



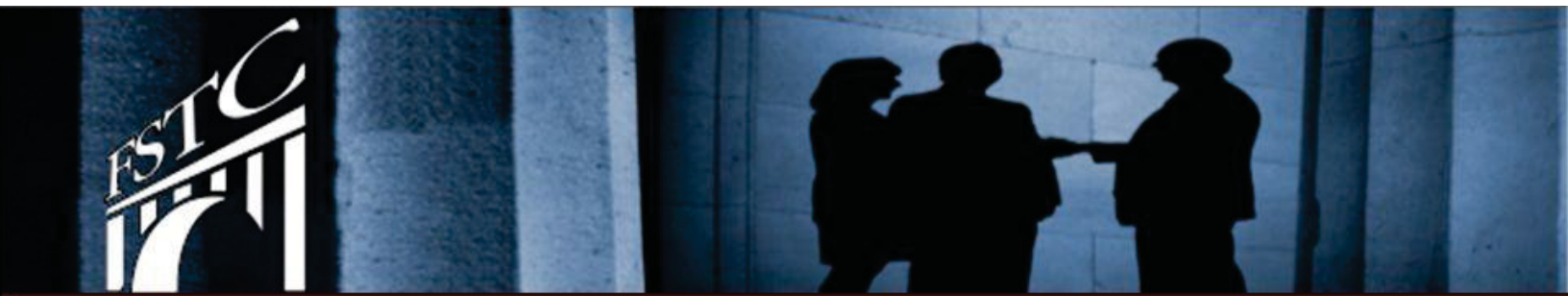
Welcome
To
FSTC's 2008
Annual Conference

**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

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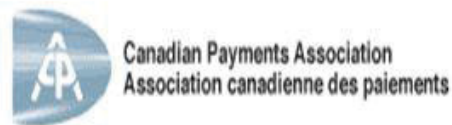
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Partner Organizations





