Clearing RDC Roadblocks
It’s Time and Here’s How

Lee Wetherington, AAP
Director of Strategic Insight
ProfitStars®

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Lee Wetherington
Director of Strategic Insight

- Develops actionable insight and strategy for the financial services industry
- Delivers keynotes nationwide
- Serves as the Technology Faculty Chair for several regional banking schools
- Published in many industry trades
- Degrees in Economics and English from Duke University
- Accredited ACH Professional (AAP)

@leewetherington
Agenda

• RDC Update
• The Stakes
• Top 5 RDC Roadblocks
• Clearing Roadblocks
• The RDC Risk Myth
• Acing the RDC Exam
• The Bottom Line
Potential for Remote Deposit

Checks deposited by format¹
100% = 24.4 billion

1 Format by which account holders deposit checks at the depository institution of first deposit.

Federal Reserve Payments Study: December 2010
The Competition
Chase Ups the Ante

GET CHASE QUICK DEPOSIT FOR FREE*
SAVE $600 PER YEAR
WHEN YOU DEPOSIT AT LEAST 10 CHECKS PER MONTH.¹

Now you can deposit checks online - right from your desk!

Key advantages:
- Scan paper checks with a FREE scanner provided by Chase and the electronic images are deposited directly into your Chase Business Checking account
- All transactions are secure and can be viewed on Chase Online℠ for Business
- Reduce paperwork with online storage of check images and transaction history
- No limit on the number of deposits that can be made
- Scan up to 150 checks in a single deposit²
- Save time and money with 24/7 convenience

PLUS – Get a FREE check scanner, an $885 value!

Enroll in Chase Quick Deposit by July 31, 2010, and pay no monthly fee when you deposit at least 10 checks per month – a savings of $600 per year!¹
Mobile Remote Deposit (mRDC)

Quick Deposit

Deposit To: CHASE CHECKI (..9884)
Amount: $50.00

Check Images

Check Front

Check Back

PayPal

Add money from checks to your PayPal account with your phone’s camera. Just snap photos, submit them, and wait for the check to clear.

When that’s done (usually in about six business days) the money will show up in your PayPal account.
PayPal acting more like a bank with mobile remote-deposit capture feature to its Apple Inc. iPhone application is helping solidify that view, according to one industry observer.

The mobile remote-deposit capture feature “is the continuation of [PayPal’s] extension into bank-like payments services and shows their ability to disintermediate the banks in all typed of payment avenues,” says Andy Schmidt, a research director in TowerGroup’s global payments service.
PayPal RDs $100K in First Day

PayPal check scanning tallies $100K in 36 hours

by Don Reisinger

October 8, 2010 8:25 AM PDT

More than $100,000 worth of checks got deposited through PayPal’s mobile check-capture service in its first 36 hours, the company announced.

“We knew that this would be popular, but we had no idea how much pent up demand there was...,” a PayPal spokeswoman wrote on the company’s blog yesterday.

PayPal’s iPhone app, which was updated with the new feature on Wednesday, lets people take a picture of a check and have that amount deposited into their PayPal account at no charge. The service requires people to hold onto checks for 15 days to allow them to clear, but PayPal says that the time it takes to get the funds into the account is “at most six days.”
Javelin predicts 100 million mBanking users by 2014, half of which see mRDC as highly desirable

(50 million users for Mobile Deposit)
Mobile RDC Adoption

Mobile RDC Adoption

2010
- Have a solution: 15%
- Piloting: 36%
- Planning a solution: 45%

2009
- Have a solution: 6%
- Piloting: 20%
- Planning a solution: 72%

SOURCE: Celent
William Mills’ “Bankers As Buyers 2011”
• 23% of ALL consumers find mRDC desirable (Mercatus)
• 39% of ALL small biz owners find mRDC desirable
• 18% of ALL adults have smartphones today, growing to 52% in 2014
• 74% of ALL business transactions are paid with checks
• 50% of all iPhone users + 29% more in "second wave" totaling 79% find mRDC desirable.
Mobile Bankers Want in mRDC

Consumer Likelihood to Use Mobile RDC

Top 3 box scores among mobile banking users

Note: Top 3 boxes include respondents indicating they would be somewhat likely, likely or extremely likely to adopt mobile RDC if their bank offered the service. Respondents indicated their likelihood to use mobile RDC on a 1 to 5 scale where 1 = Extremely Likely; 2 = Likely; 3 = Somewhat Likely; 4 = Slightly Likely; 5 = Not At All Likely

Source: Mercatus 2009 Financial Services Franchise Health Study Part 2 (N=1,744)
The Economics
High Cost of Branch Transactions

• Branch transactions are down 1/3 to 1/2 in past 4 years.
• Only 30% of banking transactions now take place in a branch.
• Since branch operating costs are fixed, cost of in-person banking transactions have increased 30-40%!!!

