

INFUSED.  
INTRIGUED.  
INNOVATIVE.  
**GET INSIGHTS.**  
INVIGORATED.  
INFORMED.  
INSPIRED

# PROACTIVE FRAUD PROTECTION

**Jeff Robbins, Product Manager – FIS**

**Kamila Kibilda, VP Risk Management & Analytics – FIS**

**Nicole Braccia, Director Card Analytics – FIS**

# TOPIC OVERVIEW

- Latest fraud trends
  - Global Fraud Business Intelligence Briefing
- Enterprise approach to payments
  - Corporate structure
  - Our people
  - Our data
  - Our tools
- Benefits of a combined group
- Working together: leveraging resources
  - New model
- Working together: leveraging data and contacts
  - Murphy's oil fraud case

# Falcon 6

Jeff Robbins

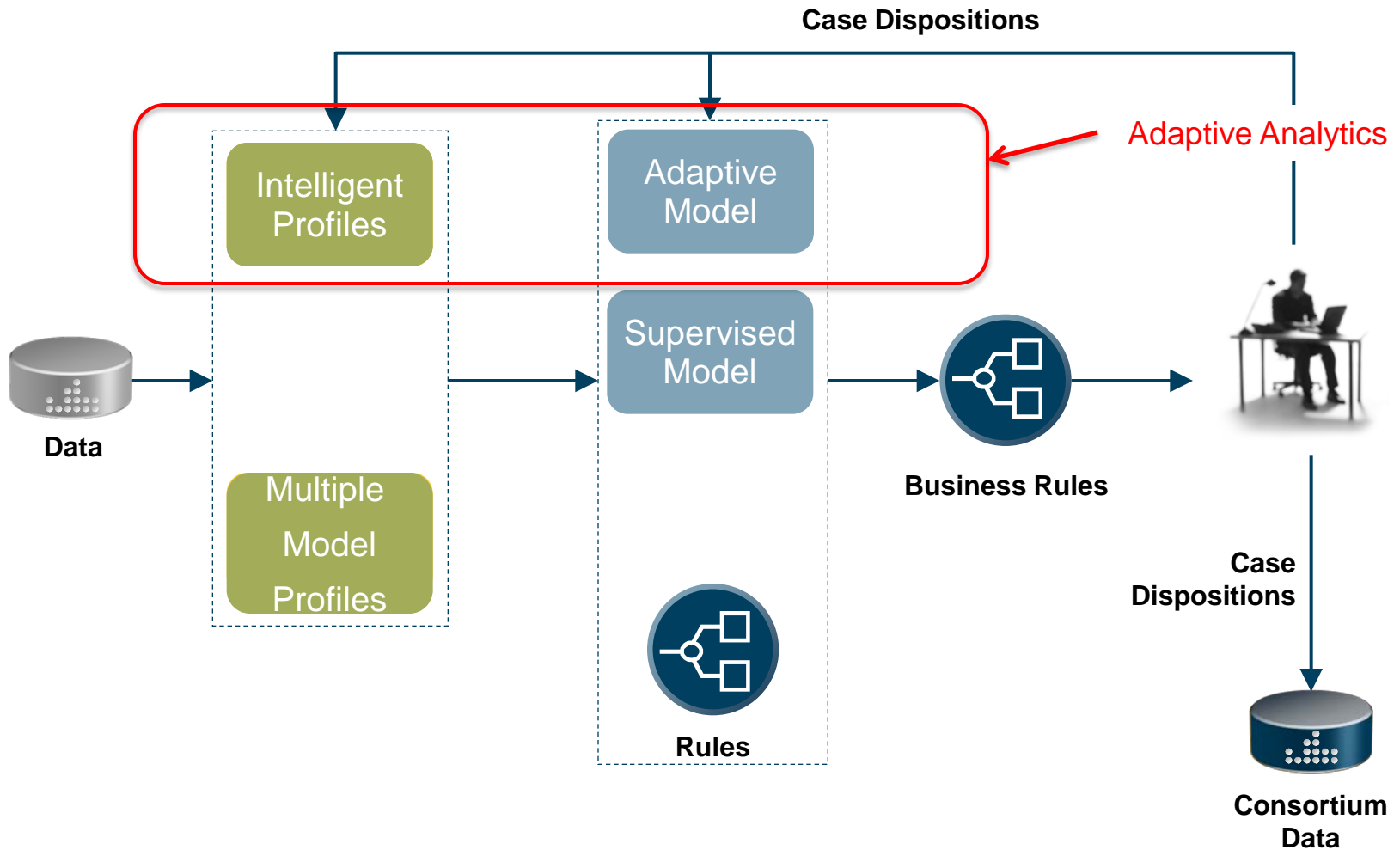
Product Manager

# FALCON 6 ENHANCED FUNCTIONALITY

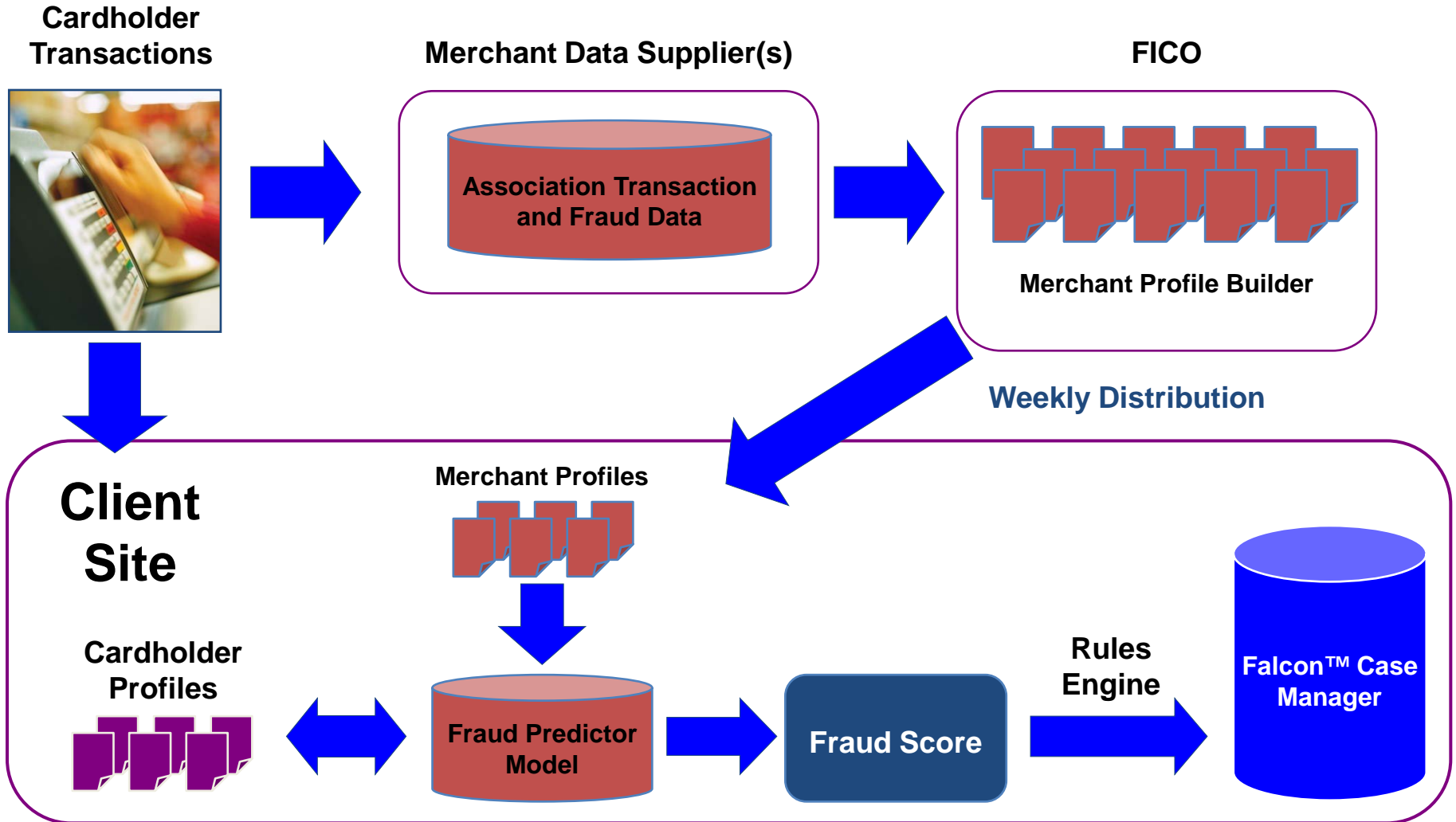
- Enterprise case management
- SOA – compliant component architecture
- Hot lists
- Expanded reporting capabilities
- Adaptive analytics
- Merchant profiles
- Global intelligent profiles
- Real Time Processing
- Multiple scores available per transaction
- Multi tenant



# FALCON 6 AUTHORIZATION PROCESS FLOW



# FRAUD PREDICTOR WITH MERCHANT PROFILES



# BOTTOM LINE

- Better fraud detection
- Lower false positives
- Customization options
- Greater flexibility
- Operational standardization



# FALCON 6 INTEGRATION ROADMAP

- FIS Fraud Management committed to:
  - Leveraging our power to integrate through advanced technology and proprietary predictive analytics
  - Integration initiatives transparent and seamless for clients:
    - No disruption of service
    - No impact to the cardholder experience
  - Continued focus on preventing fraud and mitigating risks
- Project timeline scheduled through early 2012
- Client communication plan forthcoming with specific migration dates for various FIS authorization platforms

# FRAUD MANAGEMENT PLANS FOR 2011

- Conversion to Falcon 6, the newest version of Falcon, is scheduled for 2011.
  - Due to scope and complexity of the project implementation will likely involve all of 2011
- Integration of legacy MVE debit platform into Falcon
  - Consolidated fraud management across entire card enterprise
- Travel indicator
  - Ability to segment travelling card holders out of certain rules will increase accuracy and cardholder satisfaction
- Mobile Fraud Alerting
  - Ability to contact cardholder via SMS and/or e-mail to validate suspicious activity
- Cross-training of Investigations teams between Retail and Card

