

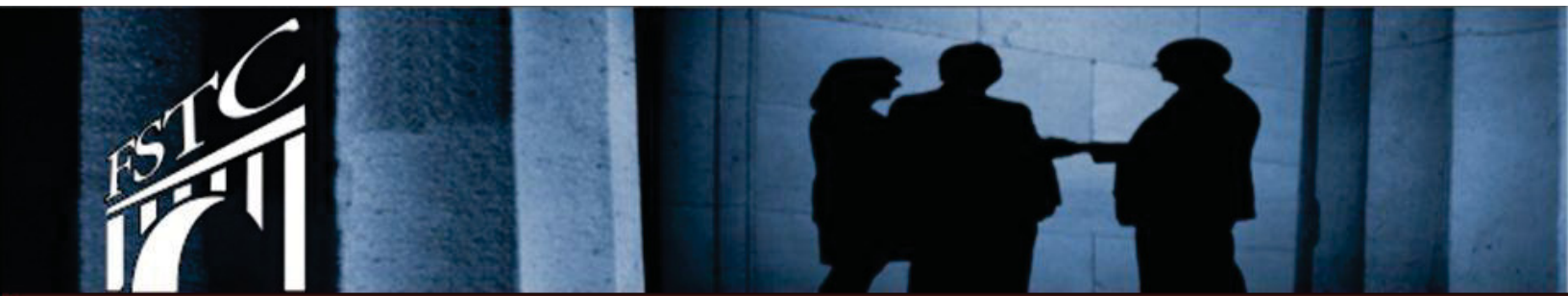
Welcome  
To  
FSTC's 2008  
Annual Conference

**FSTC's  
2008 Annual Conference**

**On the Innovative Edge:  
Successful Strategies for  
Financial Services**

**Industry Navigators**





# The Financial Services Technology Consortium

Empowering the  
Industry Through  
Innovative Ideas

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# Common Vernacular for Payments Fraud

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# **FSTC Fraud Collaboration Project Annual Conference**

**Wednesday June 18 , 2008**

## **Presenters:**

Mike Sherrod, Senior Mgr, Fraud Investigation & Dispute Services, Ernst & Young

John Fricke, Chief of Staff, FSTC

Jim Pitts, Managing Executive – Payments SCOM, FSTC

## Member Financial Institutions

Bank of America.



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## Associate Members



## Partner Organizations





## 2007 ABA Deposit Account Fraud Survey Report

Survey participants identified signature **debit card fraud**, **customer victimization scams**, and **fraudulent check deposits** as the top three threats against banks' deposit accounts in the next 12 months.

- Eight in 10 banks (80 percent) incurred check fraud losses in 2006, up from 75 percent in 2003.
- The total amount of attempted check fraud against banks' deposit accounts reached an estimated \$12.2 billion in 2006. Most of the attempts (92 percent) were caught by banks' prevention systems or measures before incurring any financial loss to the bank.
- On average, 44 percent of a community bank's 2006 check fraud losses could be attributed to organized customer scams. The percentage decreased to 14 percent at the largest banks.

## **Phase 1 Project**

- 
- 1. Legal & Regulatory Framework**
  - 2. Inventory & Catalog related Initiatives**
  - 3. Taxonomy of Financial Fraud**
  - 4. Communication Standards, Protocols, and Infrastructure**

# Burning Platform

## Fraud risk

- **higher than ever before**
  - **growing complexity of organization**
  - **history of inattention**
  - **internal audit functions**
  - **acceptance of some level of fraud as the “cost of doing business”**
- 
- **Sharing of information:** Mostly occurs at product or channel level. Limited sharing between organizations both in the financial industry and in the law enforcement although this is improving .
  - **Fraud patterns increasingly cross channel and product lines:** The source of the information often impedes the sharing. Difficult to collaborate different reports of purportedly related especially if from different products or different organizations. Data not available by customer-focused view.
  - **Recognized need for common view of fraud:** The development of a taxonomy view that maps the fraud crime, scheme, payment instrument, product and channel give a much better view of the big picture.