“A Lifetime of Change in 24 Months??!!”
Presented by Fred Brothers of eCom Advisors
at NACHA Mega Meeting; 9/23/2009
FI Transaction Costs by Channel

- Branch: $4.00
- Call Center: $3.75
- IVR: $1.25
- ATM: $0.85
- Online: $0.17
- Mobile: $0.08

Source: TowerGroup, Fiserv/M-Com Data

Fiserv White Paper: “How to Achieve a Compelling ROI from Mobile Financial Services”; www.checkfree.com
## FI Deposit Costs

<table>
<thead>
<tr>
<th>Channel</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-Person Branch Deposit</td>
<td>$4.25</td>
</tr>
<tr>
<td>Shared Branching/Foreign ATM</td>
<td>$3.00</td>
</tr>
<tr>
<td>Mail</td>
<td>50 - 75¢</td>
</tr>
<tr>
<td>Remote Deposit Capture</td>
<td>&lt;10¢</td>
</tr>
</tbody>
</table>

SOURCE: “The Little Guy’s High Tech Advantage”; by Jim Daly; Digital Transactions; p. 28; March 2011
What Businesses Want Right Now

1. Ease
2. Control
3. Cost Reduction
Remote Deposit Capture: Update

• Less than 10% of SMBs have RDC
• 60% of SMBs bank online
• 35% of SMBs willing to pay for RDC
• 25% willing to pay between $15 and $39 per month for RDC
• 7% would be willing to pay more than $55 per month (Aite)

SOURCE: Aite’s “Increasing Bank Success With Small-Business Remote Deposit” JULY 2009
Financial Institution RDC Calculator

- Daily Check Volume: 10
- Daily Average Deposit Value: $10,000
- New Deposit Balances: $100,000
- Monthly RDC Fee: $50

http://discover.profitstars.com/remotedepositexpert
# RDC ROI Calculator for the FI

## Financial Institution RDC Calculator

*Changes will be saved until your web browser is closed.*

<table>
<thead>
<tr>
<th>Bank Calculation Variables</th>
<th>%</th>
<th>$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return items as % of volume</td>
<td>0.500</td>
<td></td>
</tr>
<tr>
<td>Return Item fee</td>
<td>25.00</td>
<td></td>
</tr>
<tr>
<td>Deposit Multiplier</td>
<td>2.00</td>
<td></td>
</tr>
<tr>
<td>Bank Loan Spread</td>
<td>6.00</td>
<td></td>
</tr>
<tr>
<td>Bank Float Spread</td>
<td>15.00</td>
<td></td>
</tr>
<tr>
<td>Bank Rate of Return</td>
<td>10.00</td>
<td></td>
</tr>
<tr>
<td>Clearing Cost reduction (per item)</td>
<td>0.050</td>
<td></td>
</tr>
<tr>
<td>Processing Efficiency Gains (per item)</td>
<td>0.020</td>
<td></td>
</tr>
</tbody>
</table>

[http://discover.profitstars.com/remotedepositexpert](http://discover.profitstars.com/remotedepositexpert)
RDC ROI Calculator for the Business

http://discover.profitstars.com/remotedepositexpert
RDC ROI Calculator for the Business

Business RDC Value Calculator

*Changes will be saved until your web browser is closed.*

Business Calculation Variables

- Mileage cost per mile: $0.550
- Business (deposit) Days Per Year: 252
- Business Rate of Return: 10.00%
- Availability Acceleration (days): 1.50
- Time spent Preparing Bank Deposits (minutes per deposit): 10

http://discover.profitstars.com/remotedepositexpert
The Stakes
## Businesses’ Value to FIs: LTVs

<table>
<thead>
<tr>
<th>Business Size (Annual Revenue)</th>
<th># of Businesses in Tier</th>
<th>Annual FI Revenue Per Business</th>
<th>Life Time Value (LTV)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;$100K</td>
<td>19M</td>
<td>$300</td>
<td>$2400</td>
</tr>
<tr>
<td>$100-$500K</td>
<td>5M</td>
<td>$1,000</td>
<td>$8,000</td>
</tr>
<tr>
<td>$500K-$10M</td>
<td>1.5M</td>
<td>$7,000</td>
<td>$56,000</td>
</tr>
<tr>
<td>$10-$20M</td>
<td>60K</td>
<td>$20,000</td>
<td>$160,000</td>
</tr>
</tbody>
</table>