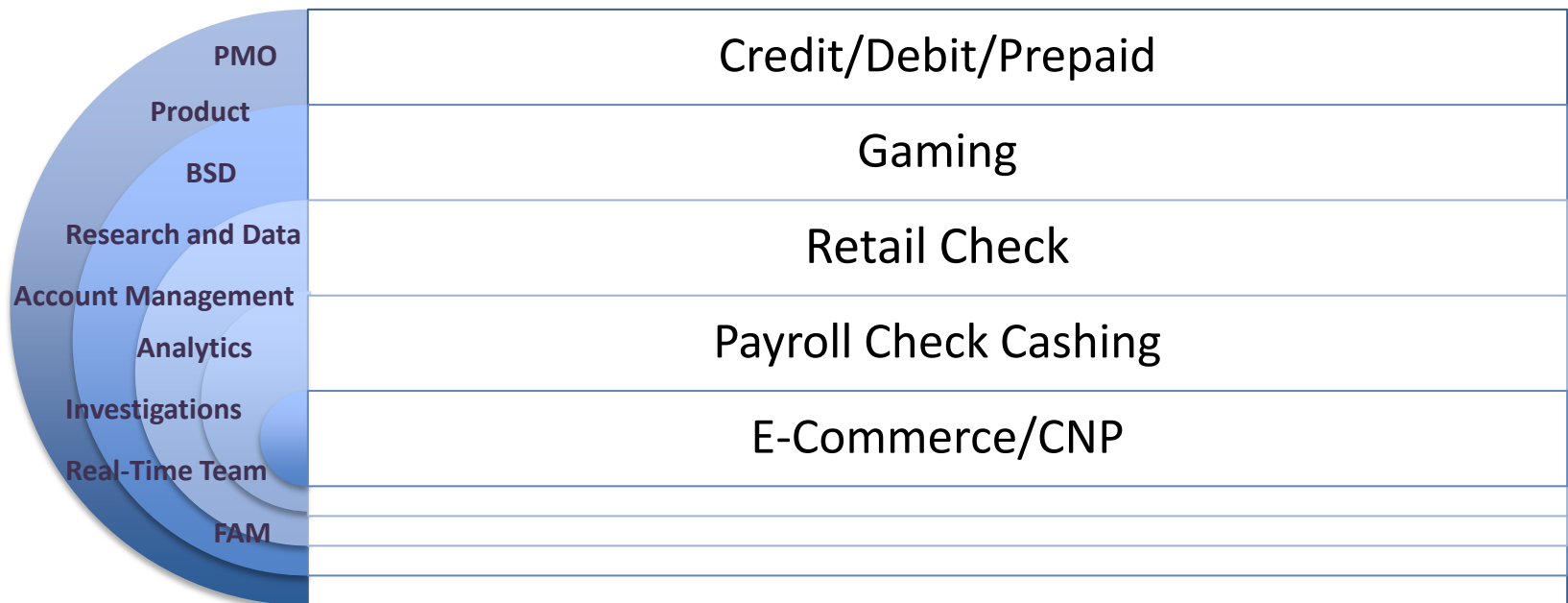
# Enterprise Approach

Kamila Kibilda

VP, Risk Management and Analytics

# CORPORATE STRUCTURE

The Payments Fraud and Products Solutions Group is organized to facilitate an enterprise-wide approach to fraud. All five lines of business are supported by product, strategy, business systems development, data/research and fraud management groups.

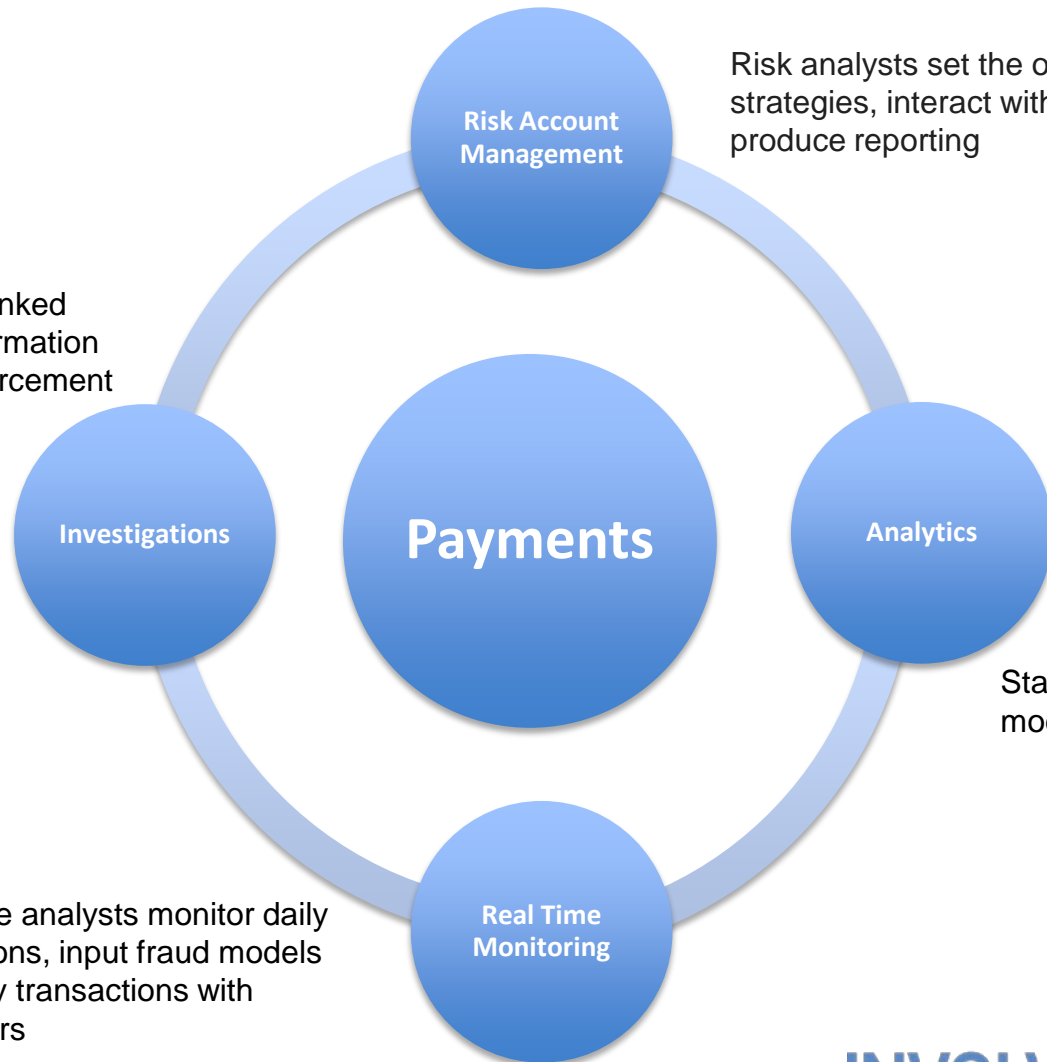


# FRAUD TEAM EXPERTISE



- Diversity in backgrounds:
  - Finance
  - Statistics/Math
  - Information/data management
  - Sociology
  - Business administration
  - Criminal analysis
  - Predator/offender tracking
  - Hostage negotiations
  - Narcotics
  - Retail security
  - Corporate investigations
  - Organized rings
  - Anti-money laundering
  - Credit card fraud
  - Check payment fraud

# FRAUD TEAM ROLES



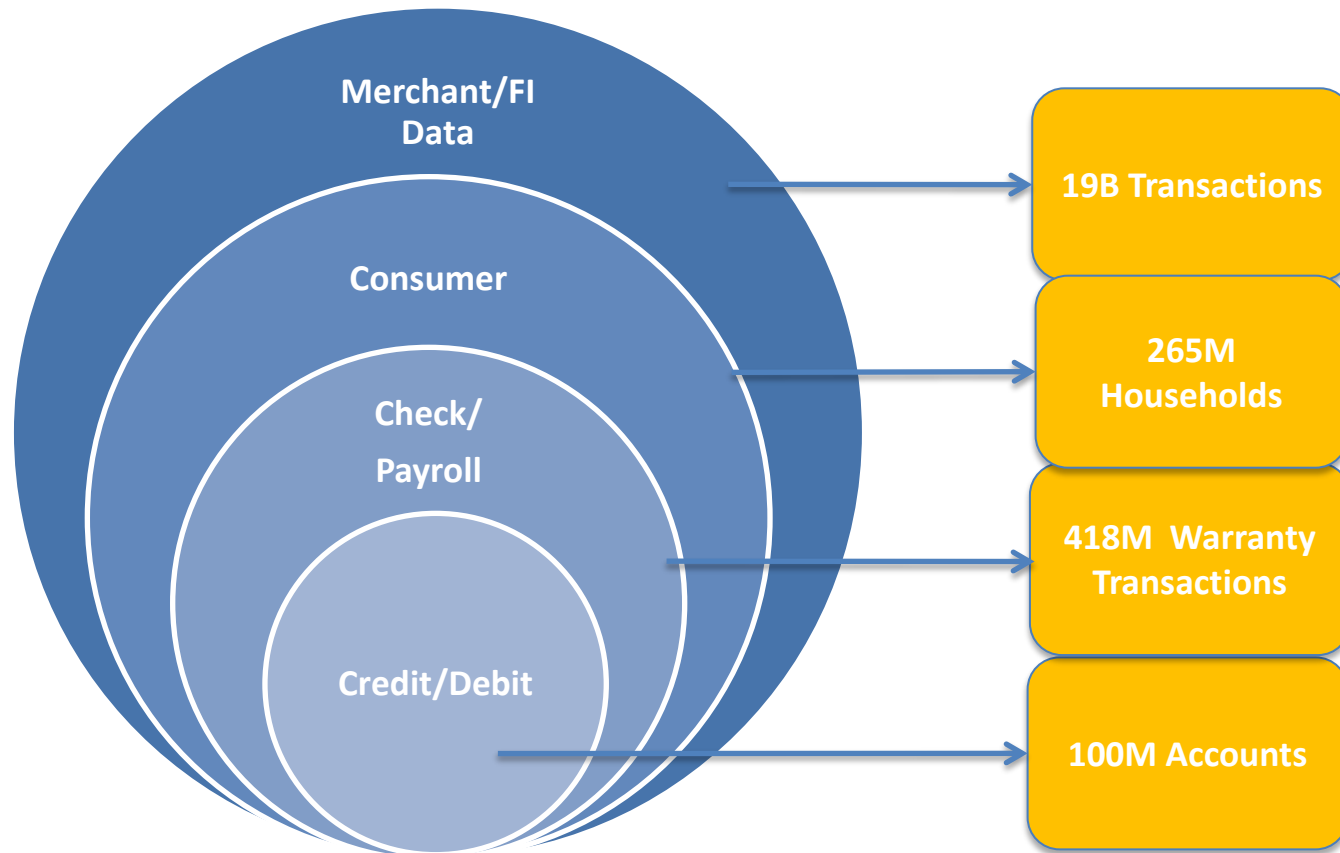
Risk analysts set the overall account strategies, interact with clients, and produce reporting

Investigators identify linked fraud, gather case information and work with law enforcement to prosecute fraudsters

