

Are you ready for the future of customer interactions?

YES

Branch Optimization: The Basics of Cash Recycling

April 30, 2009
2:00 – 3:00 p.m. ET.



- I. Teller Cash Recycler Overview and Industry Trends and Market Conditions**

- II. Branch Cash Recycling**

- III. TCR Business Impact and Case Studies**

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Bob Meara - Senior Analyst, Celent

Brian Pilla – Director of Marketing, NCR Corp.

Teller Cash Recycler versus Dispenser Functions

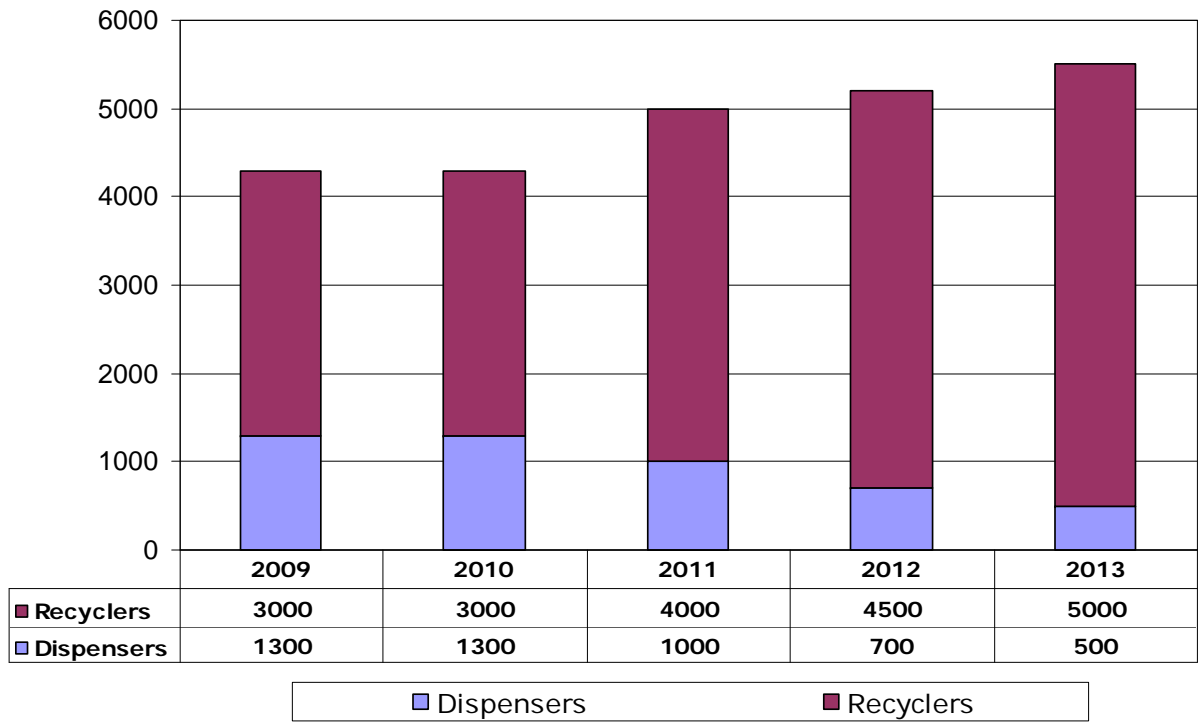


Function	TCR	TCD
Cash In	✓	
Cash Out	✓	✓
Vault Buys	✓	✓
Vault Sells	✓	
Note Validation	✓	
Night Deposit Processing	✓	
Teller Drawer Management	✓	
Lower Branch Cash	✓	
Sort & Count Notes	✓	
Monitor Cash Utilization	✓	

RBR: US Teller Assist Unit Forecast Shipments



Figure 12: TAU Shipments, by Type, 2009 - 2013



- It seems that dispensers are considered obsolete by an increasing number of FI's.
- "...will replace many dispensers with recyclers."
- "...only planning to deploy recyclers from now on..."
- "...over the next five years the market for recyclers is expected to grow significantly, as many intend to replace older dispensers with recyclers.
- By the end of the forecast period there are expected to be more recyclers in the market than dispensers.

Source: Retail Banking Research

Cash management solution:

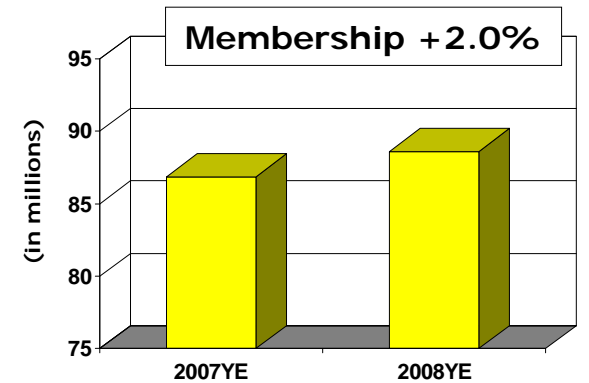
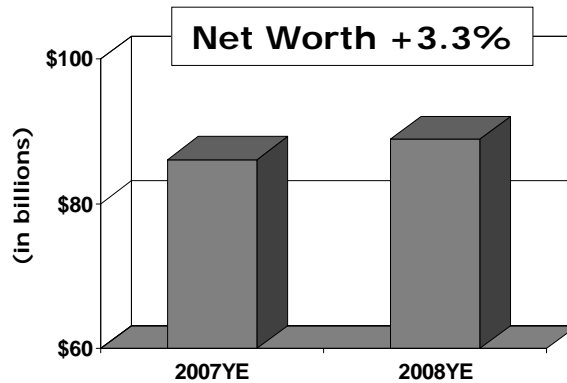
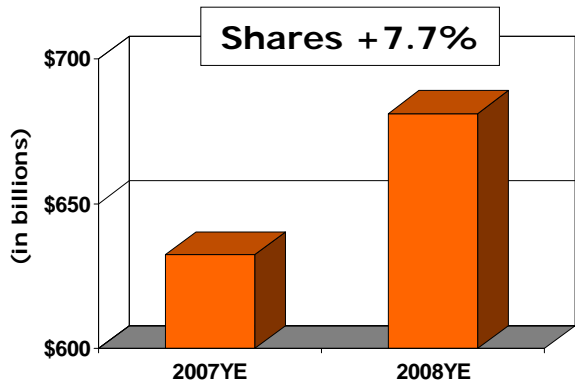
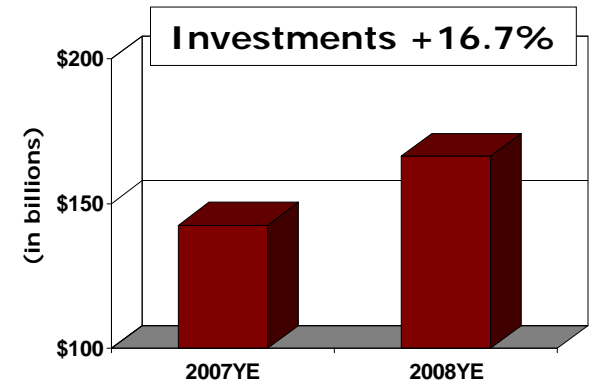
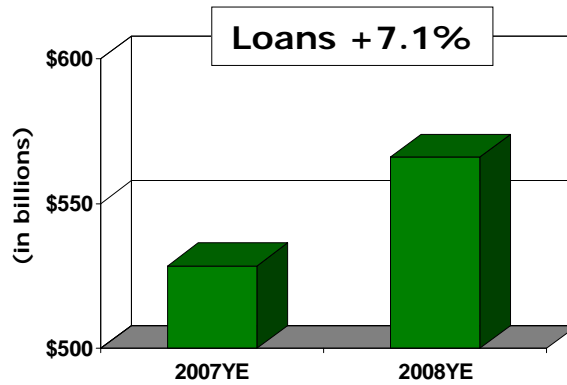
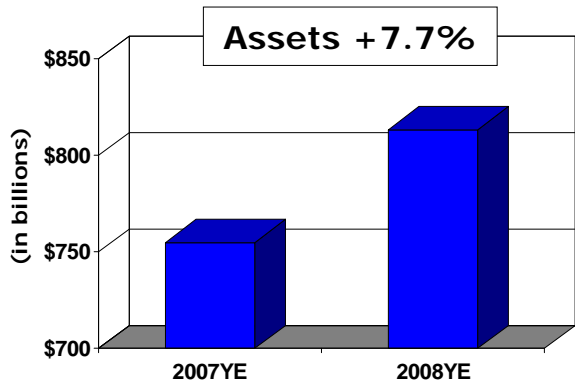
- Accurate cash-in counting
- Note authentication
- Secure storage
- High capacity day vault
- Accurate cash-out counting
- Controlled, auditable access
- Summary and detailed level reporting



Membership and share deposit growth

- As a result of a flight to safety and a dissatisfaction many in the general public have with specific banks and investment firms, credit unions are in a prime position to increase membership.
- With increased membership and existing members who also have bank accounts, credit union share deposit balances have or are poised to grow at a faster than historical rate.
- As credit unions are increasingly looked to for becoming their primary financial institution, members transaction needs for their primary account (share draft or checking) will be greater.

Industry Trends and Market Conditions



“Details of major balance sheet categories and membership growth in federally insured credit unions from December 31, 2007, to December 31, 2008

Source: NCUA Media Release, February 23, 2009

Membership and share deposit growth:

- This industry and market driven condition is both a blessing and a challenge to credit unions
- A blessing for balance sheet and earnings growth
- A challenge to the cost structure for providing appropriate service levels



Other emerging industry trends are new branch designs:

- Open and friendly
- Universal staffing
- Less costly to build
- Start small
- Expand as needed





What percent growth have you seen in your membership and share deposit base in the past 6 months?