**Sources:** Presentation delivered by Intuit Financial Services at Source Media Small Business Banking Conference November 2010; Treasury Strategies Benchmarking Database: NOTE: Average Term of Commercial Relationship is 8 Years

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**ProfitStars**
Revenue Potential: RDC

Figure 10: Revenue Potential of Small-Business Remote Deposit

Estimated Annual Potential Revenues That Could Be Generated From Remote Deposit by Adoption Level (US$Millions)

Source: Aite Group’s July 2009 Small-Business Survey
Top 5 RDC Roadblocks
Top 5 RDC Roadblocks

1. Lack of Awareness (by SMBs)
2. Upfront Cost (During Cost-Cutting Times)
3. FI’s Perceived Risk (vs. Actual Risk)
4. FI’s Uncertainty about Compliance
5. Lack of Planning, Marketing & Execution
Clearing Roadblocks
Clearing Roadblocks

1. Understand the economics/cost-benefit
2. Market beyond existing clients
3. Lower upfront costs (no scanner charge)
4. Let them try it (touch it, do it)
5. Get a reality check on RDC risk
6. Ace the RDC exam; it’s easy
7. Plan and execute
Get the Word Out
Marketing Beyond Existing Clients

- Which of your customers make good RDC users?
- What other companies have a similar profile in and near your service area?
- How can you identify and target specific potential customers?
  - Targeted methodology
Tools for Targeting RDC Prospects

• The Tools:
  • Market data
  • Market analysis
  • Expanded marketing plan
  • Targeted campaign focused on desired market or merchant type
  • Expanded communication plan
  • Expanded visibility (branch, web, advertising, mail, email, etc.)
Identifying RDC Prospects

Using SIC codes, you can target specific businesses within a geographic footprint. Some examples:

<table>
<thead>
<tr>
<th>SIC Code</th>
<th>Business Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1521</td>
<td>General Contractor</td>
</tr>
<tr>
<td>1711</td>
<td>Plumbing, Heat and Air</td>
</tr>
<tr>
<td>2759</td>
<td>Commercial Printing</td>
</tr>
<tr>
<td>3993</td>
<td>Advertising</td>
</tr>
<tr>
<td>4724</td>
<td>Travel Agency</td>
</tr>
<tr>
<td>4789</td>
<td>Transportation</td>
</tr>
<tr>
<td>5023</td>
<td>Home Furnishings</td>
</tr>
<tr>
<td>5087</td>
<td>Service Establishment</td>
</tr>
<tr>
<td>5521</td>
<td>Motor Vehicle</td>
</tr>
</tbody>
</table>
Clearing Other Roadblocks

• Compliance “Gray” Areas
  – Align policies/procedures with FFIEC guidance
  – Develop RDC Qualification Checklist
  – Leverage existing customers’ lines of credit to expedite RDC qualification process
  – Monitor deposits & flag deviations in reporting

• Client Aversion to Technology
  – Bank installs scanner, trains new clients
  – Remote training and support
Clearing Other Roadblocks, cont’d

- Client Aversion to New Responsibility
  - Education and training
  - Emphasize quality controls of RDC system
    - Balance Assist; CAR/LAR; Dual-controls
    - Other RDC system safeguards
  - Simple, clear error-resolution steps
The RDC Risk Myth(s)
Remote Deposit Risk Myths

1. Anything electronic or digital is riskier than paper.

2. FFIEC RDC Guidance says RDC is riskier than paper deposits.

3. If it involves a computer, it’s riskier than paper.
Paper Check Deposit Myths

1. Paper check deposits receive more scrutiny.

2. Paper check deposits receive any scrutiny.

3. Easier to detect fraud on a paper check than on an image of a check.
Paper Check Deposit Reality

1. Must manually write individual check amounts on deposit slip.

2. Must manually add individual check amounts to calculate total deposit amount.

3. Must write total deposit amount on deposit slip.
Remote deposit is safer than manual deposit of paper checks.

- Stipulation: The remote deposit service is one secured by common, commercially reasonable controls.
Stipulated RD Controls

- Enforced dual-control
- CAR-LAR capture of check data
- Balance assist
- Auto/calculated e-deposit slips
- Risk-based velocity controls
  - Limits for individual deposit items, total deposits, total daily deposits
- Duplicate detection/prevention
- Standard RDC agreements
Fraud Risk

Paper vs. Remote Deposit
Has your bank experienced any RDC-related fraud?