Statisticians develop analytical models that score transactions

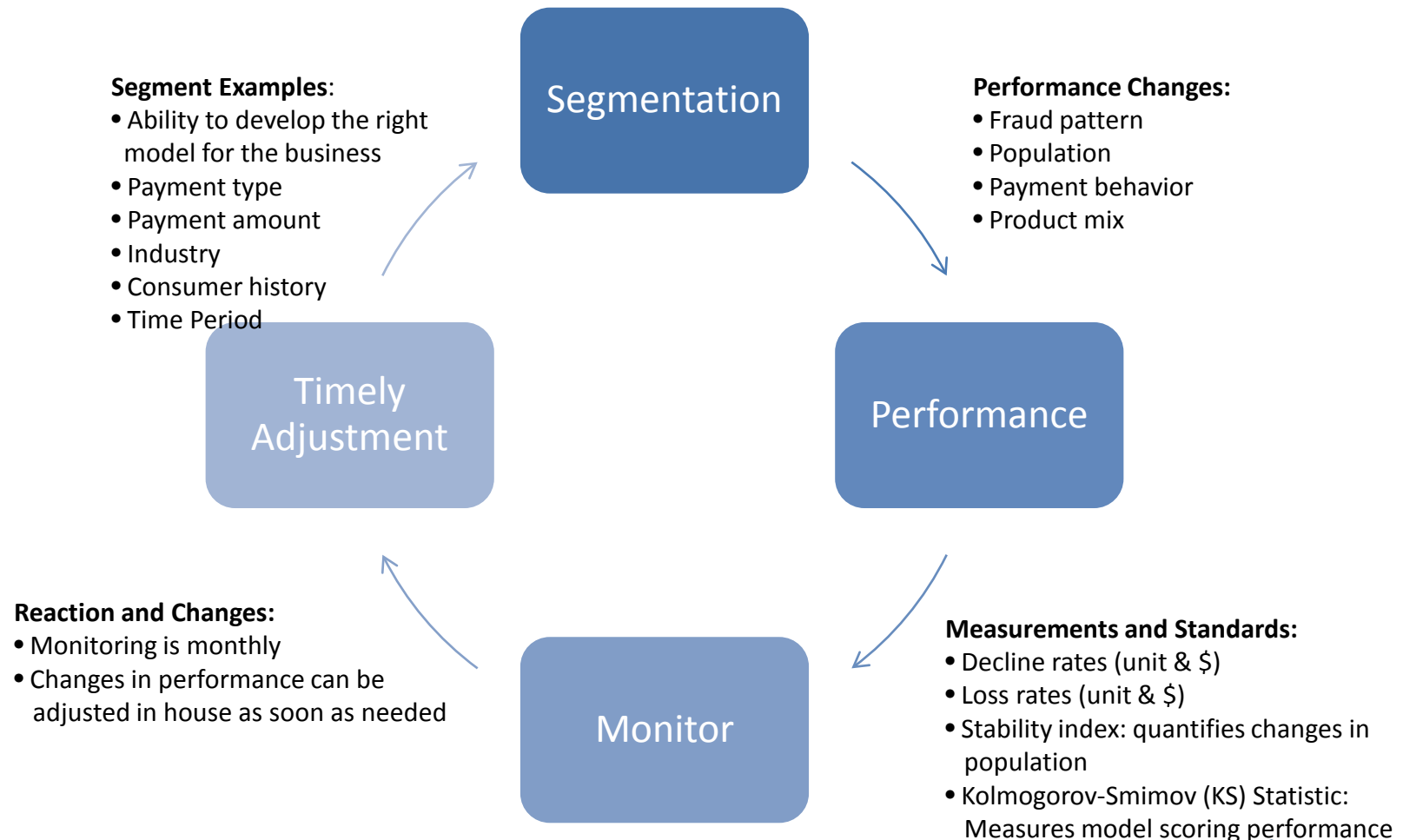
Real Time analysts monitor daily transactions, input fraud models and verify transactions with consumers

# FIS DATA



- Layers of data allow for development of a complete profile of positive/negative activity
- Pattern recognition becomes faster and more distinct with increased data

# OUR TOOLS: STATISTICAL MODELS





# OUR TOOLS: DATA MINING

## ■ Analytical Databases:

### 1. Hyperion

1. Stores 3 years of data
2. Automated reporting

### 2. ParAccel DB

1. New columnar technology
2. Increases speed of data mining
3. Allows for decision tree views

Hyperion System 9 BI+ Interactive Reporting Studio

Results8

	Account Number	HH24	Trans Date	Decision Code	PreDate CloseCod_1	PreDate ClosCod_3	STATUS	Transaction Amount	Fraud Score	Visa Aa Score	Visa Risk Condition Code	Sic 4 Code	Description
1	9272	21	02/16/09 09:09 PM	D	0	20,090,216	KF	217.24	984	52	GM	5411	GROCERY STORES, SUPERMARKET
2	0723	20	02/16/09 08:52 PM	D	0	20,090,216	KF	250.00	990	38	GM	5411	GROCERY STORES, SUPERMARKET
3	5883	19	02/16/09 07:19 PM	D	0	20,090,216	KF	265.36	975	36	GM	5411	GROCERY STORES, SUPERMARKET
4	7970	19	02/16/09 07:06 PM	D	0	20,090,216	KF	426.93	955	45	GM	5411	GROCERY STORES, SUPERMARKET
5	7061	18	02/16/09 06:18 PM	A	20090216	0	CV	10.87	74	31	GM	5411	GROCERY STORES, SUPERMARKET
6	2788	18	02/16/09 06:14 PM	D	0	20,090,216	KF	329.60	990	31	GM	5411	GROCERY STORES, SUPERMARKET
7	2993	18	02/16/09 06:04 PM	D	0	20,090,216	KF	250.00	705	35	GM	5411	GROCERY STORES, SUPERMARKET
8	0580	18	02/16/09 06:02 PM	D	0	20,090,216	KF	275.26	968	34	GM	5411	GROCERY STORES, SUPERMARKET
9	7235	17	02/16/09 05:56 PM	D	0	20,090,216	KF	105.44	710	32	GM	5411	GROCERY STORES, SUPERMARKET
10	2543	17	02/16/09 05:25 PM	D	0	20,090,216	KF	266.01	986	34	GM	5411	GROCERY STORES, SUPERMARKET
11	4336	16	02/16/09 04:42 PM	D	0	20,090,216	KF	216.02	978	37	GM	5411	GROCERY STORES, SUPERMARKET
12	5392	16	02/16/09 04:02 PM	D	0	20,090,216	KF	300.00	953	32	00	5411	GROCERY STORES, SUPERMARKET
13	9204	15	02/16/09 03:43 PM	D	20090216	0	CV	518.82	991	34	00	5411	GROCERY STORES, SUPERMARKET
14	2783	14	02/16/09 02:30 PM	D	20090216	0	CV	213.07	889	29	GM	5411	GROCERY STORES, SUPERMARKET
15	6699	14	02/16/09 02:07 PM	D	20090216	0	CV	294.11	963	67	00	5411	GROCERY STORES, SUPERMARKET
16	6699	14	02/16/09 02:06 PM	D	20090216	0	CV	294.11	901	63	00	5411	GROCERY STORES, SUPERMARKET
17	3678	14	02/16/09 02:00 PM	D	0	20,090,216	KF	100.00	973	86	GM	5411	GROCERY STORES, SUPERMARKET
18	9074	13	02/16/09 01:33 PM	D	0	20,090,216	KF	214.30	960	36	GM	5411	GROCERY STORES, SUPERMARKET
19	3240	13	02/16/09 01:30 PM	D	0	20,090,216	KF	219.52	992	32	GM	5411	GROCERY STORES, SUPERMARKET
20	4084	09	02/16/09 09:33 AM	D	20090216	0	CV	311.15	973	94	GM	5411	GROCERY STORES, SUPERMARKET
21	4303	04	02/16/09 04:16 AM	A	20090216	0	CV	76.46	726	32	GM	5411	GROCERY STORES, SUPERMARKET
22	1825	00	02/16/09 12:32 AM	A	0	20,090,216	KF	78.11	433	28	GM	5411	GROCERY STORES, SUPERMARKET
23	4506	23	02/15/09 11:35 PM	D	0	20,090,215	KF	617.85	988	59	00	5411	GROCERY STORES, SUPERMARKET

Account Number HH24 Trans Date Decision Code PreDate CloseCod\_1 PreDate ClosCod\_3 STATUS Transaction Amount Fraud Score Visa Aa Score Visa Risk Condition Code Sic 4 Code

3439 of 33368 Rows 02/18/09 09:21:43

# OUR TOOLS: FRAUD RULE WRITING

- Expert Rule Base
  - Global Rules
  - FIS Secured Rules
  - Applied Analytics Rules
  - Credit and Debit

The screenshot displays the Falcon Expert Workstation interface for configuring a fraud rule. The main window is titled "Rule Base - Prod\_Auth\_Rules" and shows the configuration for a rule named "RTDecline\_GLOBALRule". The rule is active and has a description: "RHP022610. Removed Randolph Brooks from Rule... RHP042510. Lowered SIC 5732 False score". The rule ID is 612 (12) and it was last modified by u27436. The main area shows the rule content, which is a complex conditional statement starting with "IF Trans.TRN\_AUTH\_POST = "A"" and ending with "THEN BEGIN Trans.DECL\_CD = "D"; FAL\_FIRE\_RULE(); END". The interface includes various toolbars and panels for operators, functions, and data fields.

# OUR TOOLS: FRAUD MONITORING

- Fraud monitoring
  - Probability of fraud scoring
  - Case management
  - Integrated platforms
  - Credit and Debit view

The screenshot displays a web-based fraud monitoring application. At the top, there is a navigation menu with options: View Case, Create Case, Find Case, Messaging, View Report, Admin, Help, and Log Off. Below the menu, the user's locale is set to English (United States), and the client is identified as 'demo'. The user is 'admin@10.51.49.71' with a logon time of 06-16-2006 19:02:14. The current case is Case Number 3, which is in a 'Queue' and has a 'High Score'. It is locked by 'admin@10.51.49.71' and is in 'Manual' selection mode.

The main section shows account details for Account Number 4022970010726900. The full name is 'NOT AVAILABLE'. Other details include SSN, Birth Date (01-01-0001), Postal Code, Case Block (No Block), Card Status, Card Open Date (10-30-1998), Expiration Date (10-31-2003), Member Since (01-01-0001), Home Phone, Work Phone, Co Full Name, Co SSN, Co Birth Date (01-01-0001), Available Credit (\$0.00), Credit Limit (\$0.00), All Auths (\$15,912.26), Last 24 Hrs (\$366.43), Maiden Name, Case Created (04-13-2006 16:57:26), High Score (997), Creation Score (70), Open Score (970), and Last Score (970).