- < 1%
- 1% – 3%
- 4% – 5%
- > 5%

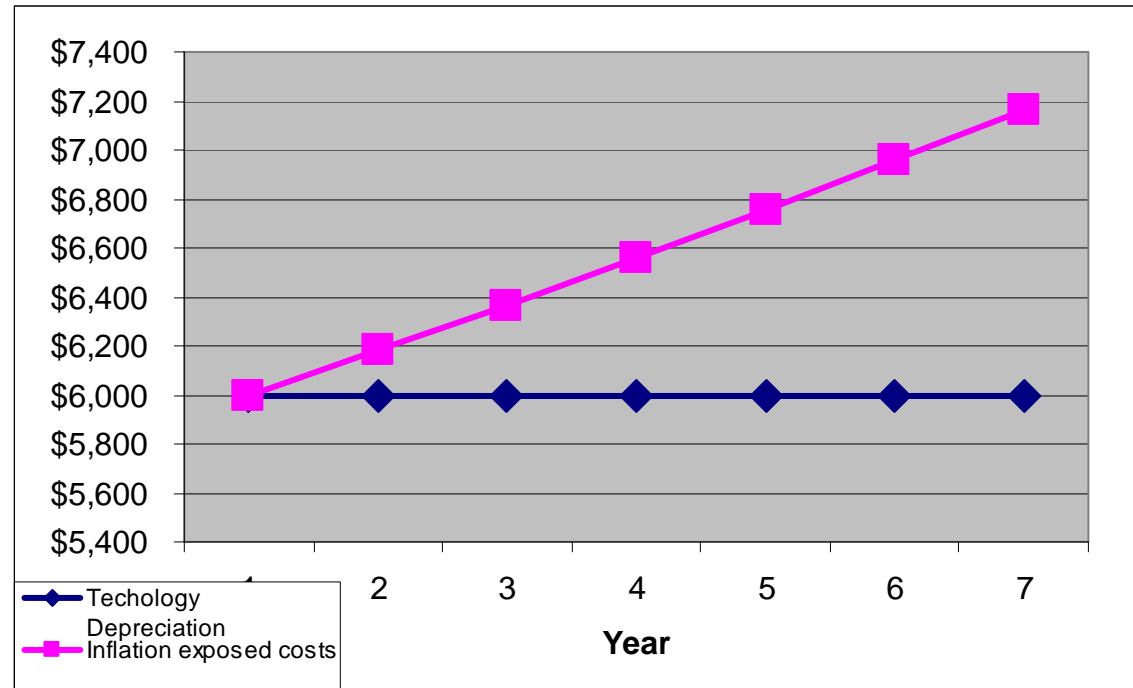
Extraordinary expenses and accounting adjustments

- Impairment of the NCUSIF asset resulting in an expense charge and corresponding dividend or capital impact.
- Incremental assessment expense (one time special and increased base rate) to recapitalize the insurance fund.
- Both events require credit unions to become more creative with other expense management and revenue opportunities.
- But not at the risk of reducing member service and operating effectively and efficiently.

Continual need to fix or lock-in branch operating costs

- **Transactions consist of variable, stepped variable and fixed costs**
- Variable costs include receipts, check presentment fees, (click charges if in an outsourced hosting system); costs that are truly incremental per transaction.
- Stepped variable costs are those costs that are volume dependent such as staffing, teller station components, cash shipments; costs can be spread over finite number of transactions before an incremental similar cost must be incurred.
- Fixed costs are constant over a virtually unlimited volume of transactions including branch depreciation. The higher the volume of transactions, the more this cost is spread out and justified.

Replacement of inflationary influenced cost components with stepped variable or fixed cost components helps to maintain a predictable transaction cost structure over time.



In the classic rate/volume cost challenge, the desire is to keep the cost rate constant for the existing transactions while volume change is influenced by the smaller variable components.

Increase capacity at the teller line

- Minimize time required for start of day cash set-up and end of day balancing
- Improved accuracy in counting and transaction balancing
- Shorter transaction times
- Reduced (or eliminated) downtime during open hours for cash buys and sells to the main vault or vault teller

Capacity creation is the result of the elimination of repetitive, non-valuable time counting and managing cash. This gives branch staff more member focused time, time for:

- Serving more members per hour
- More hours for serving members
- More time during each member session
- More opportunities for staffing management

Impact With Teller Cash Recyclers



Provide greater security

- Employee
- Cash
- Decrease member service center cash holdings

Create member service center floor plan options

- Open, modular teller stations
- Vault alternatives



What challenges are your tellers facing today?

- Drawer Cash Management
- Transaction accuracy
- Limited membership interaction time
- All the above

Utilization of cash recyclers thus will help credit unions:

- Additional capacity capability increases the stepped variable cost volume meaning that the only additional cost for a wider range of transactions is the true variable cost.
- Additional staffing management capability creates the potential to remove inflationary influenced costs, thus helping to keep the transaction rate cost constant over time.
- Additional transaction capacity in a new, open style branch also extends the time when an additional teller station or “pod” needs to be added.