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

- 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.**

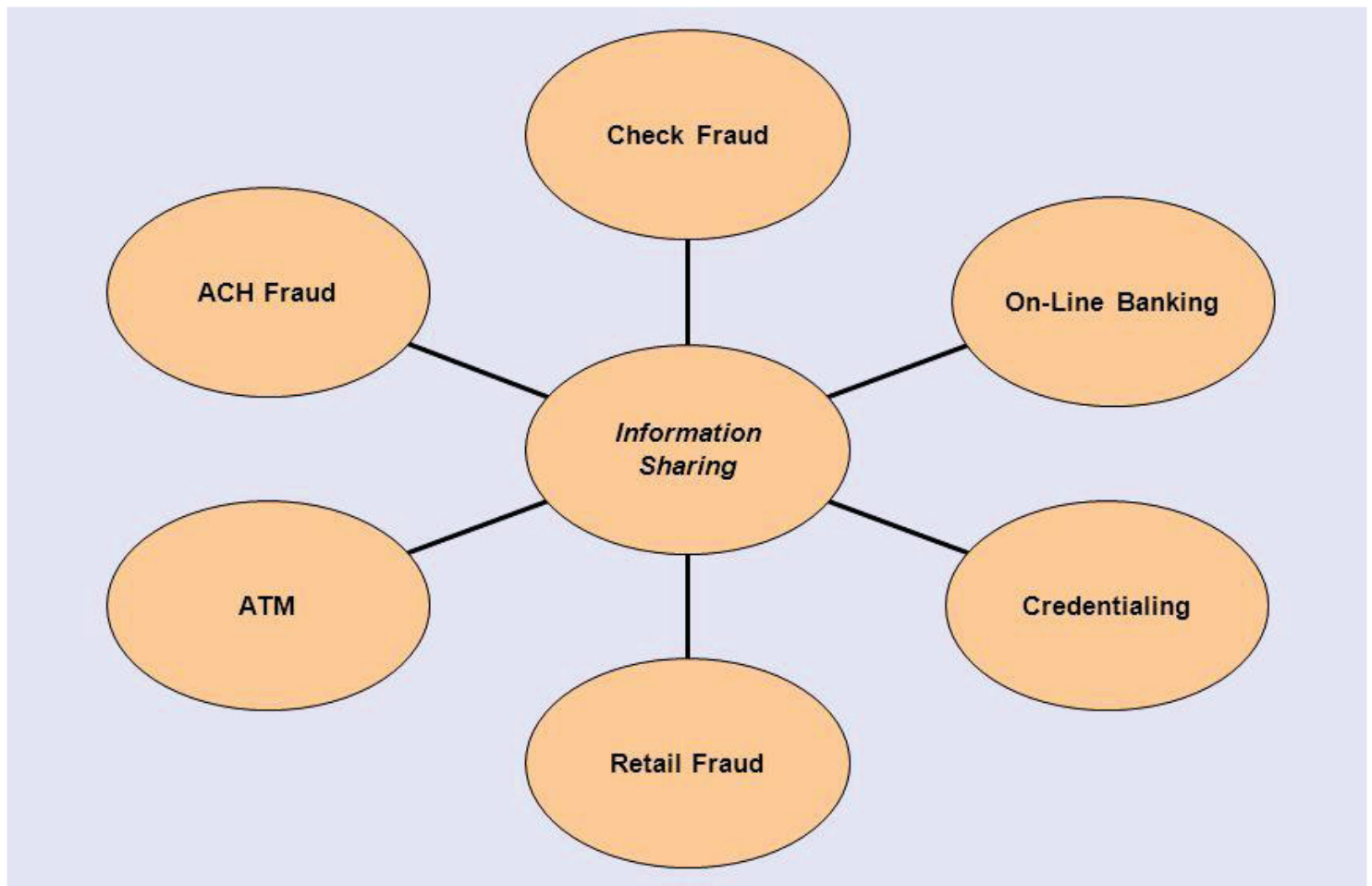
Deliverables

- **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.**

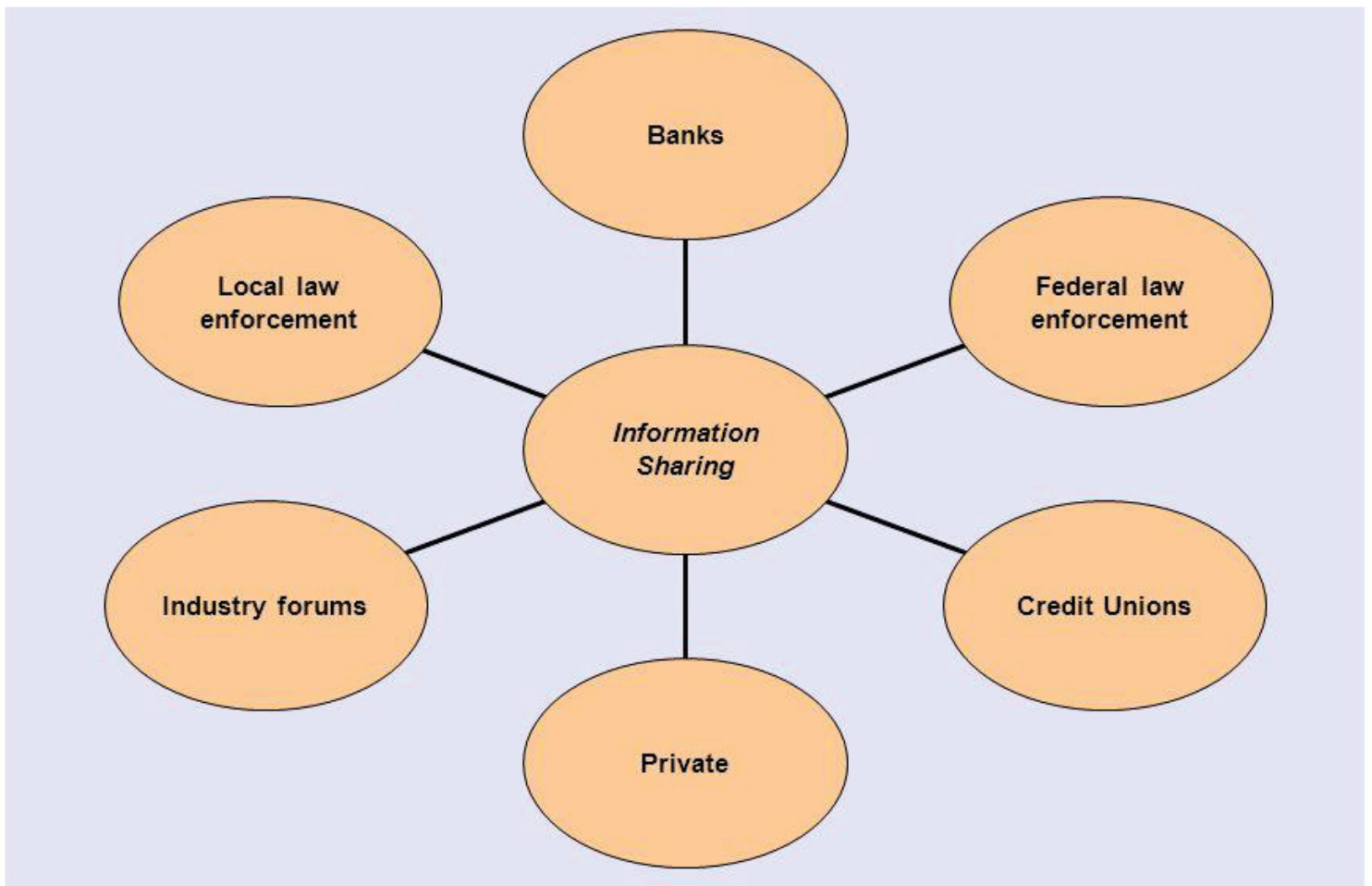
How can industry and enforcement work together



Internal and External sharing



Internal and External sharing



Taxonomy

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

Methodology (How the crime is committed)	Categories	Payment Instruments	Products	Channels
Identity Theft	Identity Theft	Identity Theft	Identity Theft	Identity Theft
Phishing	Phishing	Phishing	Phishing	Phishing
Business Email Compromise	Business Email Compromise	Business Email Compromise	Business Email Compromise	Business Email Compromise
Card Fraud	Card Fraud	Card Fraud	Card Fraud	Card Fraud
Check Fraud	Check Fraud	Check Fraud	Check Fraud	Check Fraud
Wire Transfer Fraud	Wire Transfer Fraud	Wire Transfer Fraud	Wire Transfer Fraud	Wire Transfer Fraud
Mobile Phone Fraud	Mobile Phone Fraud	Mobile Phone Fraud	Mobile Phone Fraud	Mobile Phone Fraud
Internet Fraud	Internet Fraud	Internet Fraud	Internet Fraud	Internet Fraud
Telemarketing Fraud	Telemarketing Fraud	Telemarketing Fraud	Telemarketing Fraud	Telemarketing Fraud
Mail Fraud	Mail Fraud	Mail Fraud	Mail Fraud	Mail Fraud
ATM Fraud	ATM Fraud	ATM Fraud	ATM Fraud	ATM Fraud
Bank Fraud	Bank Fraud	Bank Fraud	Bank Fraud	Bank Fraud