Below the account details is the 'Case Status and Actions' section. The Case Status is 'Pending'. Block Action is set to 'No Block'. There are checkboxes for 'Cardholder Contacted', 'Bad Phone Work', 'Left Message', 'Bad Phone Home', and 'Bad Phone Other'. There are also fields for 'Send Email/Letter' (with a template selection dropdown) and 'Schedule Callback'. An 'Apply Status' button is visible.

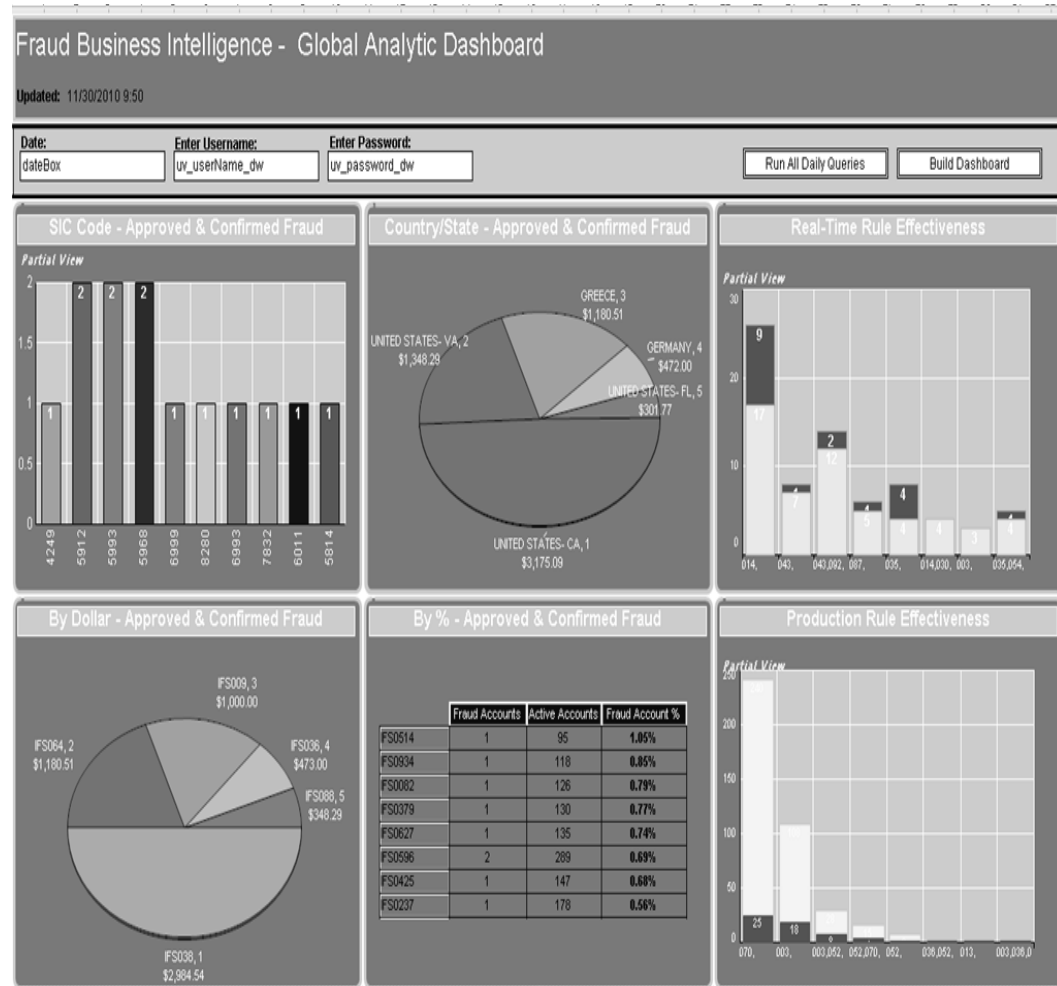
The bottom section is titled 'All Transactions' and contains a table with the following data:

No.	Post Type	Transaction Date v	Amount	Score	Decision Code	SIC Code	Merchant ZIP	Type	Reason 1	Reason 2	Reason 3
1	Auth	12-24-2002 14:10:57	\$258.58	970	A	8012	117532701	M	4	8	3
2	Auth	12-24-2002 14:05:52	\$258.58	974	R	5732	211620000	M	4	8	3
3	Auth	12-24-2002 14:04:44	\$258.58	997	R	5732	925620000	M	8	4	3
4	Auth	12-24-2002 13:34:26	\$187.96	977	R	5541		M	8	4	2
5	Auth	12-24-2002 13:32:00	\$187.96	996	R	5541		M	8	2	3
6	Auth	12-24-2002 13:30:34	\$180.41	994	R	5541		M	2	41	3
7	Auth	12-24-2002 12:49:18	\$30.00	0	A	7372	701300000	A	0	0	0
8	Auth	12-24-2002 12:47:13	\$30.00	0	A	7372	701300000	A	0	0	0
9	Auth	12-24-2002 12:47:13	\$30.00	723	A	7372	701300000	M	41	8	20
10	Auth	12-24-2002 12:21:40	\$48.85	790	A	5541		M	41	8	20

At the bottom of the transaction table, there is a navigation bar with '<< Previous Page', 'go to page 1, 2, 3, ..., 25, 26, 27', and 'Next Page >>'.

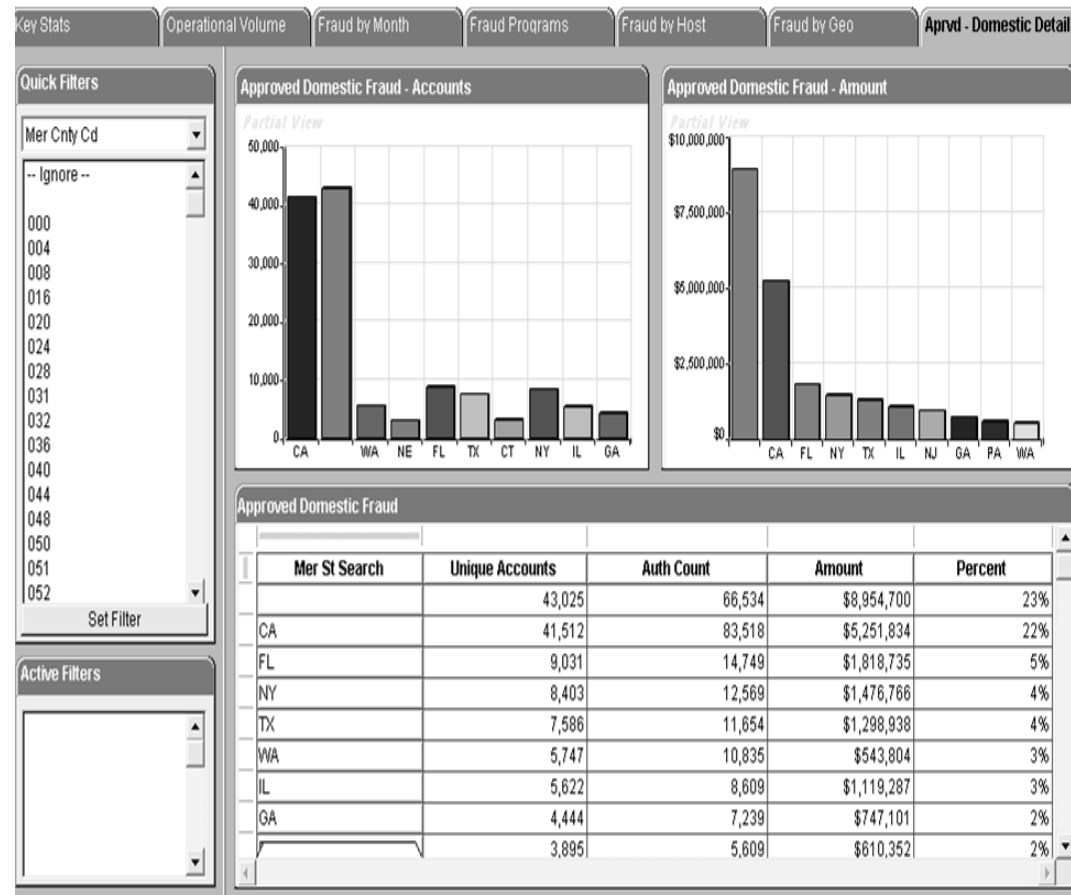
# OUR TOOLS: DASHBOARDS

- Fraud Trend Dashboards
  - Daily output
  - Interactive drill down capability
  - Global Views
    - Top Fraud by SIC
    - Top Fraud by Country/State
    - Rule Effectiveness
    - Fraud by Dollar Stratification
    - Fraud by Score Stratification
    - Confirmed Fraud Ratio



# OUR TOOLS: DASHBOARDS

- Fraud Trend Dashboards
  - Daily output
  - Interactive drill down capability
  - Country/State Global Views
    - Top Fraud by Country
    - Top Fraud by State
    - Fraud Authorizations by State
    - Fraud Volume by State



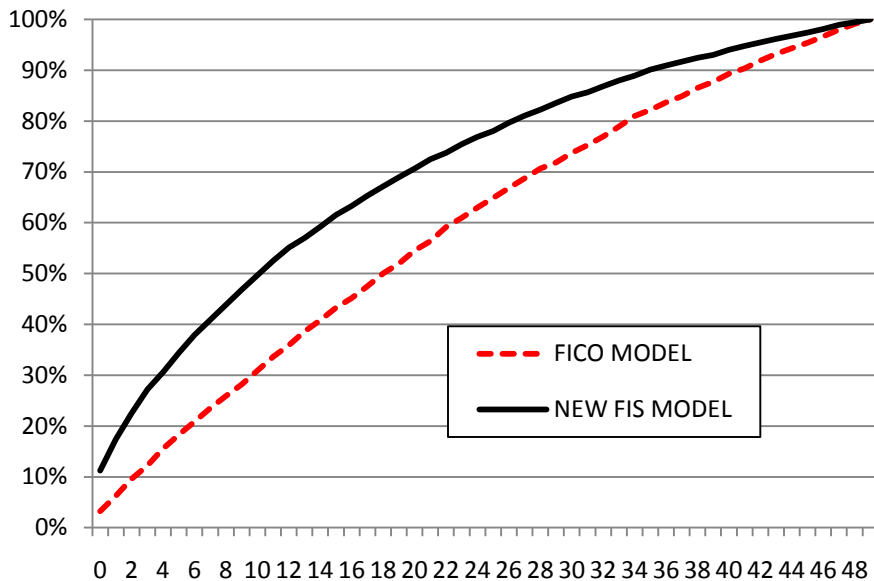
# BENEFITS OF A COMBINED FRAUD GROUP

- **Improve the ability to detect and adapt to complex fraud attacks**
- **Leverage analytics to improve decisions and investigations**
- **Manage fraud across channels and products – Card, ACH, Check, Deposit, BillPay, Mobile, alternative payments**
- **Leverage fraud detection technologies across business lines**
  - Share lists
  - Share vendor data
- **Develop complete consumer profile**
- **Leverage positive data and trends instead of primarily fraud trends**

