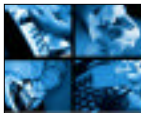




Security Concerns in Electronic Payments

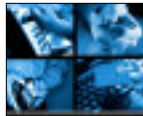
Scott Dueweke
VP, Government and Security
Concord EFS, Inc.



Major Forms of Government Electronic Payment

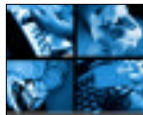
- ◆ Consumer credit cards
- ◆ Debit cards
- ◆ Purchasing cards
- ◆ Electronic checks
- ◆ Paper check conversion
- ◆ ACH
- ◆ EBT





Major Forms of Government Electronic Payment

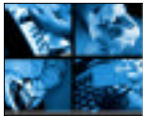
- ◆ Consumer credit cards
- ◆ Debit cards
- ◆ Purchasing cards
- ◆ Electronic checks
- ◆ Paper check conversion
- ◆ ACH
- ◆ EBT



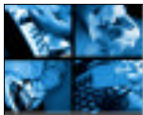
Electronic Payments to the Government Have Skyrocketed

- ◆ Online revenue collections by government projected to increase from **\$5.1 billion to \$602.4 billion** by 2006

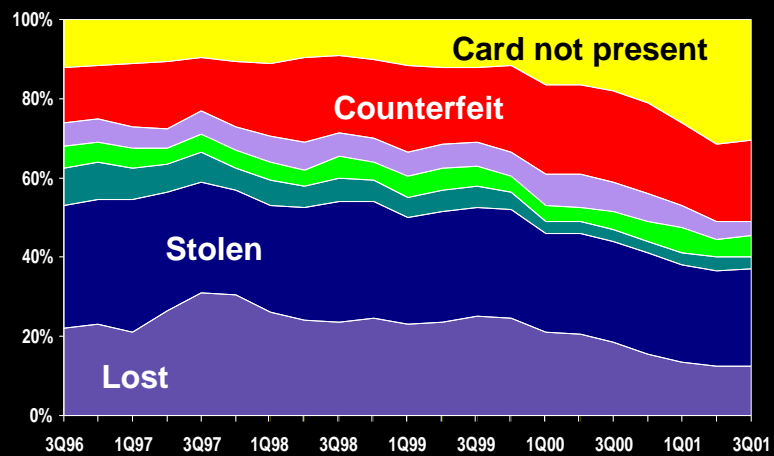




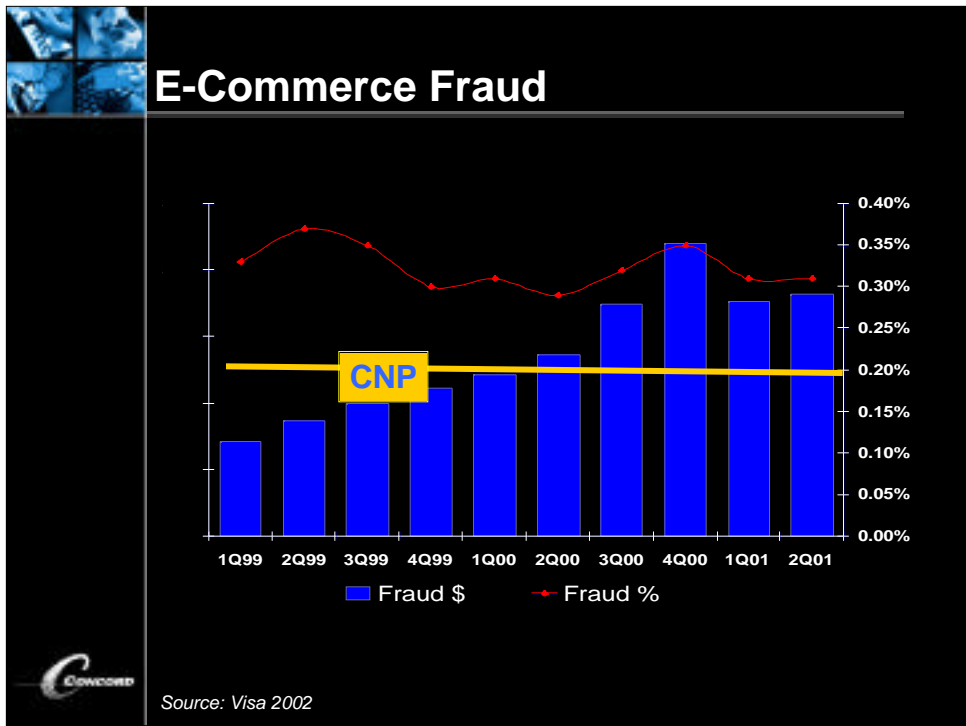
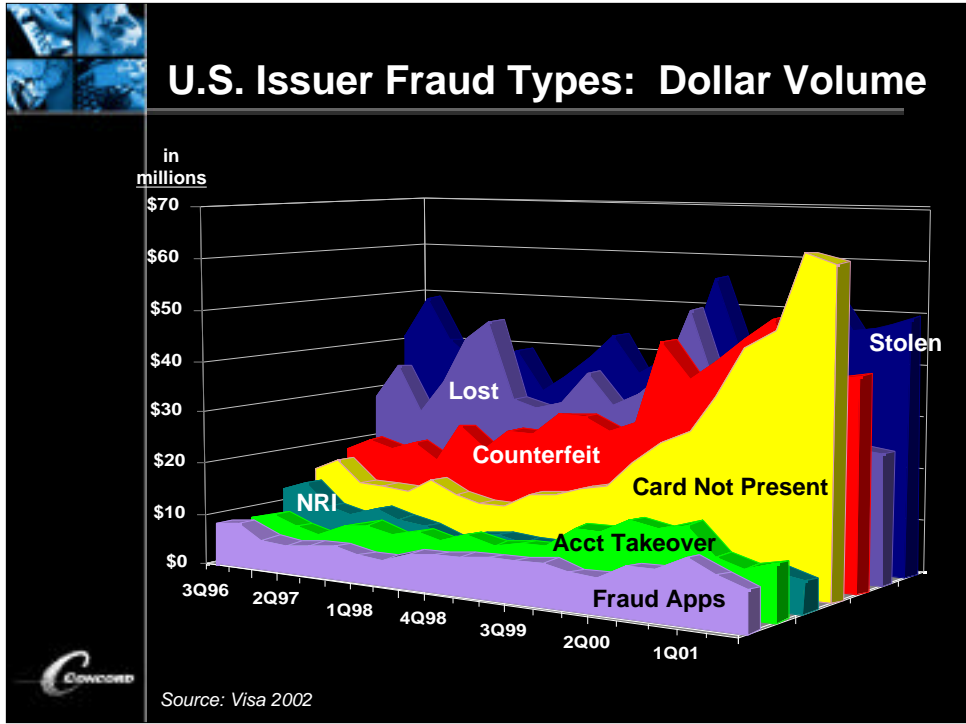
Fraud Problem Areas