Enhanced Capacity Utilization

Improved Staff Management

Reduced Capital Requirements

30 April 2009

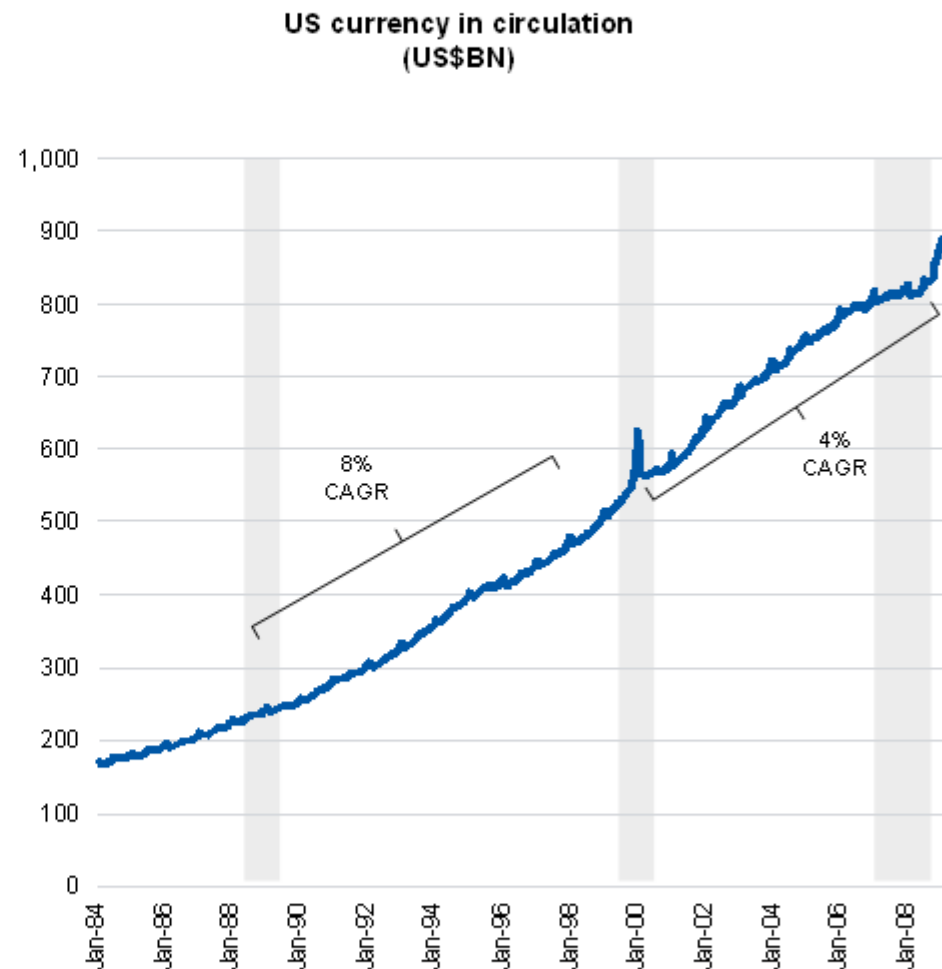
Branch Cash Recycling

Bob Meara
Sr. Analyst, Celent

Cash usage in the US shows no signs of slow down

Recessions have increased consumer cash usage

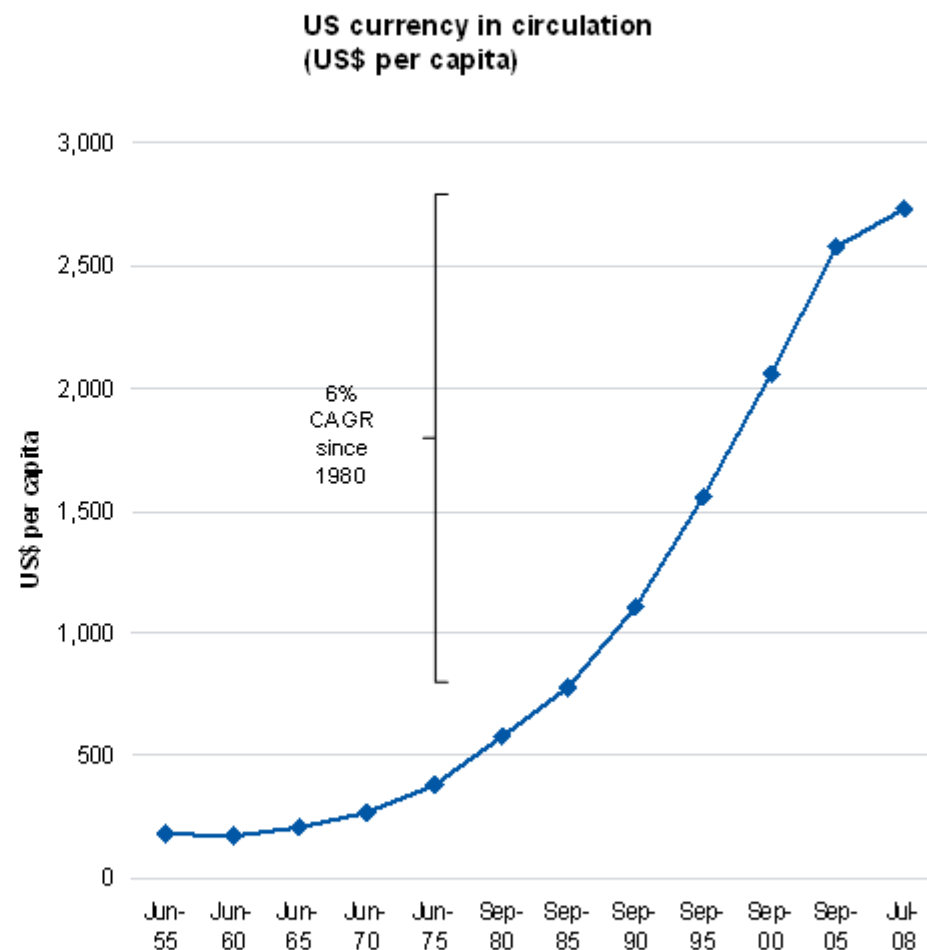
- All the hype surrounding growth in electronic payments masks the continued growth of cash
- Nearly US\$1TN is in circulation, up from half that amount 8 years ago
- This despite the doubling of debit card usage since 2000