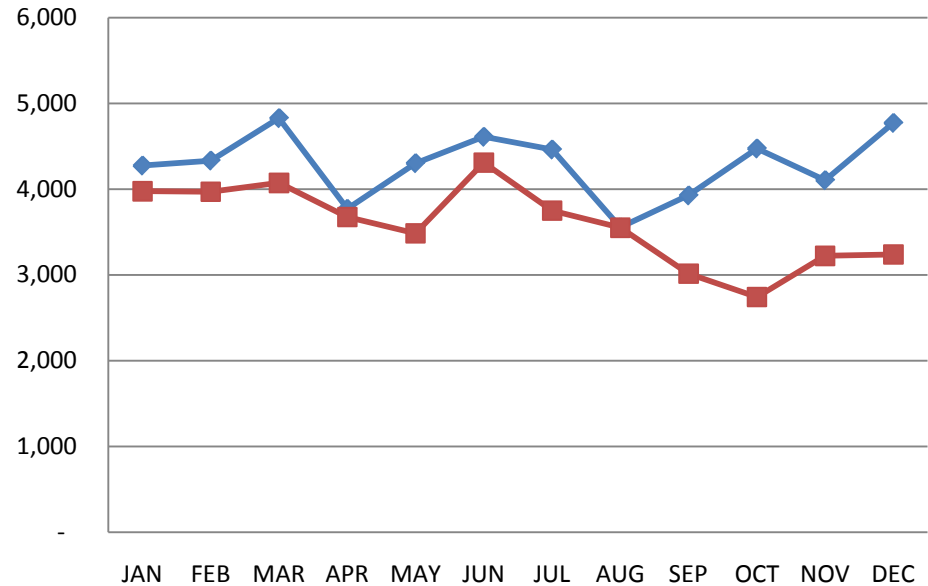
# WORKING TOGETHER

## LEVERAGING STATISTICAL RESOURCES

### Cumulative Percent of Fraud by Decile



### Total Chargeback Transactions By Auth Month



- Model decreased false positive rates from lower score bands 13:1 to 4:1
- Increased analyst efficiency by eliminating low risk cases from call queues
- Second part of 2010 is showing lowest trend in 2 years
- August marks beginning of operational efficiency changes due to model implementation

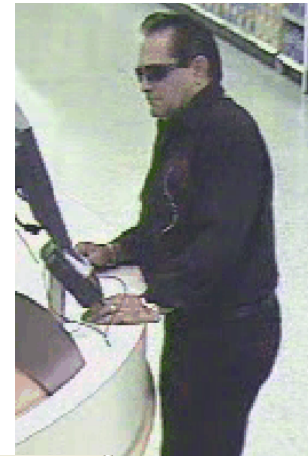
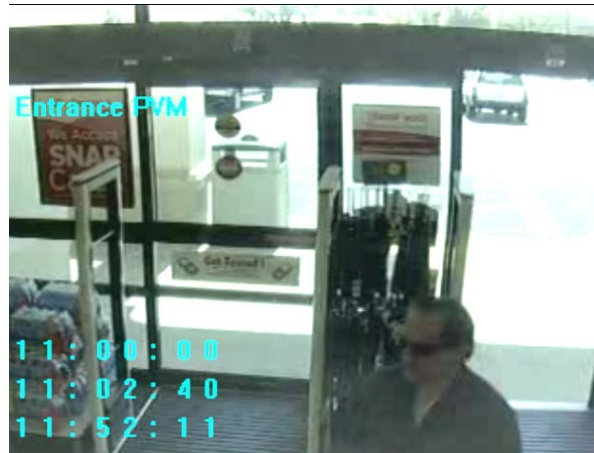
# WORKING TOGETHER

## LEVERAGING CONTACTS AND DATA

- Law enforcement identified that suspect possessed an FIS card
- Investigator queried internal data and identified transactions from 2 FIS issuers suspected to be related to suspect
- Investigator found a CPP for involved FIS cards
  - Windows store in Gaithersburg, MD
- Obtained video evidence from Retail contacts and linked additional suspects
- Provided video evidence and CPP details to law enforcement
- 17 people identified in case by law enforcement
  - Throughout the world, 138 accounts from this CPP were used for \$67,985 in successful transactions between 9/7/10 and 10/31/10
- Warrants issued for local suspects
  - Arrests occurred in February 2011
  - Best evidence was video from Retail contacts obtained by FIS



# CLEARWATER CASE – MAIN SUSPECT



Name	Docket No.	Booking Date	Arresting Agency	
<b>CEPERO, IDALBERTO</b>	<b>1441489</b>	<b>2/8/2011 12:03:41 PM</b>	<b>PINELLAS COUNTY SHERIFF</b>	
Address		City	State	Zip Code
<b>10118 ENCHANTED OAKS</b>		<b>TAMPA</b>	<b>FL</b>	<b>33615</b>
Race	Sex	DOB	Place of Birth	Arrest Age
<b>WHITE</b>	<b>MALE</b>	<b>7/13/1952</b>	<b>CC</b>	<b>58</b>
Eyes	Hair	Complexion	Height	Weight
<b>BRO</b>	<b>BLK</b>	<b>MED</b>	<b>504</b>	<b>120</b>


Scars, Marks & Tattoos

Cell Location/Status	Commissary Account Balance	SPIN	Booking Type
<b>CEN-2C2-UN02-04-003</b>	<b>\$0.00</b>	<b>344769</b>	<b>FELONY</b>

# CLEARWATER CASE – RELATED



## Hernando County Inmate Booking Information



**Inmate Name:** ECHEMENDIA, JOAN TATO

**Booking #:** HCSO11JBN000393

**MNI #:** HCSO11MNI000480

**Sex/Race:** M / H

**Date Of Birth:** 09/14/1984

**Booking Date/Time:** 01/17/2011 23:03

**Release Date/Time:**

**Current Date/Time:** 02/09/2011 12:11

[Sign up for VINE notification.](#)

## ARRESTED WITH 131 COUNTERFEIT CARDS

### Case And Charge Information

Case Seq.	Case #	Arraignment Date	Arresting Agency	Bond Amount
CASE0001	000-0000		HERNANDO COUNTY SHERIFF'S OFFICE	\$1,825,000.00

Charges for case CASE0001:

Statute	Statute Description	Counts	Charge Bond Amount
817.568.2a	FRAUD-IMPERSON, USE/POSS ID OF ANOTHER PERSON WO CONSENT	73	\$1,825,000.00

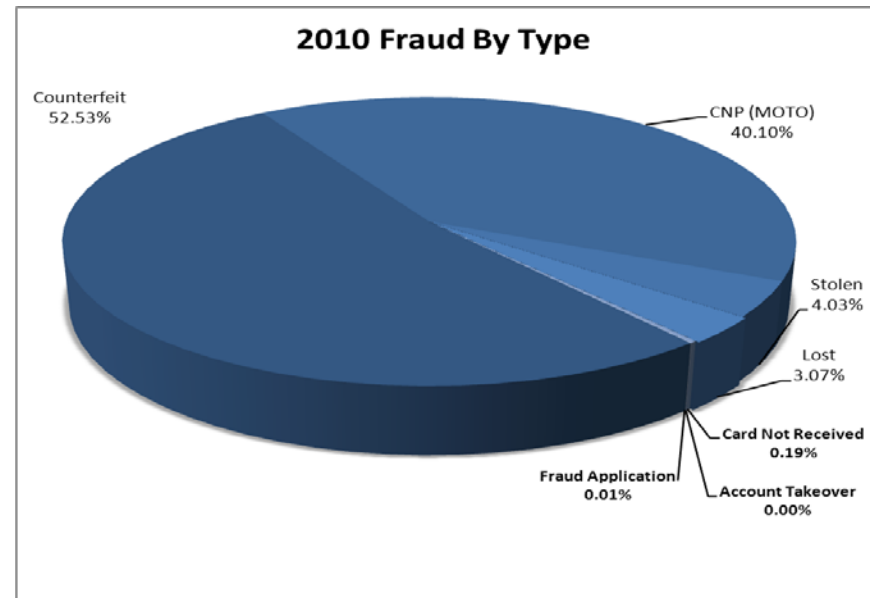
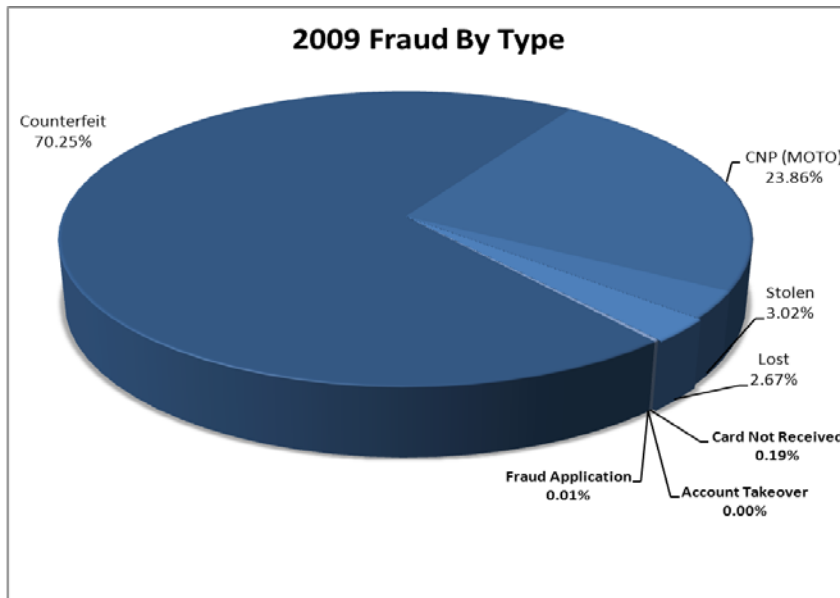
# Fraud Business Intelligence