Insurance Fraud	Insurance Fraud	Insurance Fraud	Insurance Fraud	Insurance Fraud
Healthcare Fraud	Healthcare Fraud	Healthcare Fraud	Healthcare Fraud	Healthcare Fraud
Real Estate Fraud	Real Estate Fraud	Real Estate Fraud	Real Estate Fraud	Real Estate Fraud
Automotive Fraud	Automotive Fraud	Automotive Fraud	Automotive Fraud	Automotive Fraud
Government Fraud	Government Fraud	Government Fraud	Government Fraud	Government Fraud
Academic Fraud	Academic Fraud	Academic Fraud	Academic Fraud	Academic Fraud
Art Fraud	Art Fraud	Art Fraud	Art Fraud	Art Fraud
Intellectual Property Fraud	Intellectual Property Fraud	Intellectual Property Fraud	Intellectual Property Fraud	Intellectual Property Fraud
Technology Fraud	Technology Fraud	Technology Fraud	Technology Fraud	Technology Fraud
Energy Fraud	Energy Fraud	Energy Fraud	Energy Fraud	Energy Fraud
Food and Beverage Fraud	Food and Beverage Fraud	Food and Beverage Fraud	Food and Beverage Fraud	Food and Beverage Fraud
Travel and Hospitality Fraud	Travel and Hospitality Fraud	Travel and Hospitality Fraud	Travel and Hospitality Fraud	Travel and Hospitality Fraud
Religious and Charitable Fraud	Religious and Charitable Fraud	Religious and Charitable Fraud	Religious and Charitable Fraud	Religious and Charitable Fraud
Political Fraud	Political Fraud	Political Fraud	Political Fraud	Political Fraud
Environmental Fraud	Environmental Fraud	Environmental Fraud	Environmental Fraud	Environmental Fraud
Other Fraud	Other Fraud	Other Fraud	Other Fraud	Other Fraud