Source: US Federal Reserve. Recessionary periods shaded in grey

Neither inflation or population growth explains the growth of cash in circulation

- Currency in circulation per capita has well outpaced inflation since 1980
- Less than \$500 in the eighties, there is now more than \$2,700 per capita in circulation
- Per capita growth may slow going forward, but there is no indication of a decline anytime soon

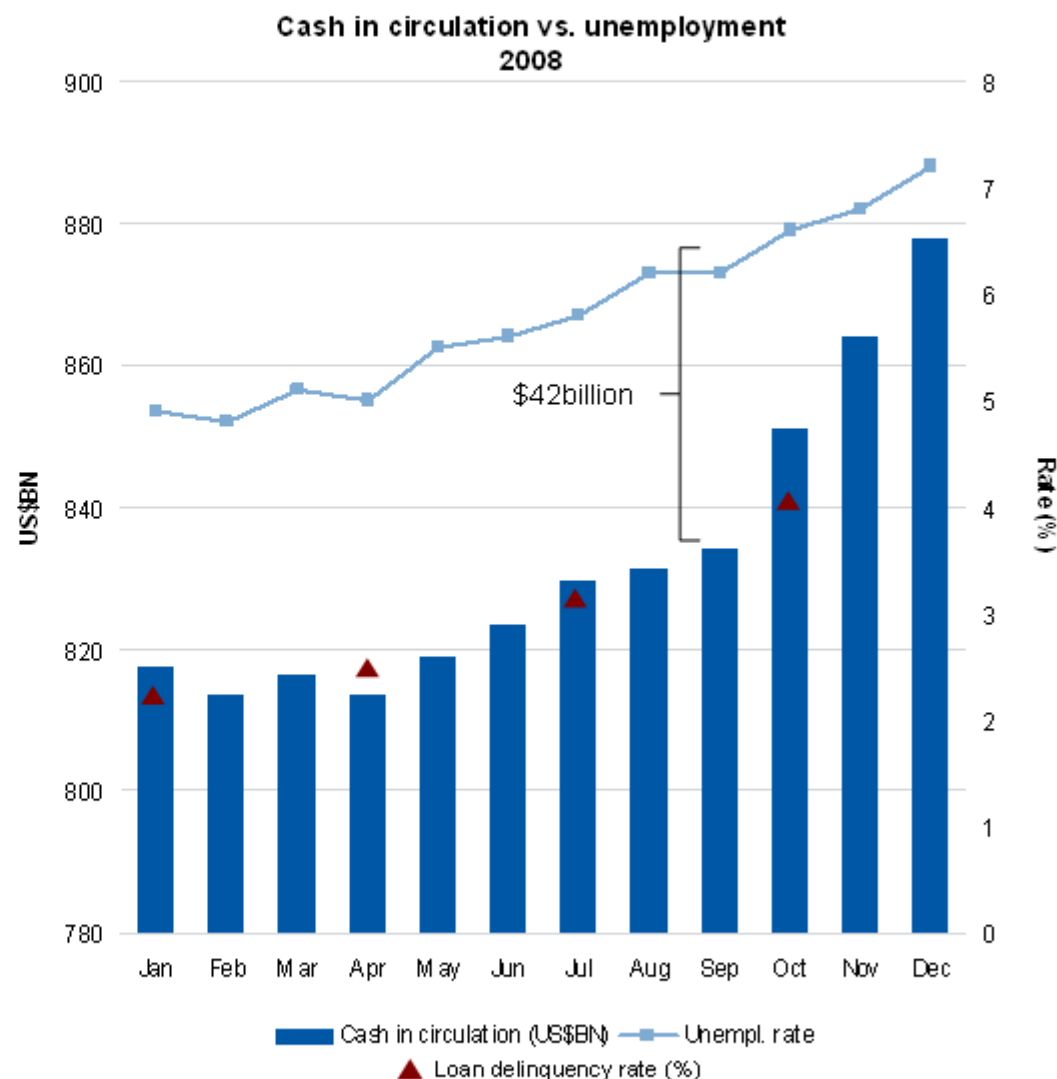


Source: US Federal Reserve, US Census Bureau, Celent analysis

Cash in circulation mirrors US unemployment

\$42 billion added in Q4 '08 alone!