Nicole Braccia

Director, Card Fraud Analytics

# 2010 TRANSACTIONS BY FRAUD TYPE

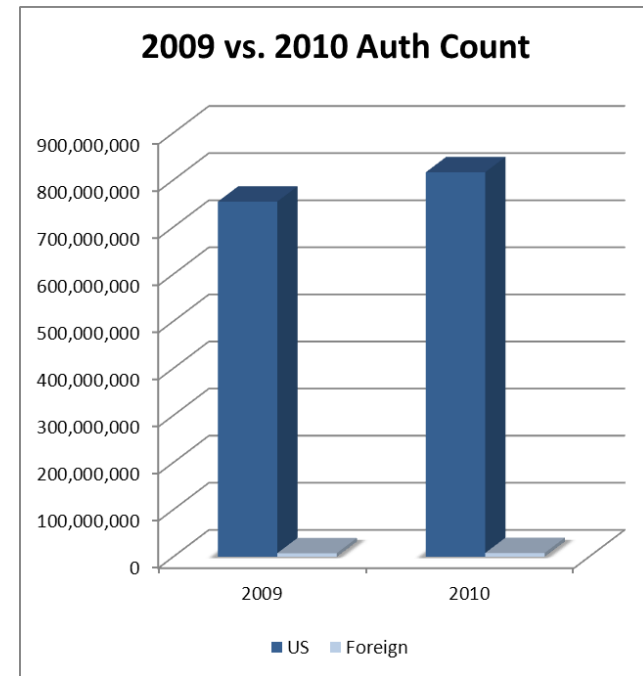
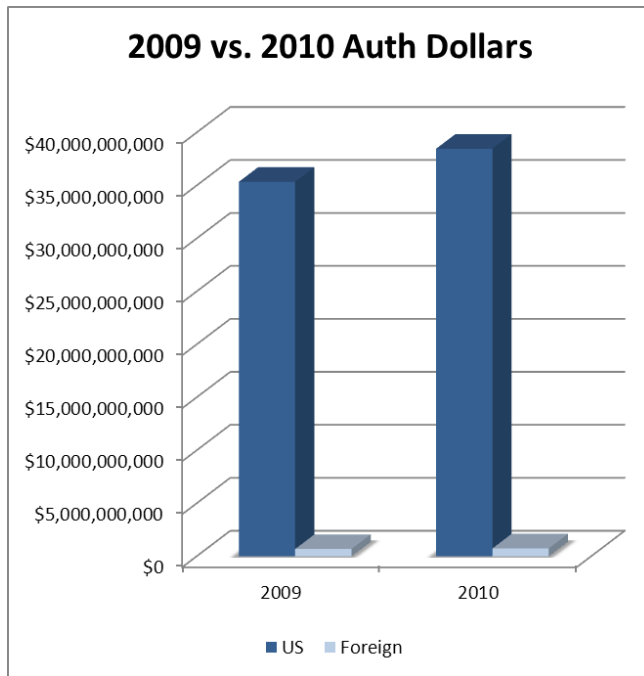
Counterfeit and CNP fraud type continues to make up the majority of the fraud dollars. However, in 2010 there was a shift with CNP increasing by 68% and Counterfeit decreasing by 25% from 2009.



Fraud Type	2009	2010	YOY % Change
Counterfeit	70.25%	52.53%	-25%
CNP (MOTO)	23.86%	40.10%	68%
Stolen	3.02%	4.03%	34%
Lost	2.67%	3.07%	15%
Card Not Received	0.19%	0.22%	15%
Account Takeover	0.00%	0.03%	634%
Fraud Application	0.01%	0.02%	134%

# 2010 US VS. FOREIGN AUTH DOLLARS

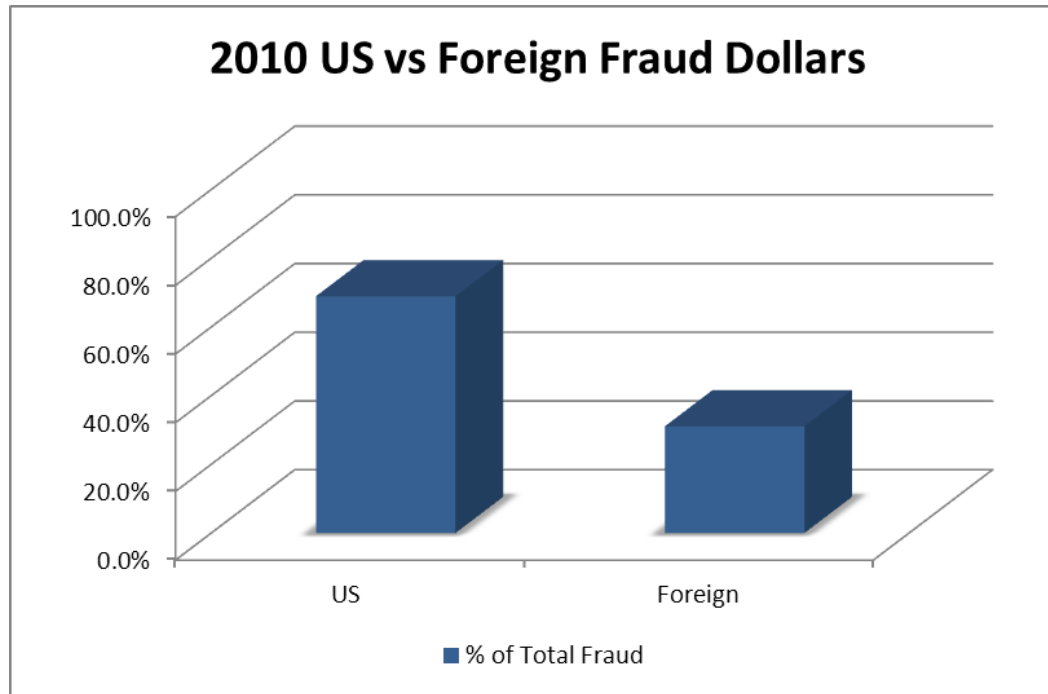
Authorization dollars attempted in Foreign increased by 7.99% compared to 8.83% in the US.



	US Auth Volume			Foreign Auth Volume			Total		
	Auth	Volume	% Volume	Auth	Volume	% Volume	Auth	Volume	% Volume
<b>2009</b>	754,111,396	\$35,348,742,430	98%	7,515,869	\$688,470,165	2%	761,627,265	\$36,037,212,595	100%
<b>2010</b>	816,334,975	\$38,468,505,797	98%	7,911,556	\$743,482,460	2%	824,246,531	\$39,211,988,257	100%
<b>YOY</b>	<b>8.25%</b>	<b>8.83%</b>	<b>0.00%</b>	<b>5.26%</b>	<b>7.99%</b>	<b>0.00%</b>	<b>8.22%</b>	<b>8.81%</b>	<b>0.00%</b>

# 2010 US VS. FOREIGN FRAUD DOLLARS

In 2010, a shift in US vs. Foreign Gross Fraud Dollars occurred with a 8.73% decrease in US fraud and a 26.95% increase in Foreign fraud dollars.



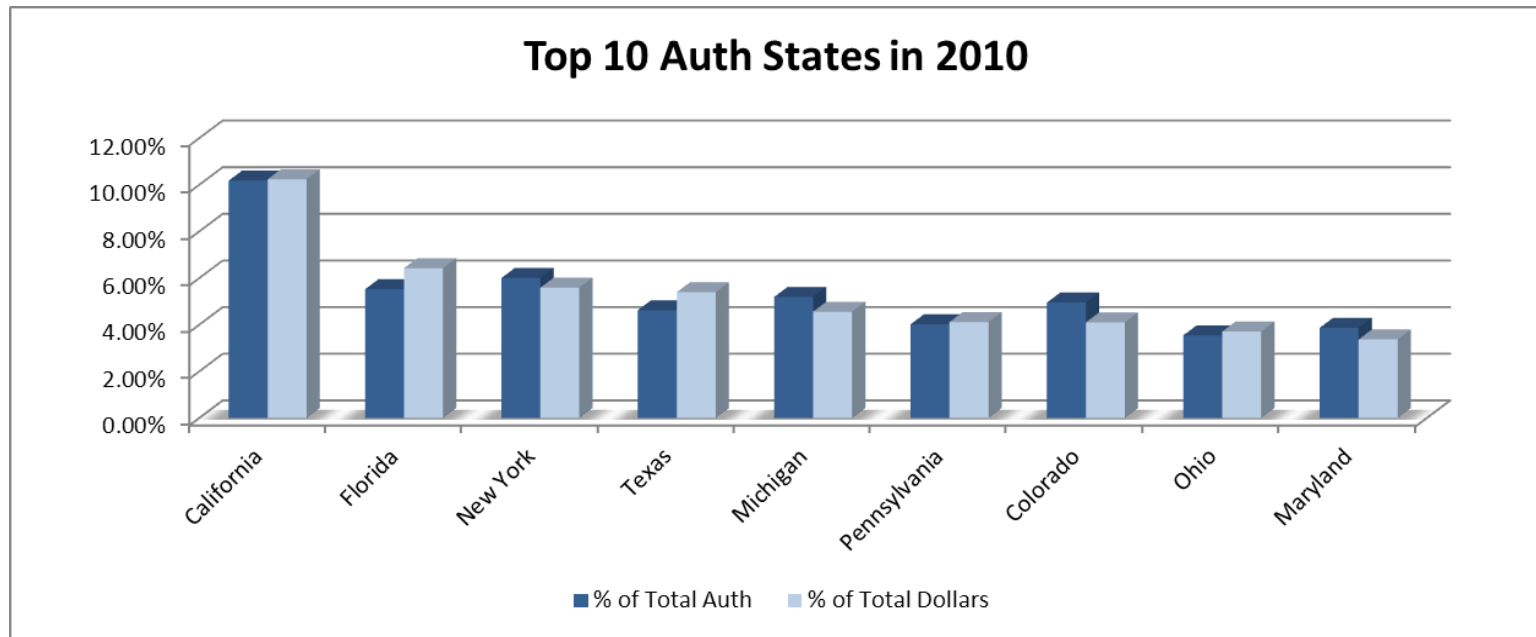
	2009	% of Total Fraud	2010	% of Total Fraud	YOY
<b>US</b>	\$ 27,961,114	75.5%	\$ 17,208,969	68.9%	<b>-8.73%</b>
<b>Foreign</b>	\$ 9,060,477	24.5%	\$ 7,756,189	31.1%	<b>26.95%</b>
<b>TOTAL</b>	<b>\$ 37,021,591</b>		<b>\$ 24,965,158</b>		

# TOP 10 FOREIGN FRAUD COUNTRIES



Great Britain	21.8%
Spain	7.5%
France	6.1%
Canada	5.7%
Italy	5.4%
Japan	5.3%
Mexico	4.0%
South Africa	2.8%
Australia	2.4%
Cyprus	2.1%