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

- **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.

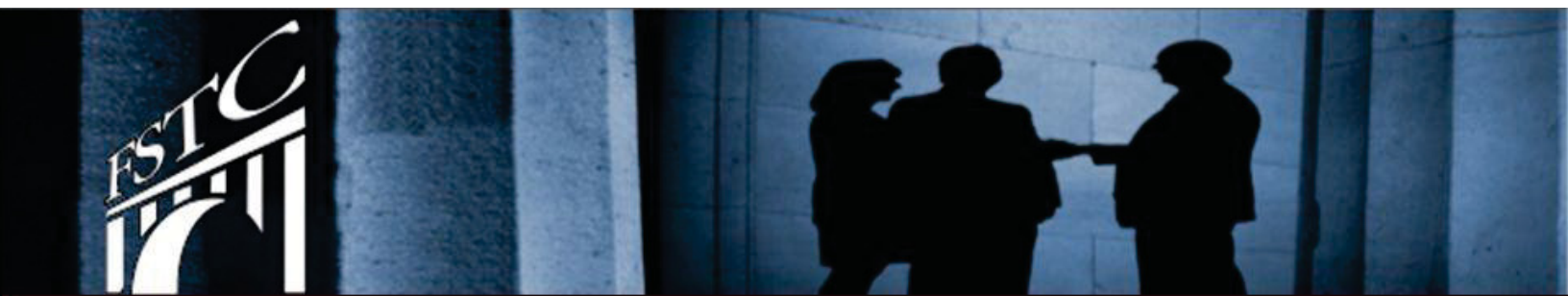
Shouldn't banks collaborate to stop them???

Join us on June 24th at 3pm ET or June 26th 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:

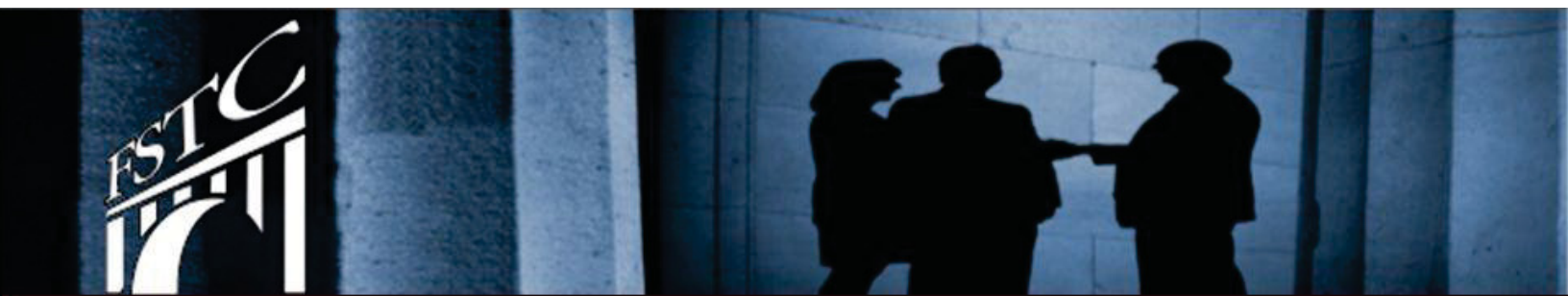
- John Fricke, john.fricke@fstc.org, 281 - 692 – 0011
- Jim Pitts, jim.pitts@fstc.org, 214 - 729 - 7287



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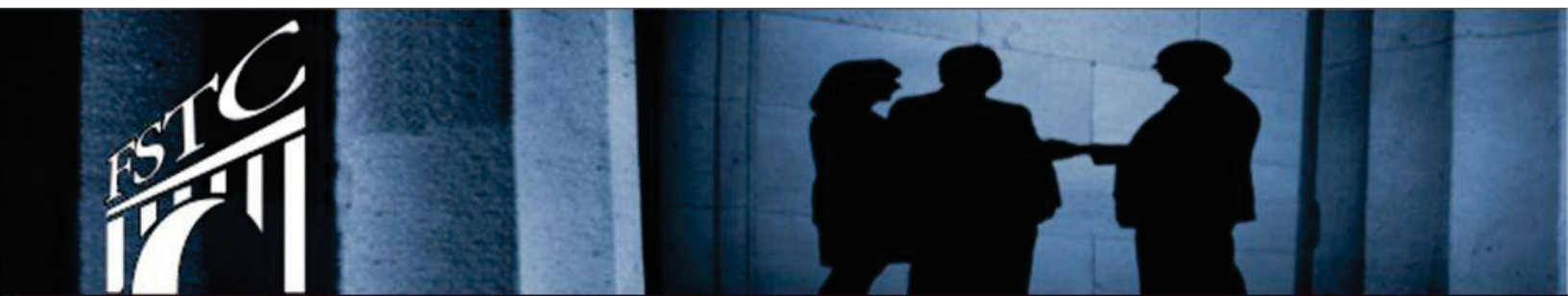
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Afternoon Break

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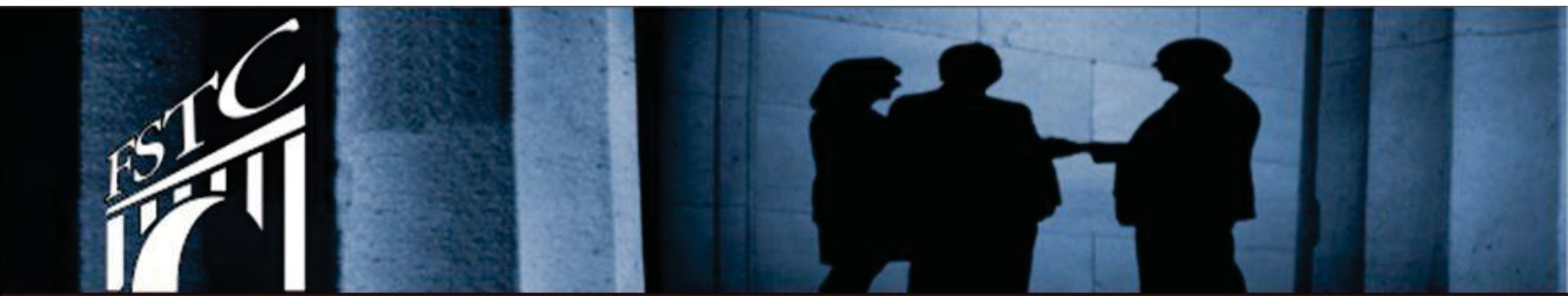