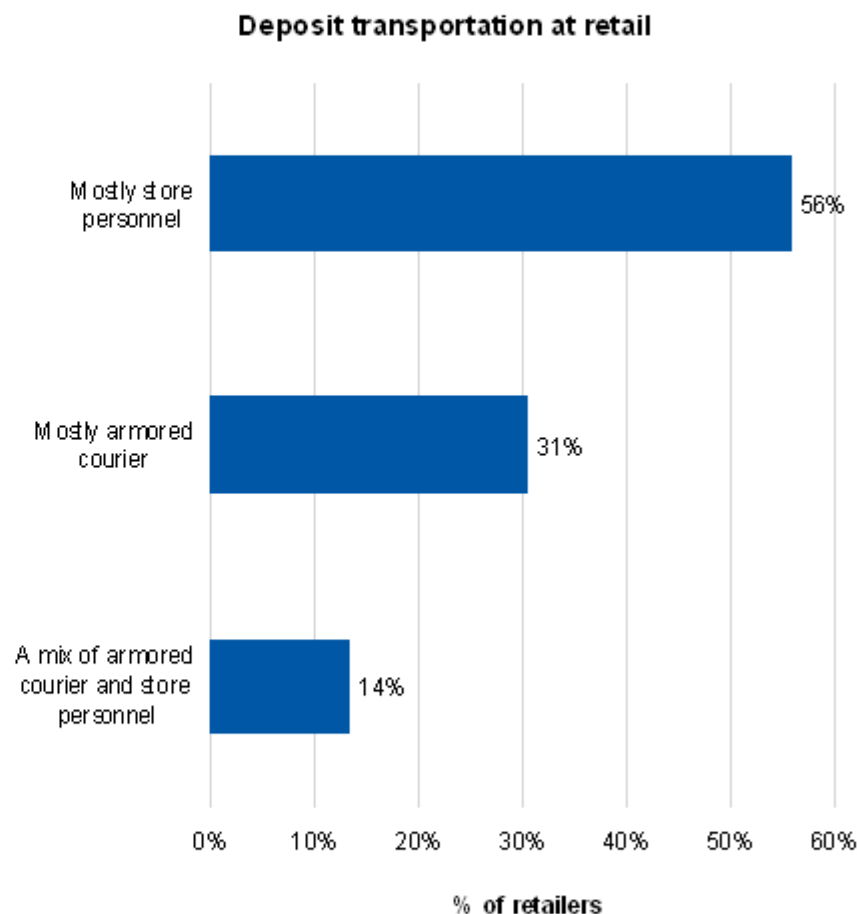
- In fact, multiple surveys indicate consumers use more cash in bad economic times
- This has played out during 2008
- Cash in circulation grew alongside unemployment and loan delinquency rate during the year