# TOP 10 AUTH STATES IN 2010

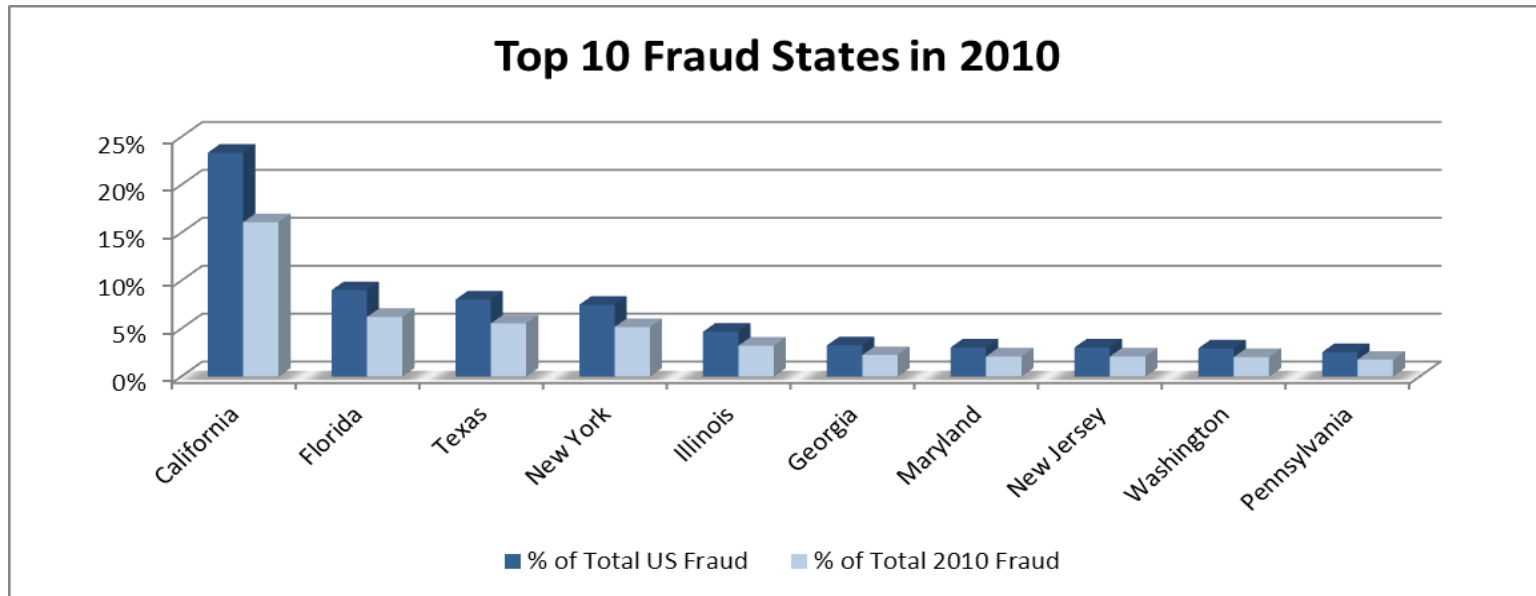


2010	Auth	Volume	Avg \$ per Auth	% of Total Auth	% of Total Volume
California	83,043,982	\$3,935,275,535	\$47.39	10.17%	10.23%
Florida	45,024,740	\$2,469,321,080	\$54.84	5.52%	6.42%
New York	48,956,306	\$2,147,398,274	\$43.86	6.00%	5.58%
Texas	37,688,243	\$2,074,173,524	\$55.04	4.62%	5.39%
Michigan	42,333,449	\$1,752,036,799	\$41.39	5.19%	4.55%
Pennsylvania	32,752,471	\$1,580,583,308	\$48.26	4.01%	4.11%
Colorado	40,370,823	\$1,575,560,010	\$39.03	4.95%	4.10%
Ohio	28,880,657	\$1,425,081,573	\$49.34	3.54%	3.70%
Maryland	31,509,965	\$1,294,301,557	\$41.08	3.86%	3.36%



# TOP 10 FRAUD STATES IN 2010

During 2010, California was the top state for fraud accounting for 23% of the total US fraud dollars and 16% of the overall 2010 fraud dollars.



State	Fraud Dollars	% of Total US Fraud	% of Total 2010 Fraud
California	\$ 4,020,908	23%	16%
Florida	\$ 1,552,400	9%	6%
Texas	\$ 1,381,557	8%	6%
New York	\$ 1,289,740	7%	5%
Illinois	\$ 805,187	5%	3%
Georgia	\$ 560,225	3%	2%
Maryland	\$ 523,849	3%	2%
New Jersey	\$ 522,946	3%	2%
Washington	\$ 507,301	3%	2%
Pennsylvania	\$ 438,793	3%	2%
<b>2010 Gross Fraud Dollars</b>	<b>\$ 24,965,158</b>		
<b>US Only 2010 Gross Fraud Dollars</b>	<b>\$ 17,208,969</b>		

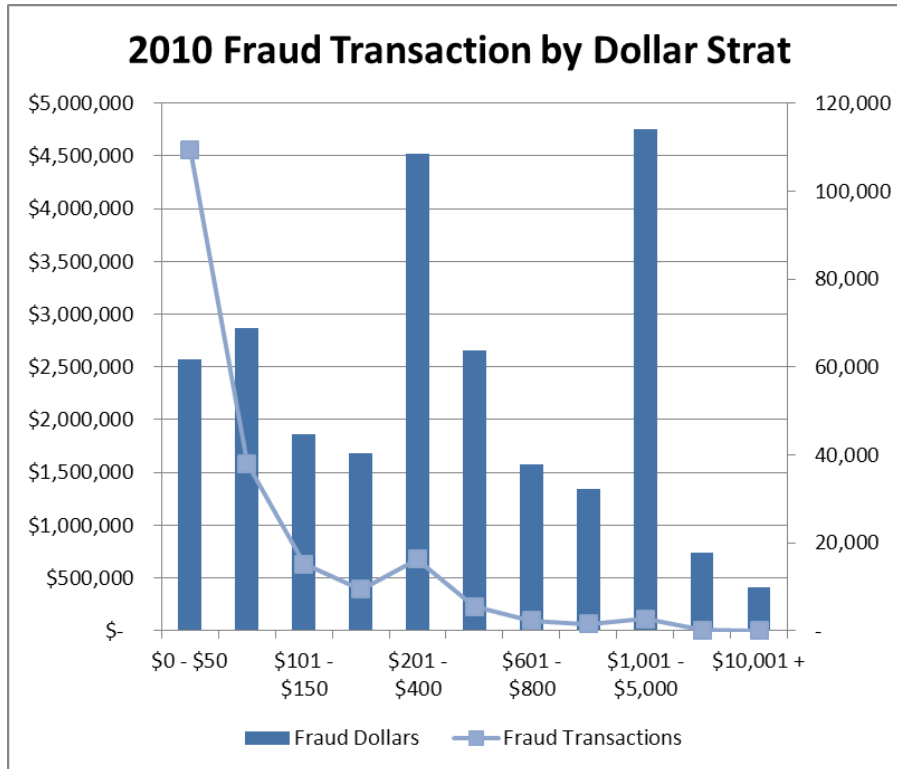
# 2010 AUTH DOLLARS BY STRAT

Almost 61% of the total auths occur in the \$1.00 - \$25.99 range. However, 17.23% of the total dollar volume occurs in the greater than \$101.00 - \$200.99 range.

2010	Auth	Volume	% of Total Auths	% of Total Volume
\$0.00	5,527,927	\$0	0.67%	0.00%
\$0.01 - \$0.99	2,109,327	\$1,337,727	0.26%	0.00%
\$1.00 - \$25.99	502,100,879	\$4,868,226,877	60.92%	12.42%
\$26.00 - \$50.99	141,474,553	\$5,223,077,339	17.16%	13.32%
\$51.00 - \$75.99	58,904,238	\$3,667,081,643	7.15%	9.35%
\$76.00 - \$100.99	34,867,849	\$3,093,425,031	4.23%	7.89%
\$101.00 - \$200.99	48,367,962	\$6,755,538,469	5.87%	17.23%
\$201.00 - \$300.99	14,168,094	\$3,448,212,377	1.72%	8.79%
\$301.00 - \$400.99	6,046,222	\$2,092,420,701	0.73%	5.34%
\$401.00 - \$500.99	3,277,588	\$1,479,733,213	0.40%	3.77%
\$501.00 - \$750.99	3,491,738	\$2,106,615,295	0.42%	5.37%
\$751.00 - \$1000.99	1,483,087	\$1,293,491,435	0.18%	3.30%
\$1001.00 - \$1250.99	706,274	\$788,120,202	0.09%	2.01%
\$1251.00 - \$1500.99	460,172	\$633,993,374	0.06%	1.62%
\$1501.00 - \$2000.99	508,263	\$886,167,439	0.06%	2.26%
\$2001.00 +	751,864	\$2,874,733,812	0.09%	7.33%
<b>TOTAL</b>	<b>824,246,037</b>	<b>\$39,212,174,934</b>	<b>100.00%</b>	<b>100.00%</b>

# 2010 FRAUD DOLLARS BY STRAT

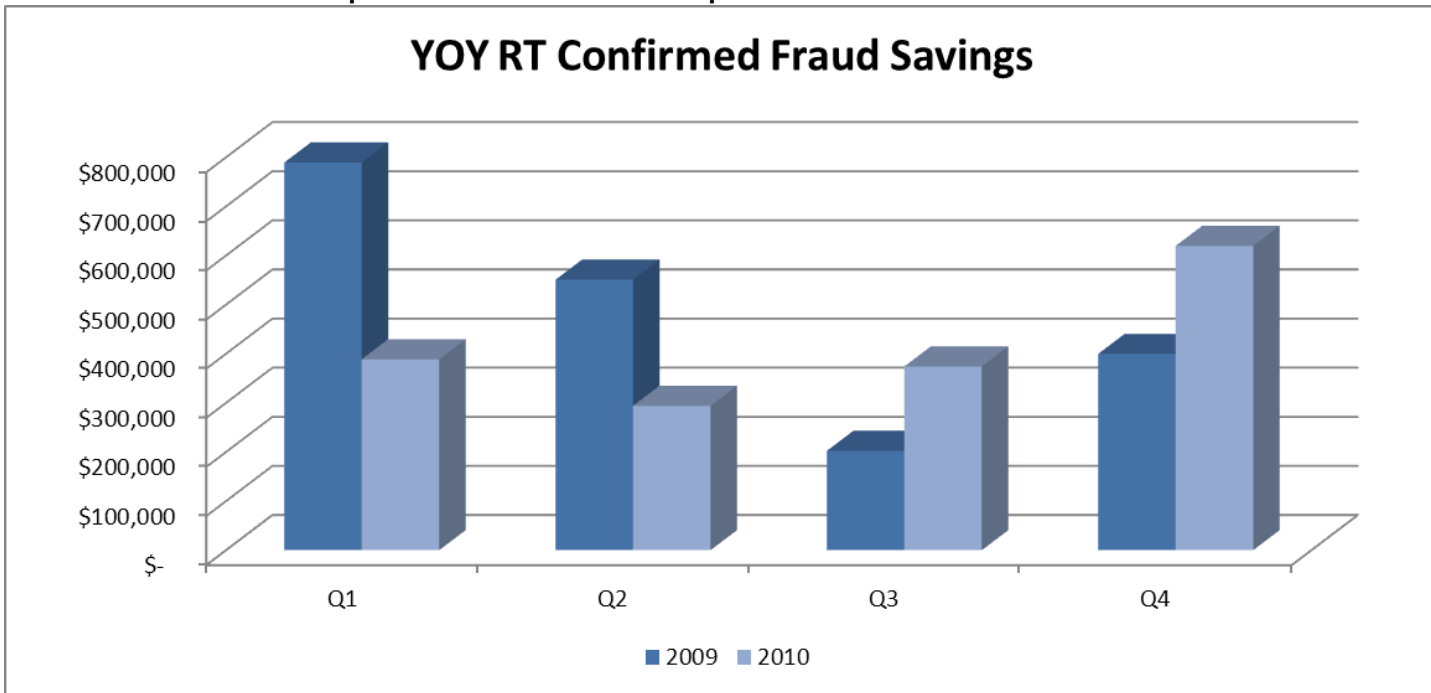
While 55% of the fraud transactions took place in the \$0 - \$50 range, 19.03% of the fraud dollars ranged between \$1001 and \$5000.