# Phase 1

## Who Participated?

- Financial Institutions
- Technology suppliers
- Industry related organizations

## Leadership

- Project managed by Ernst & Young
  - Legal team lead by Dexter Holt Boston Federal Reserve
  - Inventory & Catalog team lead by Karroll Searcy of PaymentsNation
  - Taxonomy team lead by Mike Sherrod of E&Y & Josh Ablett of Citizens Bank
  - Communication Standards, Protocol, and Infrastructure team lead by Mike Mulholand of Metavante and Mike Sherrod of E&Y

# Phase 1 - Results

## Key findings

- No legal framework for sharing fraud information.
- No other initiatives similar under way or planned
- Created Questionnaire to determine which products would address which Fraud Taxonomies
- Created fraud taxonomy that provides a comprehensive representation of various fraud schemes
  - Mapped the fraud crime
  - Scheme
  - Payment instrument
  - Product
  - Channel

## Taxonomy

[illegible]

## **Fraud Project – Phase 2 Goals**

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- Vendor questionnaire
  - Determine which products detect which taxonomy
  - Update taxonomy with results
- Define how we could agree to report losses by taxonomy
  - Obtain support of reporting organizations
- Define the lowest level signatures of each fraud taxonomy
- Define how and what to share real-time
  - New fraud schemes
  - Investigative information
  - How to promote

## **Deliverables**

- **Update and release the survey developed in Phase I to gather the necessary data to catalog potential industry fraud initiatives and solutions.**
  - **Scope out and identify a resource to maintain an up-to-date this catalog of solutions**
- **Determine which products detect which fraud pattern(s)**
  - **Update the taxonomy and catalog with the results.**
- **Define how we could agree to report fraud pattern incidents by taxonomy and seek the support of reporting organizations.**