Source: US Federal Reserve, US Census Bureau, Celent analysis

Retail branches are central to the cash cycle

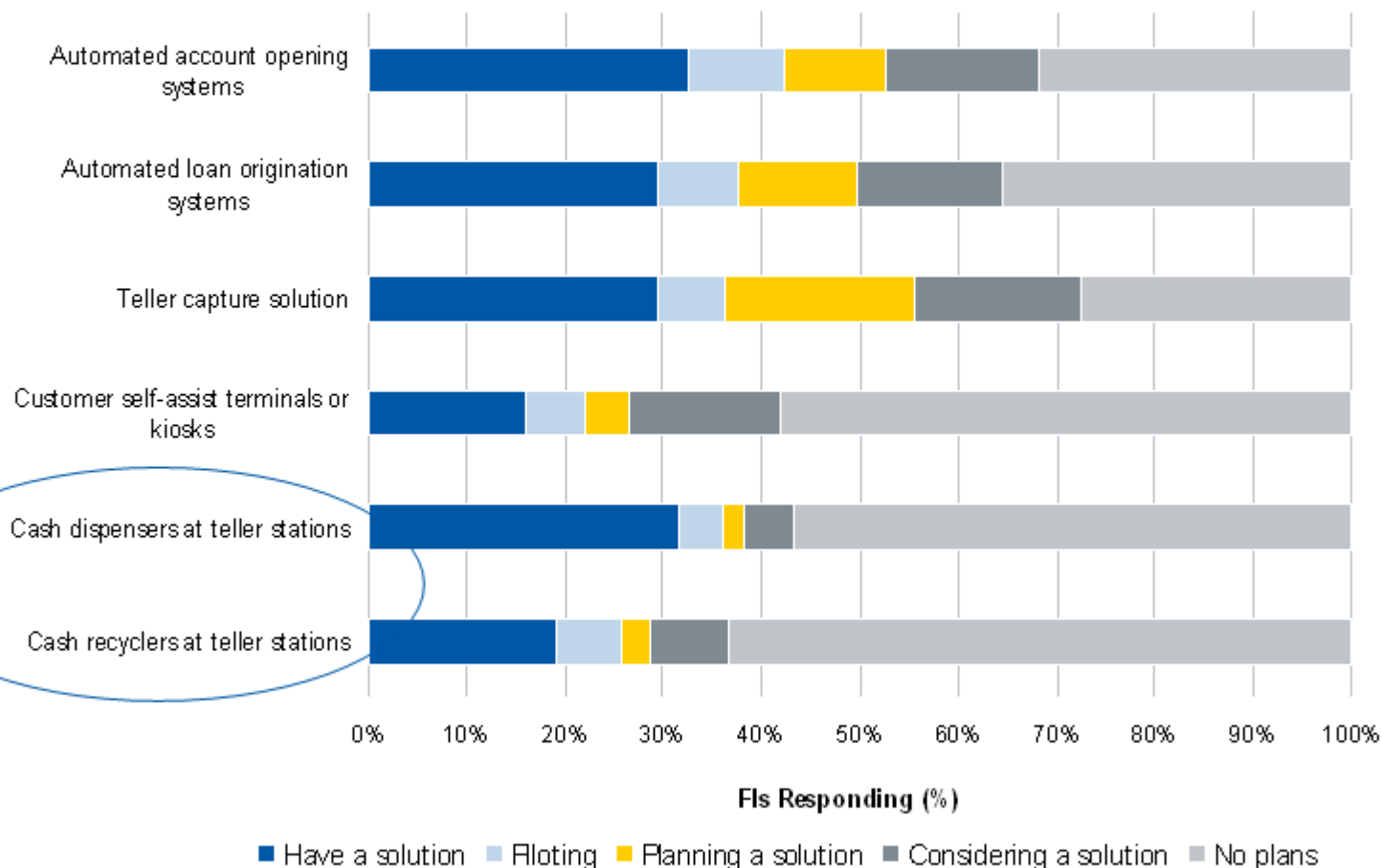
- A majority of retail merchants make regular branch cash deposits
- FIs that operate cash vaults struggle to migrate cash deposits to the vaults.
 - Pricing is largely ineffective
- Many retail branches are not well equipped for all the cash being handled