2010	Fraud Transactions	Fraud Dollars	% of Total TXNs	% of Total Dollars
\$0 - \$50	109,365	\$ 2,573,425	54.62%	10.31%
\$51 - \$100	38,047	\$ 2,867,623	19.00%	11.49%
\$101 - \$150	15,115	\$ 1,855,933	7.55%	7.43%
\$151 - \$200	9,407	\$ 1,677,638	4.70%	6.72%
\$201 - \$400	16,248	\$ 4,520,015	8.11%	18.11%
\$401 - \$600	5,485	\$ 2,660,469	2.74%	10.66%
\$601 - \$800	2,263	\$ 1,571,182	1.13%	6.29%
\$801 - \$1,000	1,488	\$ 1,340,661	0.74%	5.37%
\$1,001 - \$5,000	2,682	\$ 4,750,419	1.34%	19.03%
\$5,001 - \$10,000	110	\$ 737,361	0.05%	2.95%
\$10,001 +	23	\$ 410,434	0.01%	1.64%
<b>Grand Total</b>	<b>200,233</b>	<b>\$ 24,965,158</b>		

# YOY REAL TIME DECLINED SAVINGS

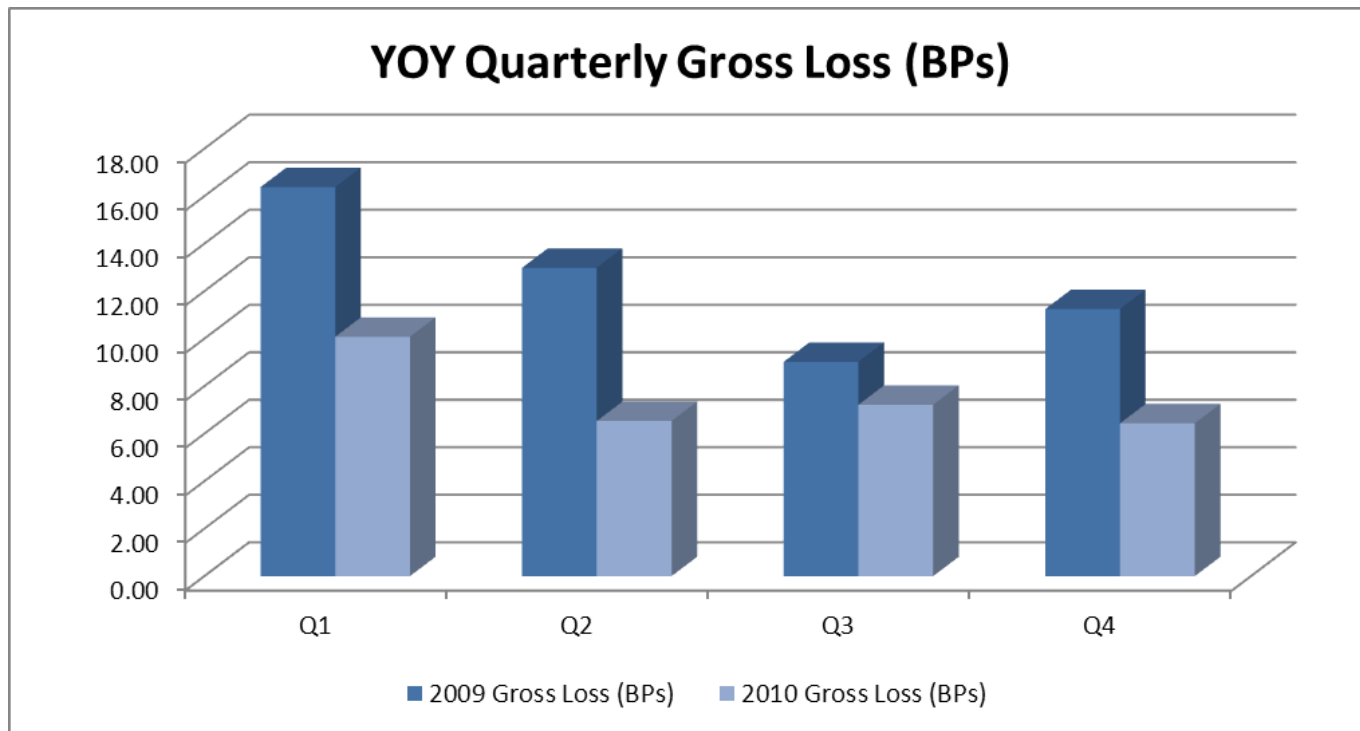
Real Time Declined Fraud Savings reduced by 13% to \$1.7M in 2010. However, the second half of 2010 experienced 65% improvement.



Confirmed Fraud RT Declines	Q1			Q2			Q3			Q4			Total		
	Auth	Volume	Avg \$	Auth	Volume	Avg \$	Auth	Volume	Avg \$	Auth	Volume	Avg \$	Auth	Volume	Avg \$
2009	1239	\$789,198	\$636.96	747	\$550,695	\$737.21	252	\$202,195	\$802.36	709	\$399,605	\$563.62	2,947	\$1,941,693	\$658.87
2010	827	\$388,690	\$470.00	664	\$293,989	\$442.75	1,031	\$374,113	\$362.86	1,783	\$619,590	\$347.50	4,305	\$1,676,382	\$389.40
YOY	-33.25%	-50.75%	-26.21%	-11.11%	-46.61%	-39.94%	309.13%	85.03%	-54.78%	151.48%	55.05%	-38.34%	46.08%	-13.66%	-40.90%

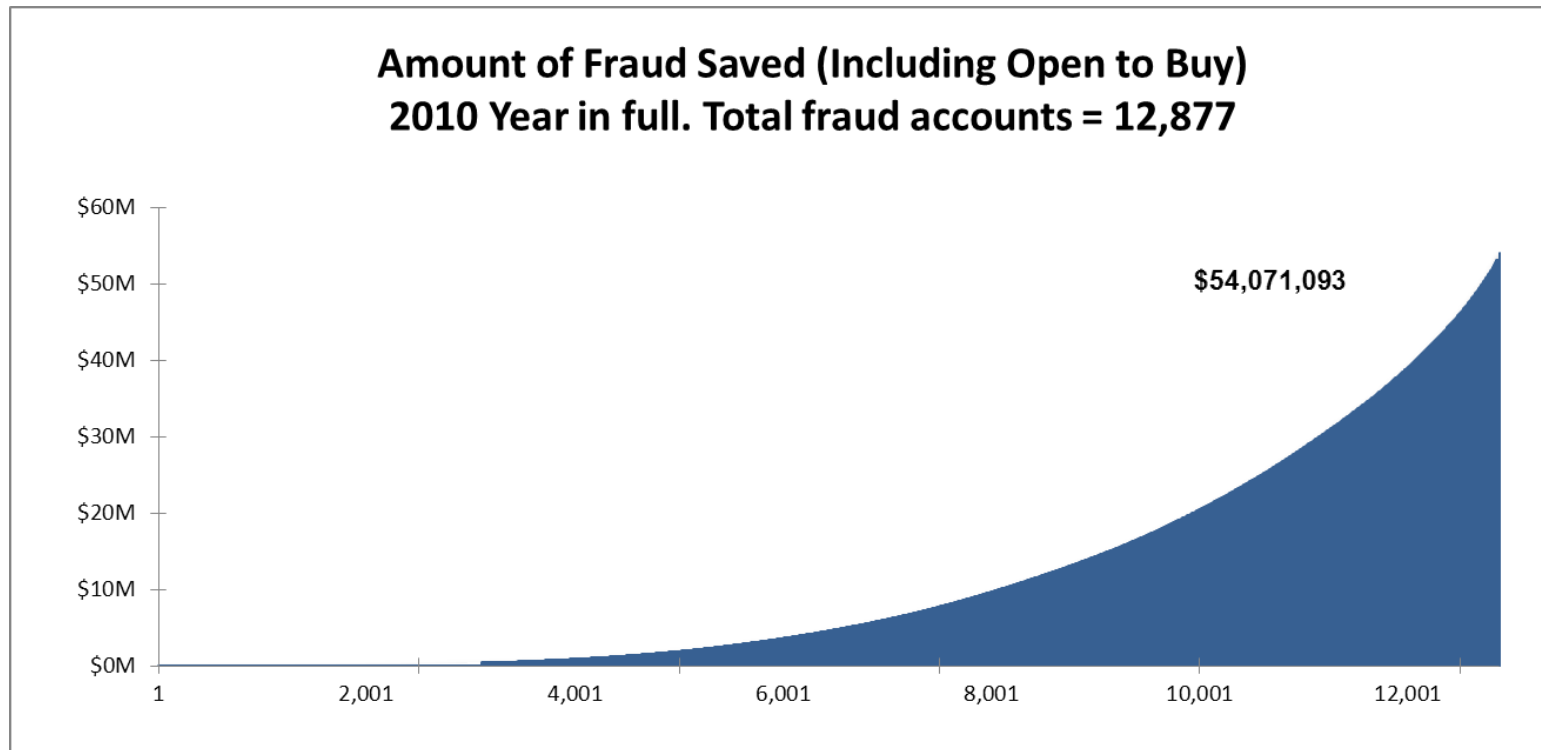
# YOY GROSS FRAUD LOSSES (BPS)

Gross fraud losses decreased by 39% from 2009 to 2010.



	2009 Gross Loss (BPs)	2010 Gross Loss (BPs)	YOY
Q1	16.38	10.08	-38%
Q2	12.98	6.53	-50%
Q3	9.02	7.22	-20%
Q4	11.24	6.44	-43%
<b>TOTAL</b>	<b>12.22</b>	<b>7.44</b>	<b>-39%</b>

# 2010 OPEN TO BUY SAVINGS



THANK YOU

Questions?