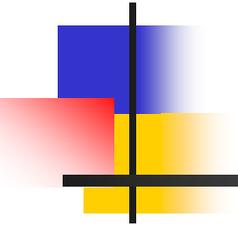
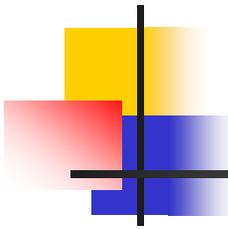


# Emerging Payments Research Group

## Federal Reserve Bank of Boston



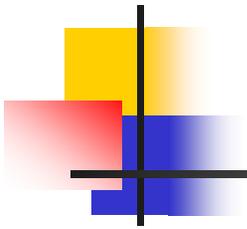
Jim Cunha  
Vice President  
Electronic Payments and Treasury Services



# Emerging Payments Research Group

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- What is the EPRG
- Why Look at Consumer and Merchant Behavior
- What we do
  - Conference in October
  - Consumer Behavior Survey
  - Industry Outreach
  - Cash Usage Study
  - Merchant Focus Groups
  - Prepaid Cards
  - Mobile Payments
  - Underbanked



# What is the Emerging Payments Research Group?

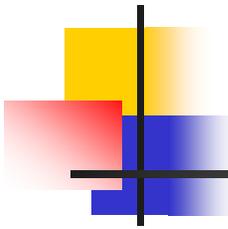
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- Cross functional team
  - Payment staff
  - Economists
- Goal:
  - Understand *why* consumers make payment choices
    - Economic research to date
      - Focus on supply of payments
      - Not consumer demand
    - Within context of a dynamic payments landscape
      - Paper to electronic
        - Decline in check volume
      - New payment technology
        - Contactless
      - Merchants accepting more payment types
        - Prepaid/Gift Cards

# Why focus on Consumer & Merchant Behavior?



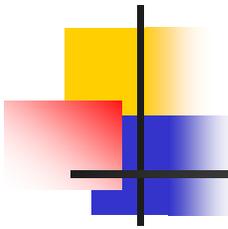
- Fed's primary view of payment is through its customers- Banks
- Much research has been done on process
- Need to understand what consumers prefer and *why*



# What we do

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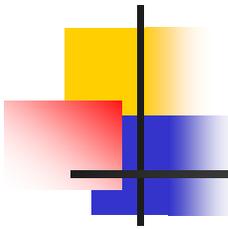
- Conference in October
- Consumer Behavior Survey
- Industry Outreach
  - Block Island Case Study
  - Merchant Focus Groups
- Cash Usage Study
- Prepaid Cards
- Mobile Payments
- Underbanked
- Trends



# October Conference

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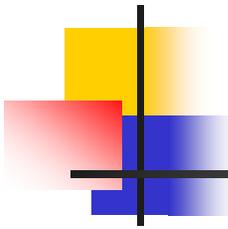
- Goal: Stimulate new economic research on consumer payment behavior
- Collaboration of Economists and business leaders
- Review research papers
- Industry panels on POS and bill payment behavior



# Consumer Payment Surveys

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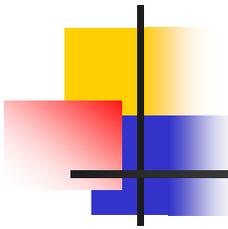
- Little data on why to analyze
- Fed System survey
- Co sponsor Dove/ABA 2005 Consumer Payment Survey
- Cash survey in 2006



# Industry Outreach

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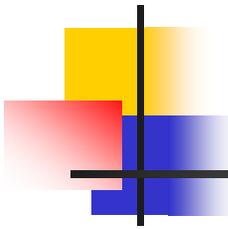
- Meet with NE Area companies to share knowledge and understand issues they face
- Leadership team projects:
  - Block Island
  - Merchant focus groups



# Block Island Case Study

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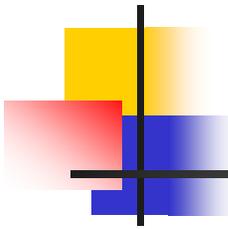
- Leadership team analyzes payment system within microcosm: Block Island
- Analyzed cash usage and other payment types used by tourists and residents
- Looked at opportunity for prepaid cards



# Merchant Focus Groups

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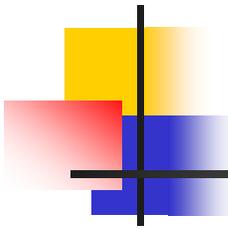
- Leadership team will conduct merchant focus groups over Q3&4 of 2005
- Goal: Understand payments through the eyes of merchants
- How much do merchants care about payment?
  - Transaction fees can be costly
- How does a merchant decide what payment types to offer?