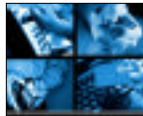


U.S. Issuer Fraud Types: Percentage

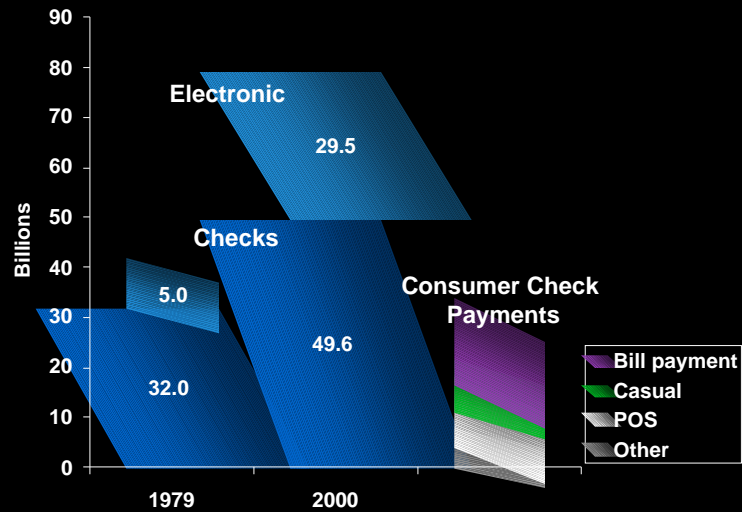


Source: Visa 2002

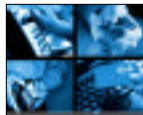




Check Usage



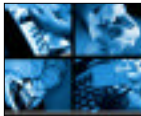
Source: Federal Reserve Payments Study, 2002



Annual Cost of Fraud

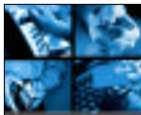
- ◆ Retailers lose \$12 to \$15 billion due to bad checks
- ◆ Financial institutions absorb \$1 to \$2 billion due to bad checks
- ◆ Identity theft costs consumers and businesses between \$2 and \$4 billion
- ◆ New account fraud generates almost one-third of fraud losses at financial institutions
- ◆ Check fraud is increasing 15% to 17% per year





Identity Theft

- ◆ Identity theft is currently the nation's fastest-growing white-collar crime, victimizing an alarming 500,000 Americans each year



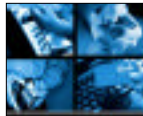
However, We Have Defenses!



Counter-measures for:

- ◆ Credit card
- ◆ Checks
- ◆ Debit card
- ◆ EBT

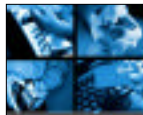




Credit: Verified by VISA

New service that allows a cardholder to assign a personal password to their Visa Card only accepted at merchants who support Verified by Visa when the password is verified by the card Issuer

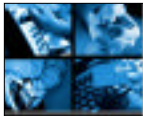
Challenge	How Verified by Visa Helps
Consumer security fears limiting online buying	Visa cardholders are given the means to control their exposure to fraud resulting in more online buyers and increased purchasing by existing buyers
Disputes and fraud financially impacting retailers and banks	Retailers and banks have the ability to lower their operating costs by reducing fraud and dispute activity
Cost of accepting payments	Low investment cost to support Verified by Visa means faster return for retailers and banks



Credit: MasterCard

Service	Description
Universal Cardholder Authentication Field	Standard interoperable method of passing accountholder authentication data among issuers, merchants, and acquirers
Secure Payment Application	Provides explicit evidence that a transaction was originated by the authorized party, reducing charge backs from accountholder purchase disputes
Site Data Protection Service	Comprehensive multi-tiered set of global security services to help protect websites and online merchants against hackers





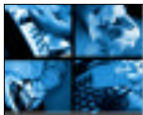
Credit: American Express



- ◆ LockIT - authenticates that both card member and card are present for the transaction with smart card technology based on the EMV (European MasterCard & Visa).

