

- Flexible messaging – merchant sensitive
- Inline user presentation v. Pop-ups
- Enabling options
  - Geography
  - Brand
  - Risk based
- Activation by consumer / choices
3D Secure - Demo

Your Card is Enrolled in MasterCard® SecureCode™

For added security purposes for our shoppers, Eclipse offers MasterCard® SecureCode™. We recommend that you authenticate yourself with your financial institution in order for us to provide you with the safest and secure shopping experience. All information communicated below is strictly between you and your bank.

SELECT ANOTHER PAYMENT

Your Bank $

Added Protection

Please submit your MasterCard® SecureCode™ password:

Merchant: Eclipse Wheels
Amount: $539.96
Date: 11-16-2010
Card Number: **** **** **** 2054
Personal Message: MasterCard® SecureCode™
User Name: JohnShopper
Password: JohnShopper

Submit
3D Secure - Demo

Order Summary

Your transaction completed successfully. Your order will be shipped immediately.

<table>
<thead>
<tr>
<th>Part</th>
<th>Price</th>
<th>Quantity</th>
<th>Subtotal</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Centinel Rims</td>
<td>$159.99</td>
<td>4</td>
<td>$639.96</td>
<td>$639.96</td>
</tr>
</tbody>
</table>
SRPc - Launch

• Early 2012
• Debit networks
• Merchants / Merchant service providers
• Secure PIN Pad
  – Credentials – alpha / numeric
  – Card / payment - information
• Location / Position / Algorithm
• Supports
  – Mobile
  – PC / laptop
  – Remote devices (tablets and other devices)
Confirmation Message:
I went to JFK High School and John Hopkins University
Confirmation Message:
I went to JFK High School and John Hopkins University

Cardinal Authenticated PIN Pad - CAPP
My cat is brown

Confirmation Message:
I went to JFK High School and John Hopkins University
Next Steps

• Add authentication!
• Questions & Answers