# Cash Usage Study

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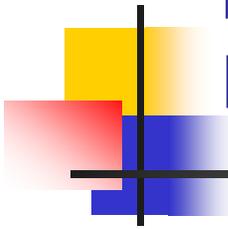
- Central cash office for Federal Reserve interested in understanding cash demand by merchant and consumer
- Will play an important role in understanding consumer and business needs
- Cash has often been viewed as the payment default; no comprehensive analysis of cash as a payment type



# Prepaid Cards: Open vs. Closed

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- Open System
  - Electronic Benefit Transfer (EBT)
  - Payroll
  - Flexible/ Medical Spending
  - Visa/MC/AMEX Issued Cards
    - Simon Mall Visa
- Closed System
  - Retailer Issued
    - Starbucks
    - Gap
    - Barnes and Noble
  - Transit
  - Phone Cards

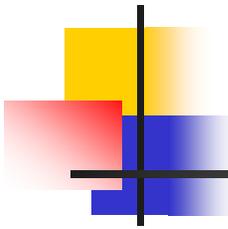


Prepaid:

## FRB Operated System for US Treasury/Military

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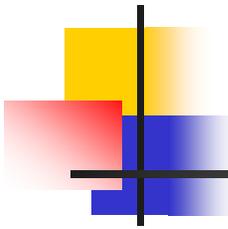
- US Military training bases
- Overseas peace keeping operations
  - Army and Air Force
- Closed system
- Smart card based
- POS machines
- Kiosks for loading and unloading
- Back office accounting in Boston



# Mobile/Contactless Payments

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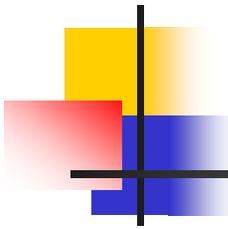
- US use of mobile payments:
  - Fast Lane
  - Mobile Speed Pass
- Contactless standard Fall 2004
- Will soon see readers at fast food chains and retailers
- Future integration with cell phones



# Underbank Populations

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- 9.5M in US do not have a checking account
- Check cashing is expensive
- New prepaid products for this population
  - Payroll cards
  - Rush & Usher prepaid cards
  - Electronic Transfer Accounts (ETA)

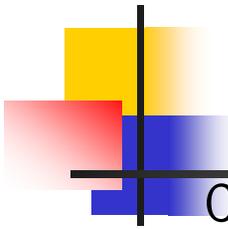


# Payment Trends

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- Total non cash payments are increasing
  - 2000: 72.5B
  - 2003: 81.2B
- Electronic payments exceeded total non-cash payments in 2003

*Source: 2003 Federal Reserve Payments Study*



# Payment Trends

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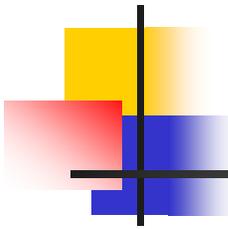
Check volume is declining

- From 41.9 B in 2000 to 36.7 in 2003\*
  
- ARCing:\*\*
  - Began in 2002
  - Reached 1.25B in 2004
  - Projected: 2B in 2005
  
- Check 21: 800,000 items per night (FRS Only)

Cash Volume needs more analysis

*Sources:*

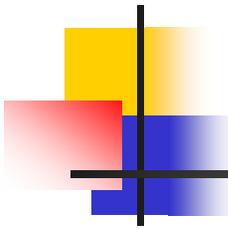
*\*Federal Reserve Payments Study    \*\*NACHA*



# Payment Trends

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- Payment landscape is changing
  - Mobile and contactless payments
  - Micropayments:
    - Big Macs: charge small value purchases
    - New opportunities: I Tunes
  - Prepaid cards are growing
    - Payroll cards
    - Unbanked communities
    - Most large merchant: Dunkin Donuts



# Final Comments

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## ■ Q&A

- Trends the R&C Banks are seeing
- Impact of migration from paper to electronic?