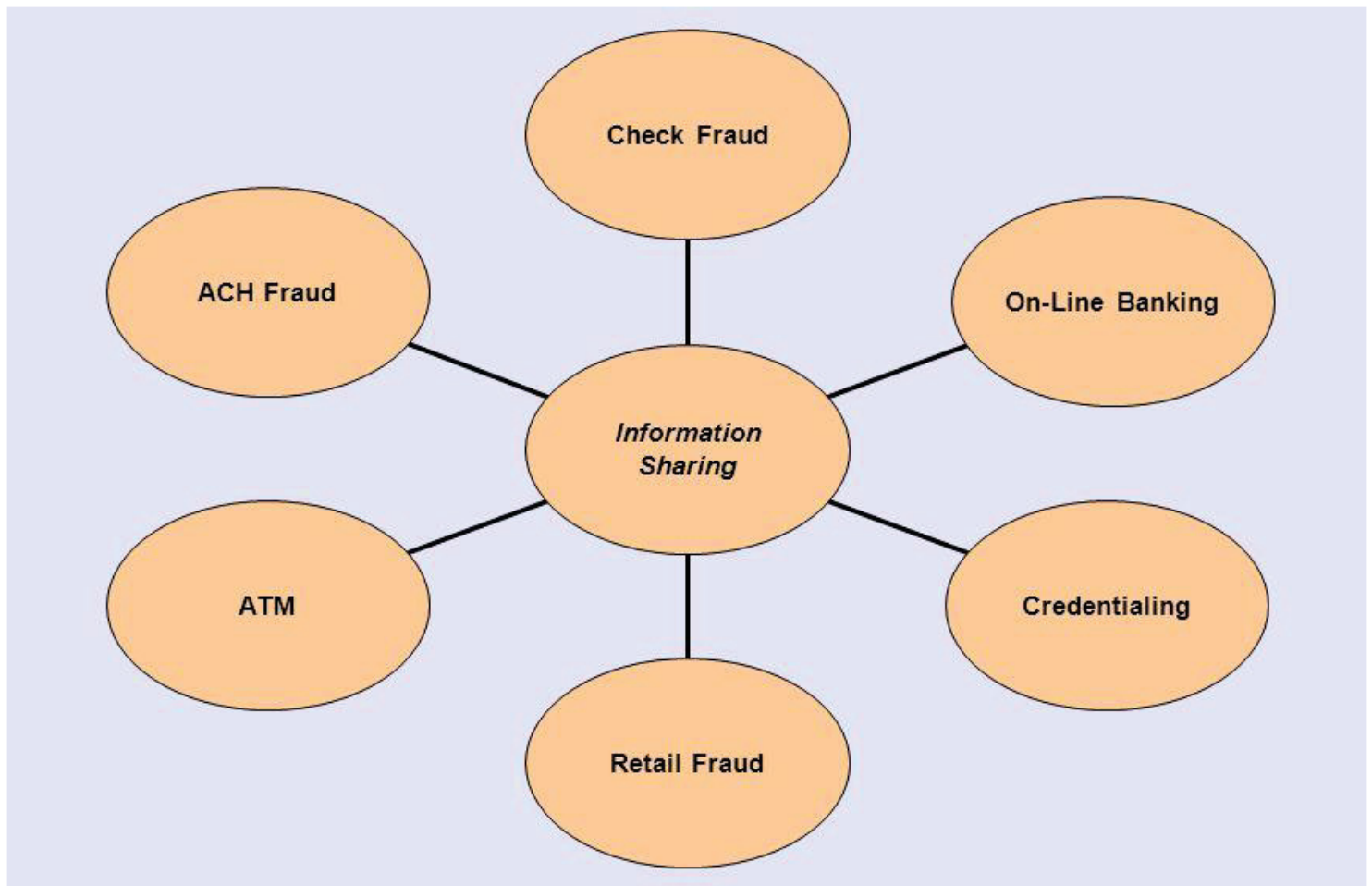
## **Deliverables**

- **Define the lowest level individual fraud patterns of each fraud taxonomy**
- **Define how and what to share real-time**
  - **new fraud schemes,**
  - **investigative information,**
    - **what use could be made of this real-time sharing to prevent or mitigate fraud.**
  - **Some illustrative use cases**
- **Develop a plan to communicate the value of the taxonomy and reporting standards to engage the industry in its use.**

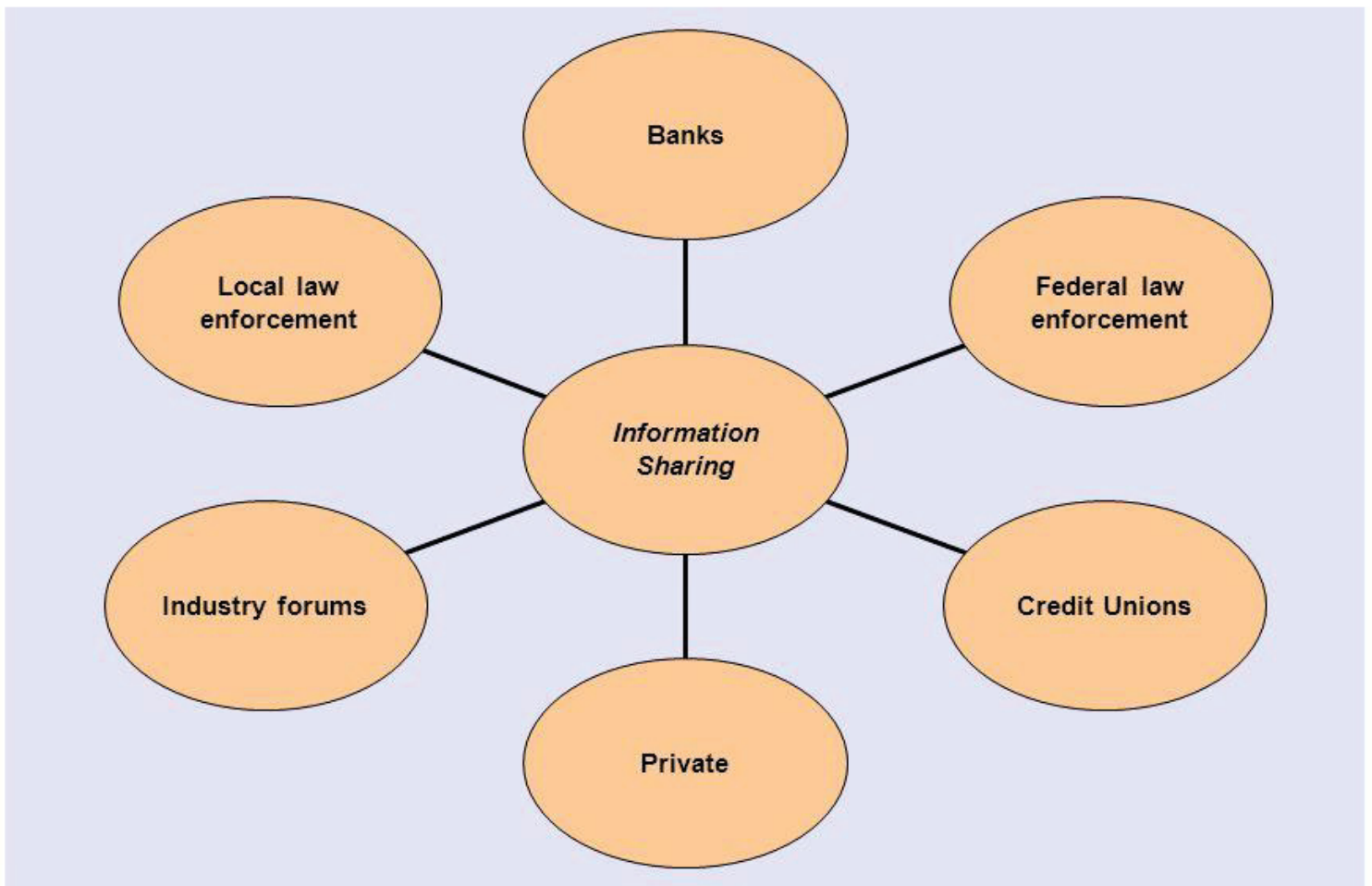
## **How can industry and enforcement work together**