- Yes: 0.9%
- No: 99.1%
“…after several years of using remote deposit capture technology, the rate of fraud or any loss associated with it has been infinitesimal…”

Bob Meara
Senior Analyst
Celent

http://www.mysanantonio.com/business/52555732.html, Web Posted: 08/06/2009 12:00 CDT
# Fraud Risk

## Deposit Risks

<table>
<thead>
<tr>
<th>Provisional credit and/or hold policy</th>
<th>Paper</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agnostic</td>
<td>No manual scrutiny of each check for signs of fraud.</td>
<td>Velocity controls and limits for per-item, per-deposit, and daily deposits. Auto scrutiny.</td>
</tr>
<tr>
<td>Ability to detect a fraudulent check</td>
<td>Even if each check was manually reviewed, sophistication of today’s printers make detection virtually impossible.</td>
<td>Auto detection of lack of MICR at point of capture.</td>
</tr>
</tbody>
</table>
Credit Risk

Paper vs. Remote Deposit
Credit Risk: Clarifications

• The method of deposit does not introduce more credit risk.
• Credit risk is a function of the hold policy for the account on which checks are returned, not the method of deposit.
• Credit risk exposure for returned checks is also a function of time vis-à-vis holds; the quicker the return, the smaller the window of risk exposure for the BOFD.
## Credit Risk

### Deposit Risks

<table>
<thead>
<tr>
<th>Losses on check returns</th>
<th>Paper</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>No velocity limits controlling unintentional (operational) or intentional (fraud) check return.</td>
<td>Velocity limits control for unintentional (operational) and intentional (fraud) check return.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Speed of clearing</th>
<th>Paper</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td>Slower clearing creates longer return window and more exposure vis-à-vis holds.</td>
<td>Faster deposit/clearing creates shorter return window and less exposure vis-à-vis holds.</td>
<td></td>
</tr>
</tbody>
</table>

**NOTE:** Ubiquity of image clearing, even for manual paper check deposits, will eventually make paper check clearing almost as fast as end-to-end image clearing.
Operational Risk

Paper vs. Remote Deposit
<table>
<thead>
<tr>
<th>Deposit Risks</th>
<th>Paper</th>
<th>Remote</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Deposit to wrong account</strong></td>
<td>Must manually choose right deposit slip based on right account number.</td>
<td>Virtual deposit slips auto-created from deposit account alias.</td>
</tr>
<tr>
<td><strong>Wrong deposit total</strong></td>
<td>Manual calculation of deposit total open to human error.</td>
<td>Automated calculation of deposit total; no math errors.</td>
</tr>
<tr>
<td><strong>Bad image quality</strong></td>
<td>Most paper checks are captured and cleared via image regardless of initial deposit method.</td>
<td>Few FIs engage IQA due to volume of rejects for checks that otherwise clear without exception.</td>
</tr>
<tr>
<td><strong>MICR misread</strong></td>
<td>Eventual auto capture of MICR data by branch capture. Similar to remote capture.</td>
<td>Detects/controls for lack of MICR. Auto capture of MICR data.</td>
</tr>
</tbody>
</table>
The Bottom Line

• Remote deposits receive more scrutiny than paper deposits.

• Remote deposits are exposed to less human error than paper deposits.

• Remote and paper deposits are otherwise subject to the same risks of check clearing:
  – Provisional credit/holds determine credit risk on returned checks, not deposit method.
The gap between real and perceived RDC risks creates huge opportunity!
Acing the RDC Exam
RDC: Top 5 Exam Findings

1. Lack of Oversight  
   - By Senior Management & Board
2. Lack of Adequate MIS and Reporting
3. Lack of Monitoring
4. Inappropriate Approval Process  
   - No separation of duties
5. Inadequate Limits or No Limits

How to Preempt a “Tough” Exam

1. Establish Appropriate Deposit Limits
   • “Logical” and “Reasonable”

2. Demonstrate Diligent Monitoring
   • Selective RDC Client Approval

3. Develop MIS (System/Software Controls)

4. Exhibit Ongoing Fraud Concern

5. Improve RDC Awareness of Senior Management & Board
   • RDC Guidelines Brochure (Reference for Management)
     • Wayne Russell (FRB Atlanta): (404)498-7241
Questions?
Housekeeping

- You will receive an email link to an archived recording of today’s presentation and a PDF of the presentation slides.

- Direct follow-up questions to:

  sales@profitstars.com

- RDC Knowledge Center

  http://discover.profitstars.com/rdc-knowledge-center-form-page/
http://discover.profitstars.com/strategicallyspeaking/
Lee Wetherington, AAP

http://discover.profitstars.com/leewetherington

http://twitter.com/leewetherington

http://www.linkedin.com/in/leewetherington