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Business Process and Re-Engineering of Payments

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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

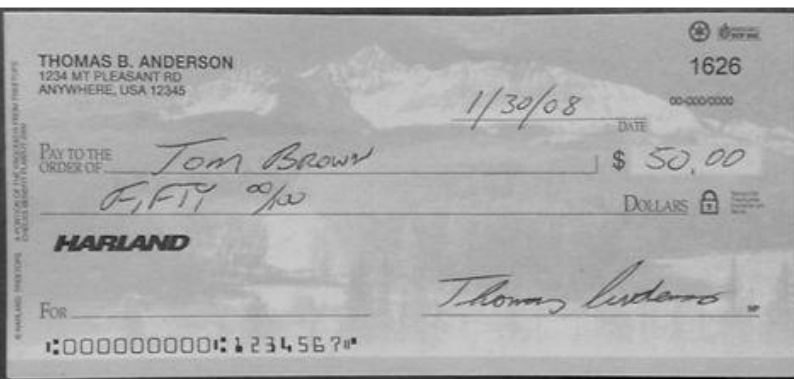
ImageNet Mobile Deposit Capabilities

- » **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

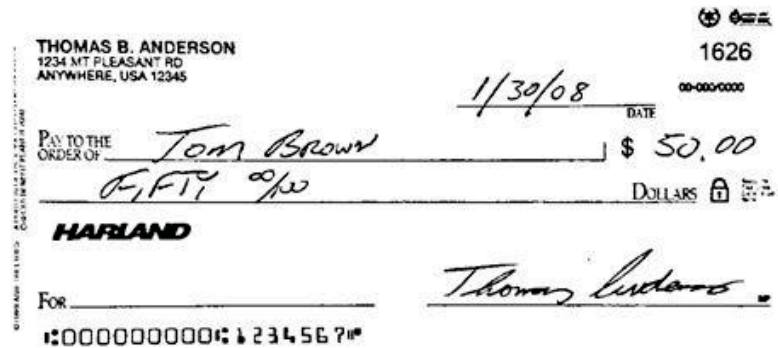


Image Processing Example 1



Step 1 – Capture Check Image

Step 2 – Crop and Deskew

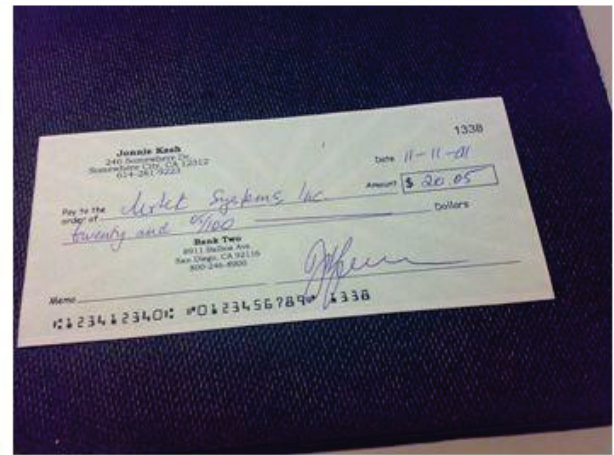


Step 3 – Binarize Image

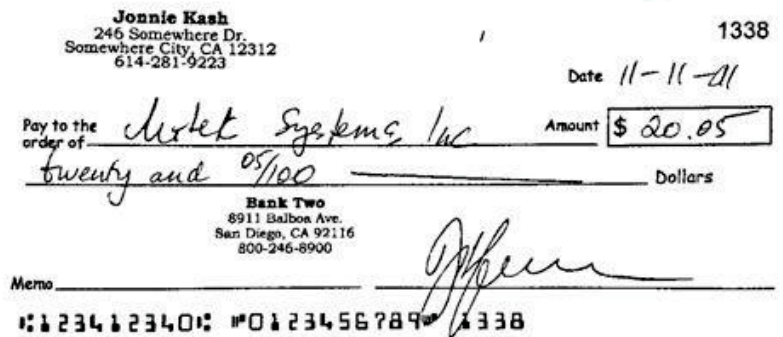
Image Processing Example 2



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**



Billions of Images. Thousands of Patterns. One Solution.