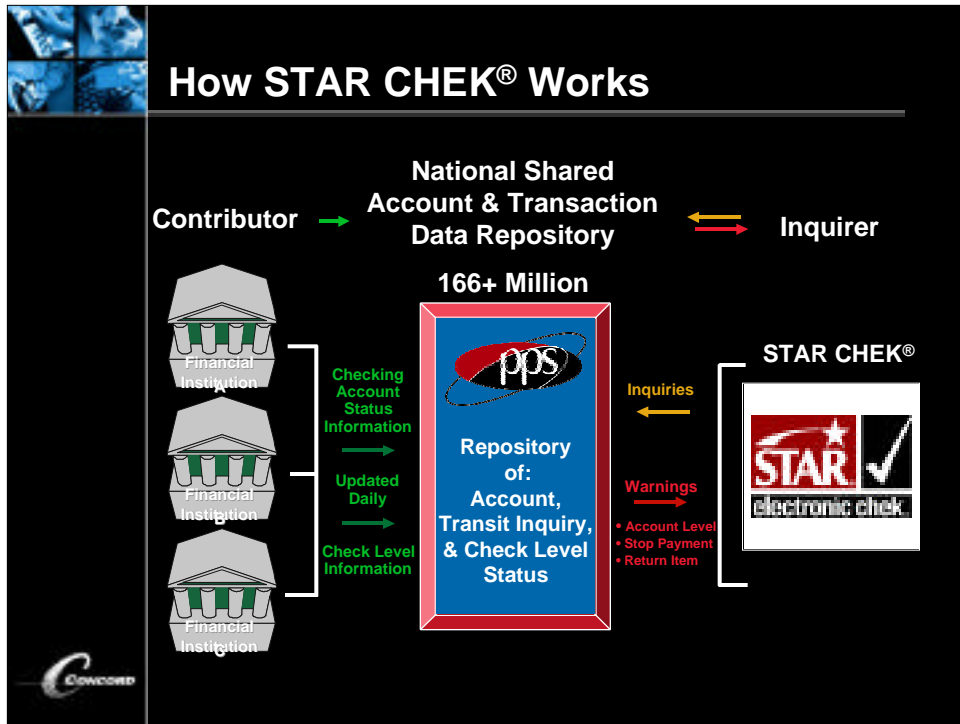


- ◆ One-Time-Use American Express® Card account number to transact online that is linked to your actual Card account each time you shop.



Checks: STAR CHEK®





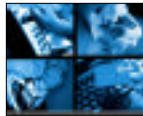
- ## STAR CHEK® Data Elements
- ◆ Over 166 million accounts
 - Status of account (present, closed, etc)
 - Stop payment information
 - ◆ 100% of contributors' draftable demand deposit accounts (DDA)
 - ◆ Updated daily
 - Reflects status as of open of business each day at institution's host system
 - ◆ More than 50% of checking accounts nationwide
- The Cowi logo is in the bottom left corner.

Current Data Contributors

Bank of America, Bank of Hawaii, Bankwest, Bank One, BB&T, California Bank, CALFED, Centura, Chase, Citi, Compass Bank, Discover Savings, Fifth Third Bank, First Citizens Bank, First Tennessee, Fleet, Frost Bank, Huntington, Key, Mellon, National City, PNC Bank, Provident Bank, Sanwa Bank, Southwest Bank of Texas, TCF Bank, US Bank, Wells Fargo, Washington Mutual

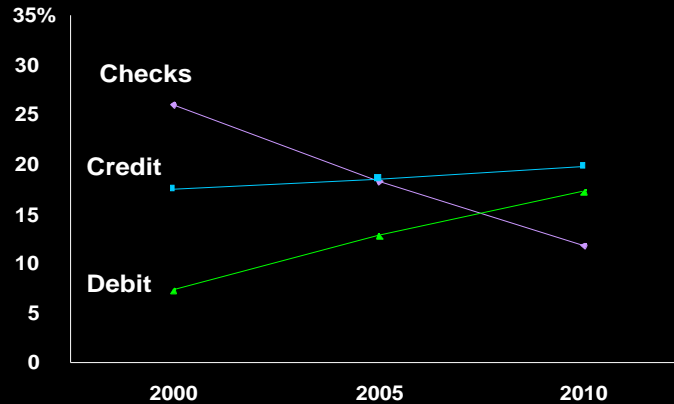
STAR CHEK® Summary

- ◆ One of a kind positive data source
- ◆ Updated daily
- ◆ Make better check decisions
- ◆ Reduce fraud exposure
- ◆ Integrates with existing check program
- ◆ Includes payroll checks
- ◆ Improves customer service
- ◆ Clear migration to real time check
electronification



Debit Card Growth

% of total payment transactions



Total trans	112 billion	132 billion	154 billion
-------------	-------------	-------------	-------------



Source: The Nilson Report, December 2001.