## Internal and External sharing



## Internal and External sharing



# Taxonomy

Methodology  
(How the crime is committed)  
Catagories  
How Fraud is committed  
Payment Instruments  
Products  
Channels

[illegible]

# Taxonomy Data Base

- Solutions (policies, procedures, controls or applications)
- Detection
- Prevention
- Red Flag Findings
- Vendor / tool
- Transaction Fraud or Loan Fraud
- Mitigation (What can be done after detection)

# Estimated Project Schedules

- **Deliverable #1**
  - Update and release survey – 2 to 4 weeks
  - Survey response time – 1 month
  - Organization and analysis of response data – 1 month
  - Taxonomy updates – 1 month
- **Deliverable #2**
  - Define potential loss reporting methodologies – 1 to 2 months
  - Seek support from reporting organizations – 1 month
- **Deliverable #3**
  - Complete lowest level patterns for each taxonomy – 3 to 4 months
- **Deliverable #4**
  - Define collaborative sharing process details – 1 to 2 months
- **Deliverable #5**
  - Develop taxonomy promotion plans – 1 to 2 months
- **Project Conclusion Activities – 2 to 4 weeks**

# **Project Management Support**

- **FSTC Project Manager – Jim Pitts**
- **Associate Manager (PMO) – Tim Kormos**
- **Projected Participation**
  - 10 Banks, 10 Technology Providers, 5 Advisory
- **FSTC Fraud Collaboration Webonex Site**
  - Team Files/Meeting Notes/Documents
  - Glossary
  - Taxonomy
  - Data Base
  - Discussion Forums
  - Task Management/Team Project Plans

## Next Steps

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- **Project solicitation for participation**
  - Underway

- **Work group kick off Meeting**
  - Scheduled for June 16

- **Project Participation Agreement (PPA)**

- **Intellectual Property Agreement (IPA)**

# Can you Afford it?

What is your share of **\$13,000,000,000** ?

**Criminals collaborate to steal from Banks.**

Shouldn't banks collaborate to stop them???

Join us on June 24<sup>th</sup> at 3pm ET or June 26<sup>th</sup> at 11am ET for more information.

Dial 512-225-3050 pc#272373

If you are interested in the Fraud Collaboration Phase II project, please contact:

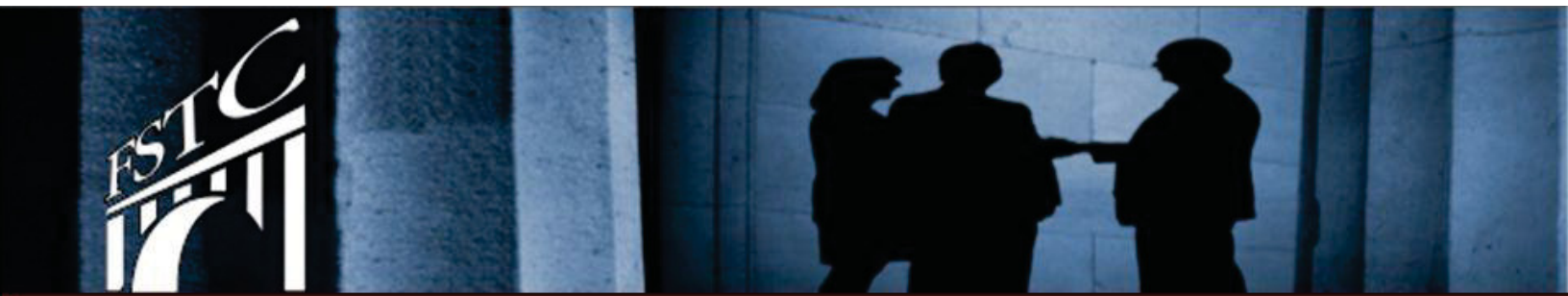
- John Fricke, [john.fricke@fstc.org](mailto:john.fricke@fstc.org), 281 - 692 – 0011
- Jim Pitts, [jim.pitts@fstc.org](mailto:jim.pitts@fstc.org), 214 - 729 - 7287



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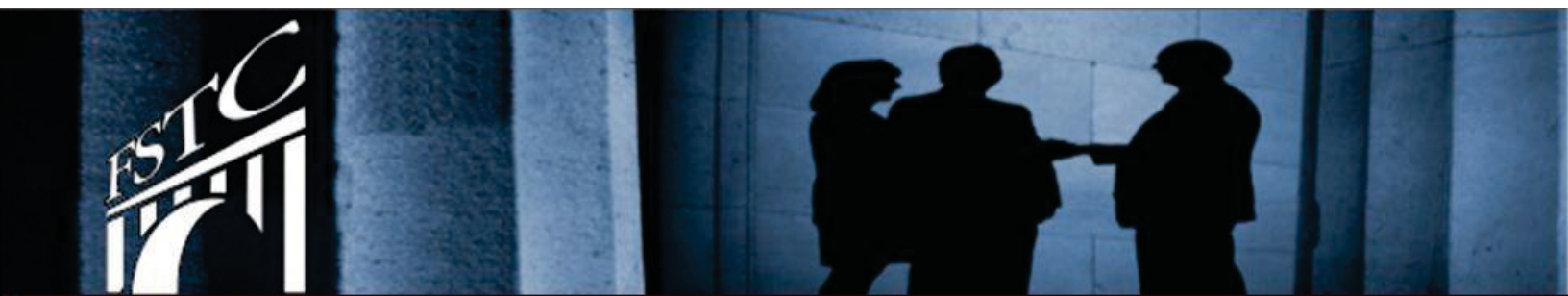
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## Afternoon Break

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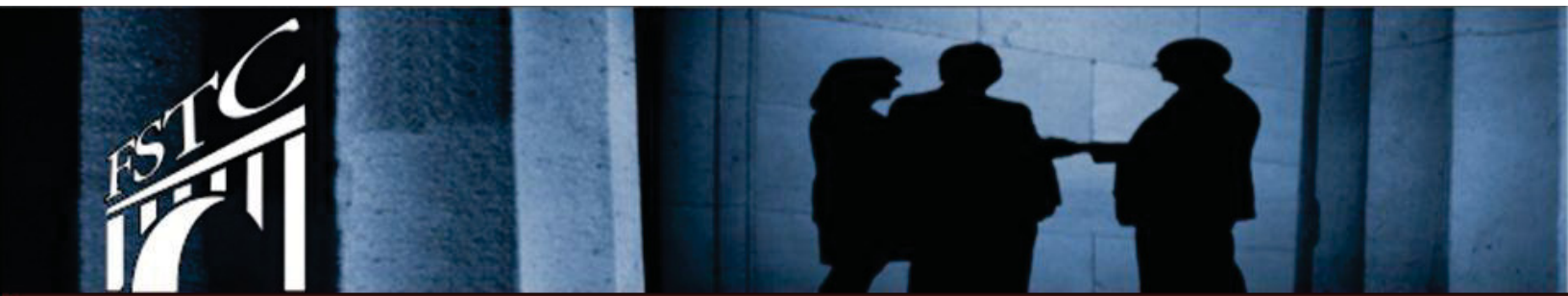


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Billions of Images. Thousands of Patterns. One Solution.