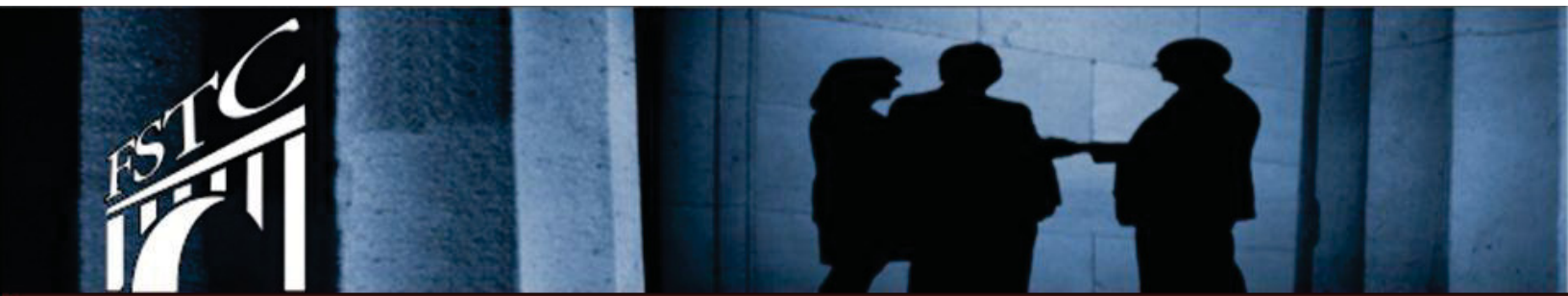
ImageNet

Mobile Deposit

A logo icon consisting of a black magnifying glass with a blue circular lens. Inside the lens is a white bar chart with three bars of increasing height. The magnifying glass handle is black and points towards the bottom left.

June 2008

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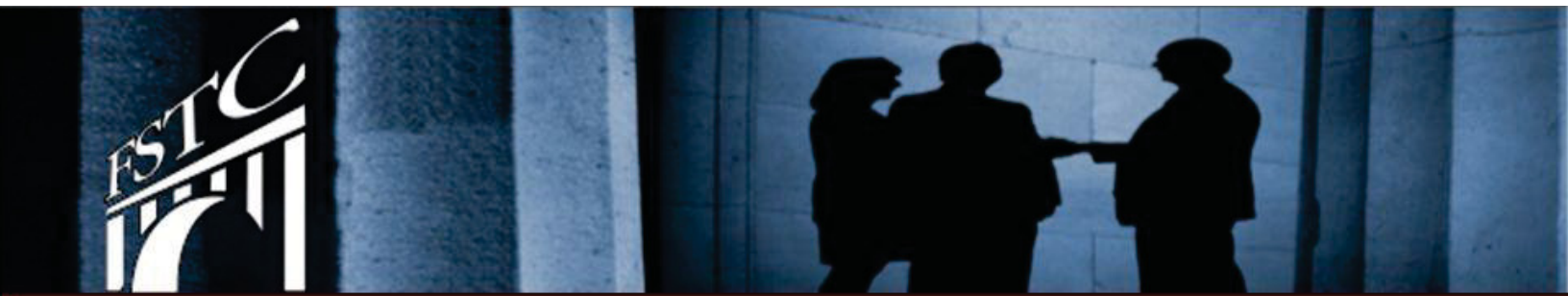
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Plus....Madrigal Vineyards Wine Tasting!

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