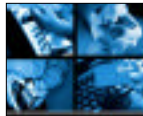
Debit: Retailer ID Program



Utility Bill Payments

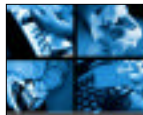
- ◆ Available via the Internet 10/01
- ◆ Available to regulated to utilities only
- ◆ Merchant/processor authenticates the consumer
- ◆ Merchant/sponsoring FI accepts risk
- ◆ All STAR cards participate
- ◆ Pilot underway
- ◆ Operational requirements
 - STAR will not perform stand-in
 - PINless debit transaction





Entitlement Programs Switching to EBT

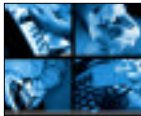
- ◆ In 2001 over 17 million people per month received Food Stamps
- ◆ 80% of the \$15.5B in Food Stamps last year were paid via EBT
- ◆ By eliminating paper coupons that may be lost, sold, or stolen EBT eliminates much of the black market “food stamp” economy
- ◆ If the card is lost or stolen, it can't be used by anyone who doesn't know the PIN, and it can be easily canceled and replaced



ID Forgeries

- ◆ IDs are used to gain access to our trusted systems, whether they be financial, informational, transportation, or others
- ◆ ID security is only as good as the ID used to validate their identity



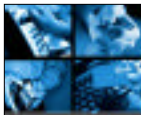
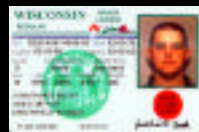


The Problem

Over 900,000 ID theft cases reported last year

State Issued

Fake ID



Obtaining a Fake ID is Easy



Search Web Sites: FAKE ID

Top 10 Web Site Results of **4,554,159** for: Fake ID

[Show Summaries](#) | [View by URL](#)

- [FakeIDZONE.com - Fake ID, Fake ids](http://www.fakeidzone.com)
URL: <http://www.fakeidzone.com/>
- [Jakin4Beats](http://www.bestfakeids.com)
URL: <http://www.bestfakeids.com/>
- [Fake ID Kit, Center, Fake Drivers License and Fake id Templates](http://www.fakeid.ultramailweb.com)
URL: <http://www.fakeid.ultramailweb.com/>
- [FAKE ID fake id Fake ID Belvine The ID Card Specialists](http://www.belvine.co.uk)
URL: <http://www.belvine.co.uk/>
- [Fake ID, FakeIDs, How to create a Fake ID.....](http://www.fakeid.net)
URL: <http://www.fakeid.net/>
- [False-ID.net - False Ids, Fake Ids, Fakeid, Novelty ID, Photo ID](http://www.id2000.net)
URL: <http://www.id2000.net/>

[next 10 results](#)

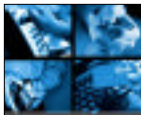




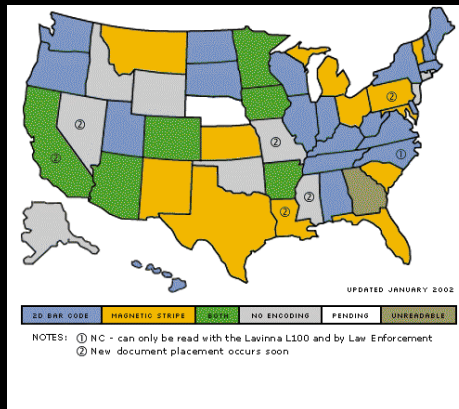
Logix Company – Spring Break 2001



Over 10,000 Fake ID's Confiscated



Readability Map



39 States and 256 Encoding Formats
4 Canadian Provinces
Military ID Cards





Terminals

Reads and stores all electronic data from driver's license or other government issued documents

Lavinna L-100



LCD with touch screen
Stores 4,000 – 64,000 records
Magnetic stripe reader (internal)
Smart card reader (internal)
Barcode reader (attachment)
Fingerprint reader (attachment)
Internal Modem w/Internet interface
Wireless capabilities