June 2008

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## Mitek Systems

### » **Located in San Diego**

- Software Analytics and Mobile Telecom Hub

### » **15 year Innovator of Image Analytics and Pattern Recognition technologies used in the U.S. Payments Industry**

- First Mobile Deposit – Patent Pending
- First Fraud Detection Product Built on Image Analytics
- First Signature “Secure Code” Validation - Patented



### » **3 of the top 5 banks in the U.S. currently use Mitek recognition technology, and more than 30 percent of nearly 30 billion U.S. checks written annually are processed with Mitek Image Analytics software**

## Mitek's Mobile Deposit Objectives

- » **Leader in *Mobile Imaging* as it relates to Banking Services and Payments**
- » **Drive new revenue models for banks, particularly related to Merchants and SMB**
- » **Leverage Mitek's IP in Check Payments, Image Correction, OCR, Document Recognition, Signature Verification and Mobile Phone Platforms**

## Key Market Drivers

### » RDC Extension to Merchant and Home Deposit

- USAA, Fiserv/CheckFree
- Image Clearing: 42.1 million images/day; 10.6 billion images/year

### » Wireless Data Trends

- >100 Million data users in the U.S
- > 50% penetrated in every demographic (except >65, 42%)

### » Camera Phone Trends

- 119 Million camera phones shipped in 2007
- Approx. 30 Million  $\geq$  2 Megapixel Camera Phones shipped in U.S in 2007

### » Mobile Banking Adoption is Accelerating

- “We are still waiting on that killer app for mobile banking”

Emmet Higdon of Forrester Research

## Mitek Launches First Mobile Deposit Application

### » High “Wow” Factor

- A Scanner in Your Hand - Extend RDC
- Always On, Always With You
- Customer Convenience is Key



### » Exceptional level of interest

- Previewed Product at BAI
- Selected “Top 10” in *Bank Technology News*
- Featured in *USA Today*
- *First Field Trial started April 2008*
- Over 200 Articles/blogs Covering **ImageNet Mobile Deposit™** Since January (Google “Mobile Deposit”)

## Define New Category: “*Mobile Merchant Capture*”

### » **Extension of Merchant Capture**

- Follow Current Market Pricing Model
- Monthly Minimum with set # of Checks
- Per Check Charge over Minimum

### » **Provide Banks Opportunity to Monetize SMB**

- Key Target Segments:
  - Mobile Workforce
  - Mobile Professional – Early Adopters
  - 28 million businesses < \$10 m and < 10 checks per day

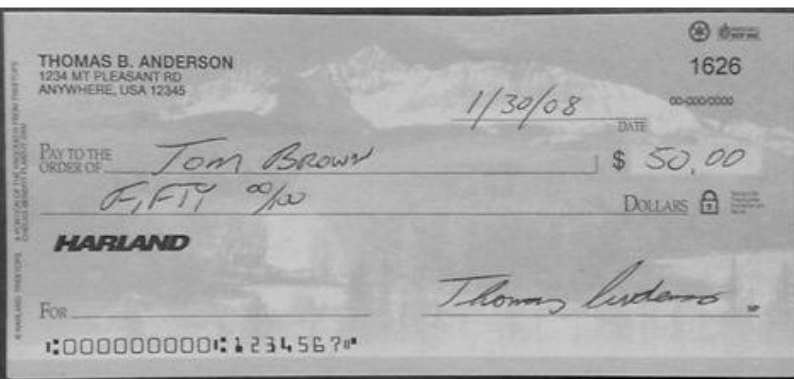
## ImageNet Mobile Deposit Capabilities

- » **Deposits a Business or Personal check using a cell phone's camera on any wireless data network ("mobile ATM")**
- » **Optimizes ease-of-use via simple menus**
- » **Provides immediate user feedback via on-screen prompts and messaging when transaction is complete**
- » **Provides immediate Transaction Review**
- » **Performs instant Check Guarantee services on-the-spot**