Hypercom ICE 5500 & 6500



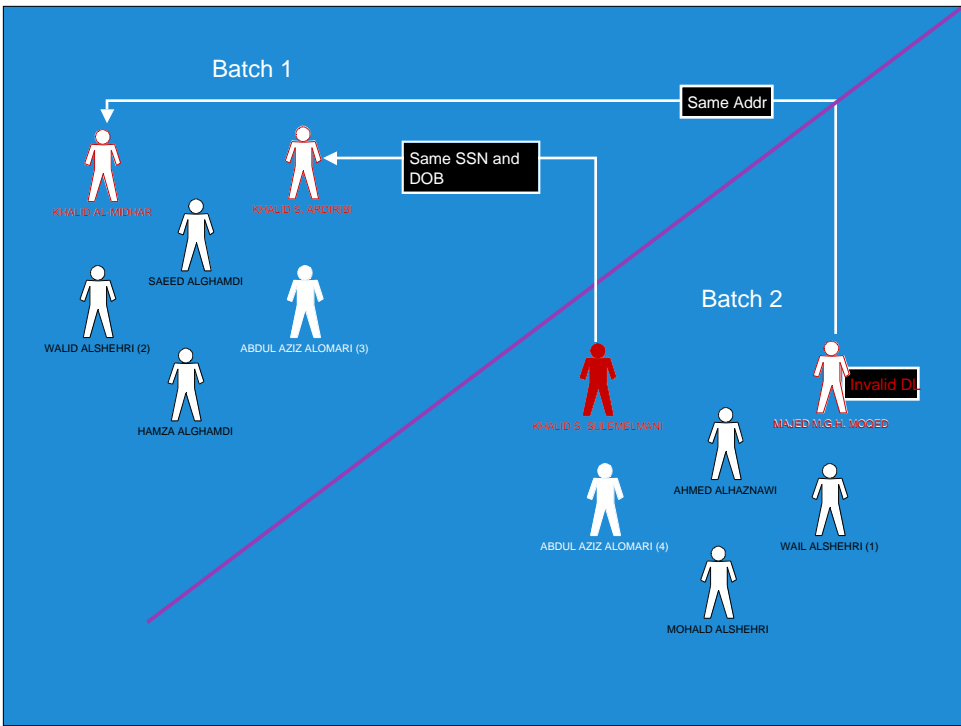
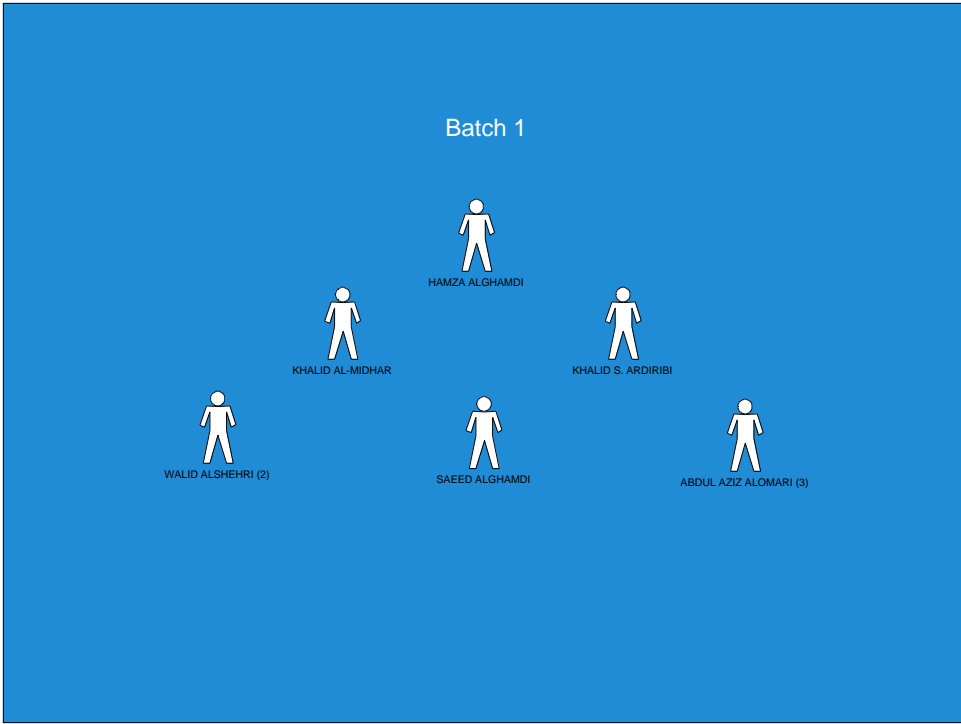
Touch-screen with customized prompts
Barcode attachment
Magnetic stripe
LCD touch-screen display
Internal modem w/Internet interface
Internal Printer

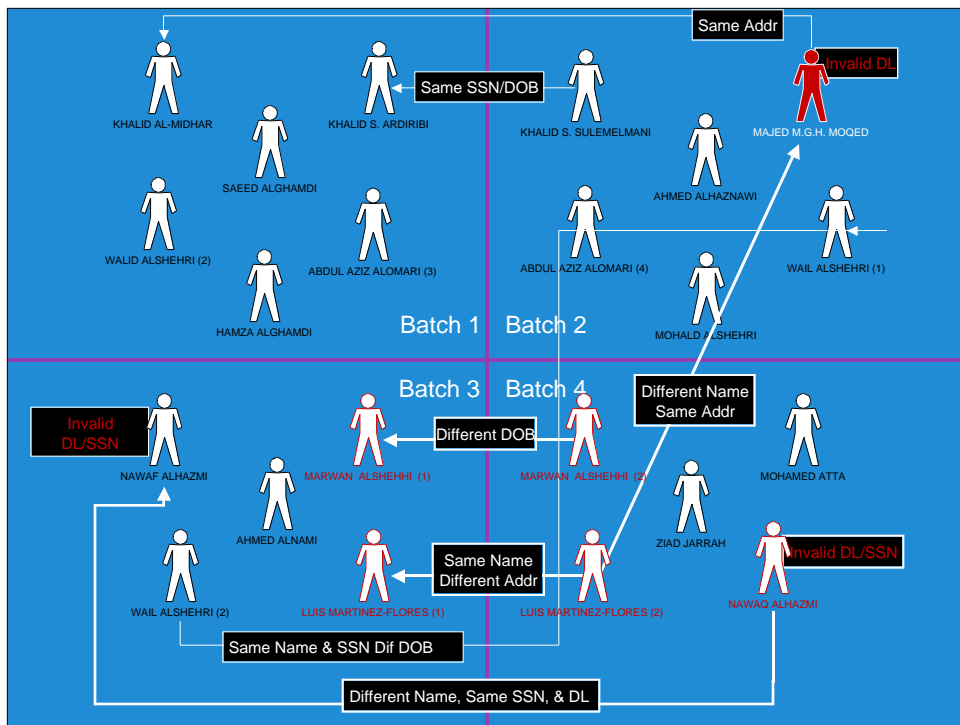
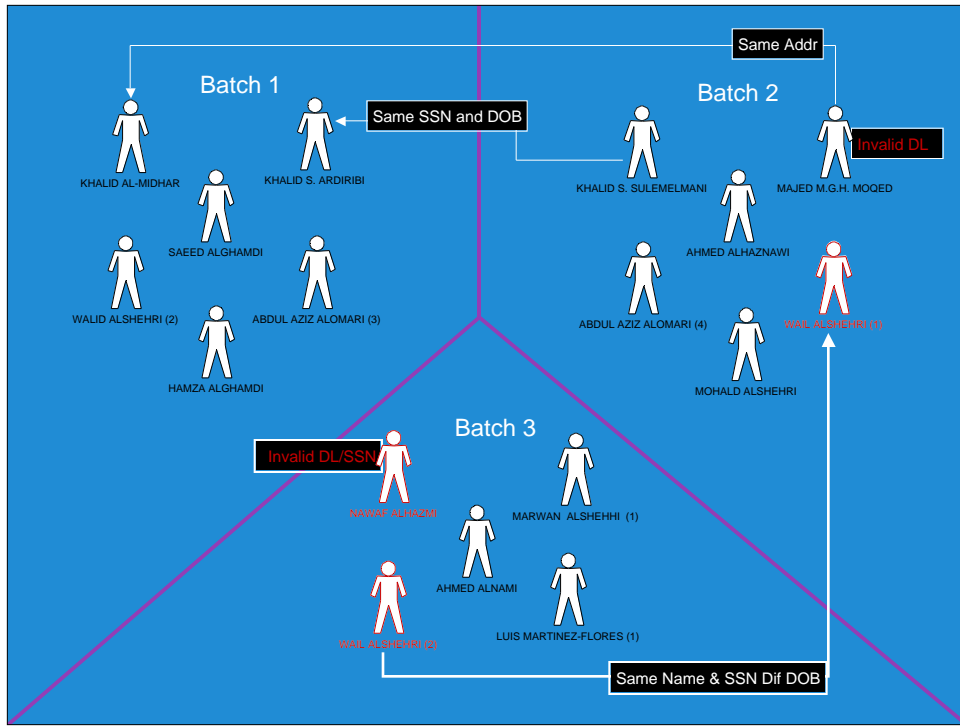