## Mobile Check Deposit

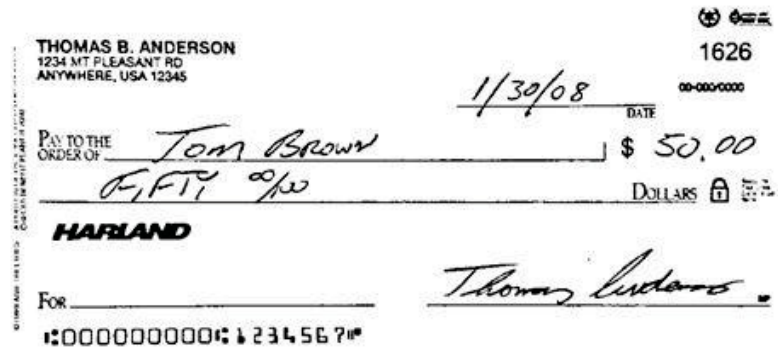


## Image Processing Example 1



### Step 1 – Capture Check Image

### Step 2 – Crop and Deskew

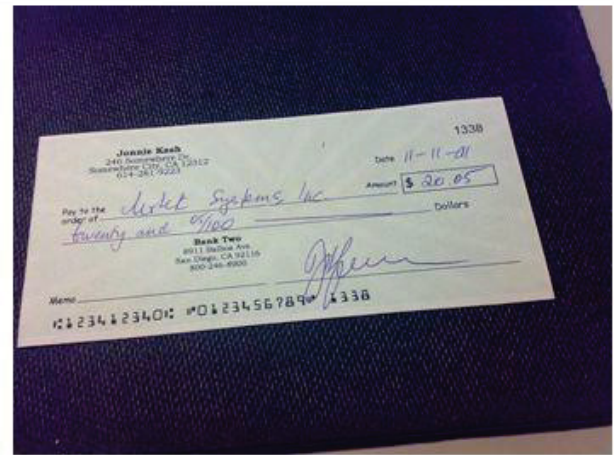


### Step 3 – Binarize Image

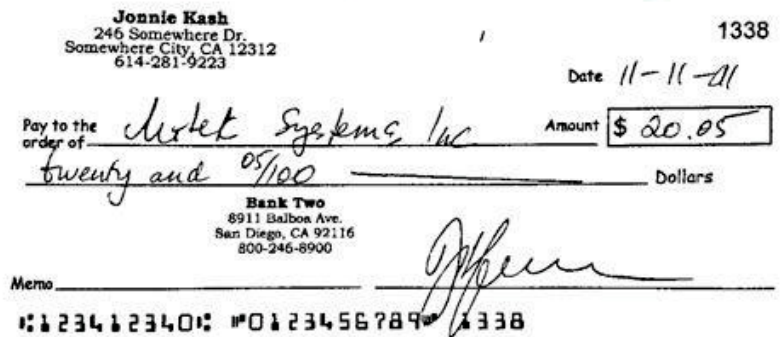
## Image Processing Example 2



### Step 2 – Crop and Deskew



### Step 1 – Capture Check Image



### Step 3 – Binarize Image

## Key Considerations

### » Security and Compliance

- Login and Logout Authorization (FFIEC)
- 128 bit encryption of data on phone
- SSL over the air
- Check 21 Compliance
- Endorsement Verification - uses Mitek's patented Secure Code signature technology optimized for accuracy and speed over the wireless network

### » Augment Existing Mobile Banking Platforms

- Check Balances
- Funds Transfer
- Electronic Bill Pay
- MOBILE CHECK DEPOSIT - New
- MOBILE PAPER BILL PAY - New

### » Augment Existing Merchant Capture Platforms

- Downloadable App connected to existing RDC system
- LOW cost of Implementation

## Key Targets and Benefits

- » **Banks Target Reliable Commercial Customers**
  - More ways to Monetize Segments
  - SMB and Professional Tradesmen
- » **Banks Attract Profitable Retail Customers**
  - Business Professional and Travelers
  - Gen X/Y don't require branch footprint
- » **Banks Enhance Brand Leadership**
  - Innovation "Halo" effect attracts desirable customers and supports customer service
- » **Banks Leverage Existing RDC Investment**
  - LOW cost of Implementation - Downloadable App connected to existing RDC
  - Uses existing Merchant Capture Pricing paradigm, but simpler
- » **Banks Leverage Existing Mobile Banking Initiatives**
  - Bridges the gap between Mobile and Paper