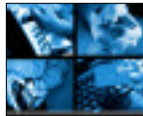
IDENTITY CHEK_{sm}

- ◆ Today used by 76% of all bank branches to catch fraud rings, saving millions
- ◆ Using existing financial fraud control tools to identify:
 - Money Laundering Rings
 - Drug Rings
 - Terrorist Cells
- ◆ Anyone using our own systems of authentication and security to gain access to trusted communities





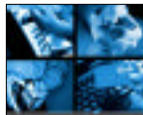




Terrorists Test

Test conducted on terrorists from Sept. 11th

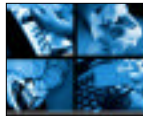
- ◆ FBI publicized some information on the Internet
- ◆ Information on only 12 of 21 terrorists
- ◆ Names, address, some SSN, some DOB, some DL#
- ◆ Information run through IDENTITY CHEK
- ◆ 11 out of 12 created a warning!
- ◆ We can tell fraud patterns they used
- ◆ If we could obtain the rest of the information, we could give a more complete picture of terrorist's patterns



Terrorist's Fraud Patterns

- ◆ One person using several addresses
- ◆ Several people using same address
- ◆ Two people using similar DL# or same DOB
- ◆ One person using two DOBs
- ◆ One person with slight change in name (Example: Wail / Walid)
- ◆ Invalid DL#
- ◆ SSN issued late in life
- ◆ Possible invalid SSN (based on forecast)

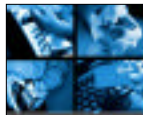




Government applications

Applications for IDENTITY CHEK:

- ◆ Prescreen airline ticket purchasers
- ◆ USA Patriot Act – help financial institutions comply with Treasury Dept. regulations (and OFAC compliance)
- ◆ Gun control – screen fire arms purchasers
- ◆ Issuing passports
- ◆ Issuing drivers licenses



Summary

- ◆ Fraud remains manageable
- ◆ Tools are emerging to help combat new threats
- ◆ Debit and checks, as well as credit cards need to be considered
- ◆ EBT users have largely eliminated their fraud
- ◆ Purchasing cards can eliminate internal misuse with many other benefits
- ◆ Point of payment is a perfect time to gather enough data to catch the bad guys
- ◆ Existing financial industry mechanisms can help
- ◆ New authentication systems/mechanisms emerging





Thank You

Scott Dueweke

VP, Government and Security

Concord EFS, Inc.

540.636.2541

sdueweke@neteps.com