## Adoption Considerations

### » For Users – Make it Simple

- More Convenience, Less Clicks
- Interoperability with Camera Phones and Networks
- Application Download Ease – “Over The Air”
- High Willingness to Pay for Business Process Improvement (eg. Faster funds availability, new business outreach via mobility, less risk)

### » For Financial Institutions – Make ‘em Pay

- Monetize, Monetize, Monetize
- Merchant Capture and Credit Card Guarantee Pricing Paradigms
- Interoperability with Existing Bank Systems, Handsets and Networks

## Conclusions

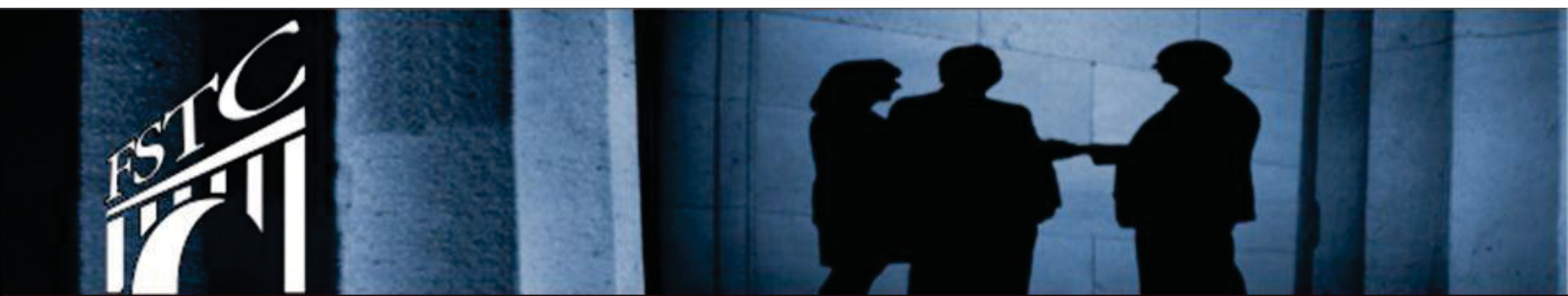
- » **Mobile Deposit provides an instant “Wow” appeal to customers**
  - Added Convenience
  - Added Ease of Use
  - Added Brand “Halo” of Innovation
  
- » **Specifically Targets Mobile Workforce as Extension of Merchant Capture**
  - Mobile Deposit addresses the huge downstream market for businesses requiring a RDC solution for < 10 checks per day
  - Solid Usage and Business Case
  
- » **Ready for Immediate Deployment**

# ImageNet

## Mobile Deposit



June 2008



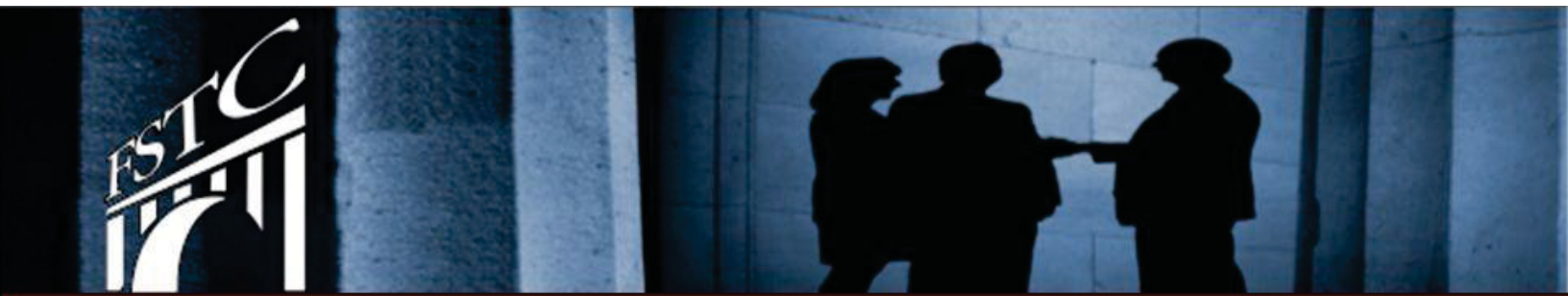
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Plus....Madrigal Vineyards Wine Tasting!

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