Source: Celent retailer survey, July 2007, n=292

Ironically, cash is among the least automated processes in branches

Branch Automation System Usage



Source: Celent financial institution survey, December 2007, n=157

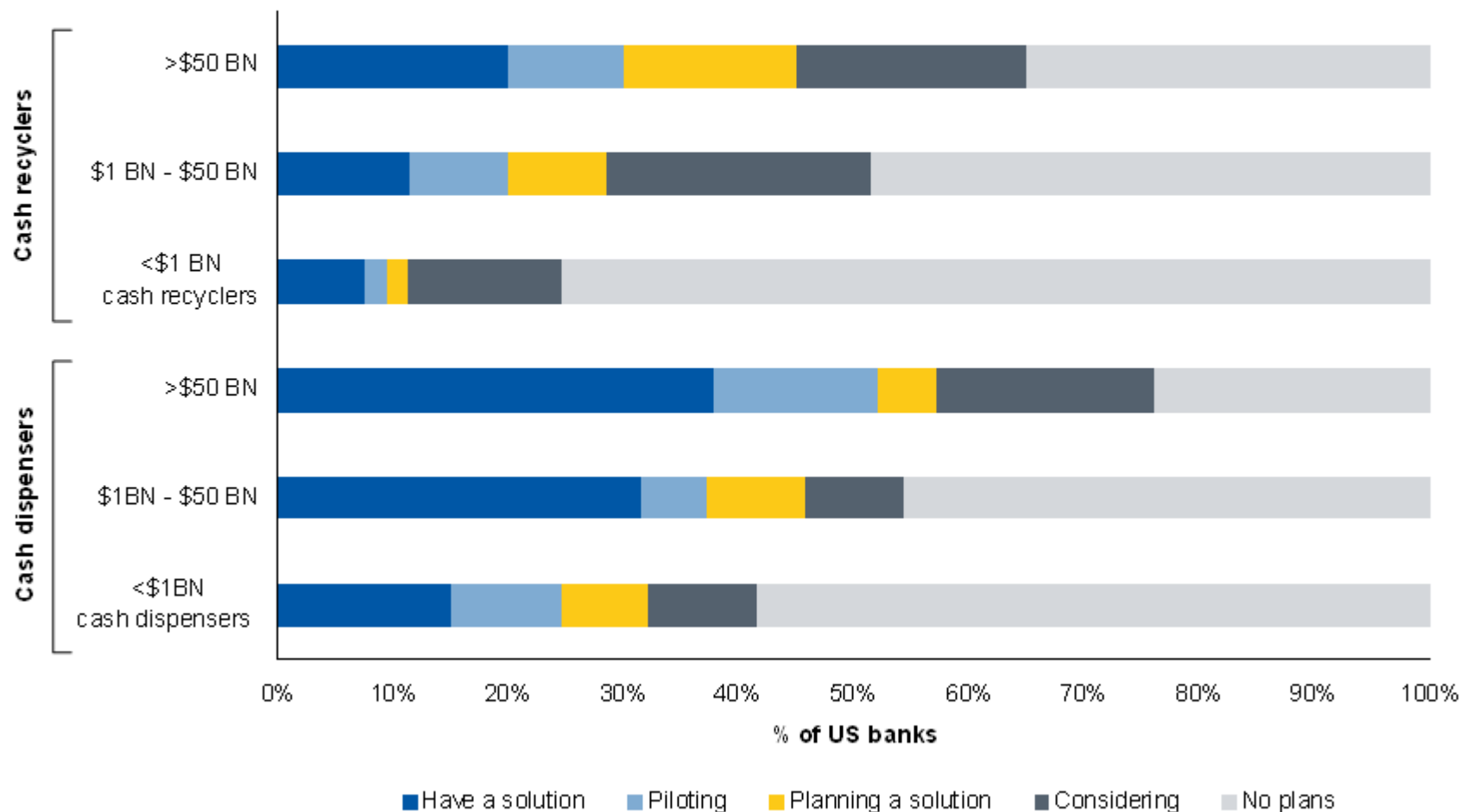
Polling Question

- What type of cash automation do you currently have?
 - None
 - Cash Dispense Only
 - Cash Recycling Only
 - Cash Dispense and Cash Recycling

Larger banks have historically been more likely to invest in cash automation

Pre-crisis, a minority of banks have invested in cash automation

Branch Cash Automation System Usage



Source: Celent financial institution survey, December 2007, n=157

But, pressure is on to manage channel costs

- Branch transaction volumes continue to decline
- Multiple product lines forecast declining profitability, putting the focus on controlling costs
- Proposed legislation designed to limit fee revenue may further erode share draft and DDA margins
- Fewer and more versatile branch staff is a likely outcome

Cash recycling addresses this need through:

- Simplified teller workflow
- Fewer errors, fewer out-of-balance conditions
- Shorter business days by shortening till preparation and reconciliation
- Improved branch capacity

Now is the time to explore cash automation

Are you ready for the future of customer interactions?

YES

TCR Business Impact and Case Studies

Brian Pilla

Director, Marketing and Deployment

Hard and Soft Benefits of Teller Cash Recycling

Hard Cost Savings

Increased Efficiency

Cash Drawer Set-up & Balancing

Daily Bank Balancing

Vault Buys and Sells

Reduced Transaction Time

Handling Error Reduction

Decreased Time to Process Night Deposits

Cost Reduction

Reduced Cash Theft and Counterfeiting

Cost of Cash Reduction

CIT Trip Reduction and CIT Prep

Insurance Cost Reduction

Soft Business Benefits

Increased Efficiency

Turnover Cost Reduction from Increased Job Satisfaction & Reduced Stress

Overtime Cost Reduction from Better Labor Utilization & Decreased teller Outages

Improved Cash Utilization – Info by Denomination

Better Intra-Day Cash Management

Cost Reduction

Asset Cost Reduction (Bandit Screens) / Lower Cost Vault Alternatives

Increased Security

Lower Cash Loss From Robbery

Member Satisfaction

Higher Retention Rates (Quicker Service)

More Capacity for Membership Growth

TCR used by 2 tellers, 150 transactions each (60 *cash in*/90 *cash out*), start/end of day time of 15 mins, 4 buys + 4 sells of 5 mins, balancing of 30 mins, 20 days/mon, an average teller wage of \$15 / hour

- **Withdrawals time savings: 6.7 hours/month**
- **Deposits time savings: 25.0 hours/month**
- **Start/End of Day time savings: 6.7 hours/month**
- **Balancing time savings: 10.0 hours/month**
- **Vault Buys/Sells time savings: 40.0 hours/month**

↳ Total time savings = 98.4 hours/month or 1,181 hours/year

↳ Total Annual Savings = \$17,700 time value

Multi branch institution servicing growing base of business clients, TCR shared by 2 business tellers but used by 4 tellers for vault buys & sells

- **Deposit time savings: from 4-5 minutes to 30 seconds**
(eliminated need to count 3 times)
- **Cash Drawer set-up time eliminated**
- **Cash Drawer settlement: from 20-30 minutes to 2-3 minutes**
- **Vault Buys/Sells time savings: from 15 minutes to 30 seconds**
- **TCR Service Calls: 0, maximum uptime/availability**
- **Increased Employee Morale and Job Satisfaction**

TCR shared by 2 tellers in a traditional window and 2 tellers in Drive-thru

- Average transaction time savings: **50% reduction**
- Significant reduction in vault trips: **80%**
 - Increase in Vault Teller productivity
- Start/End of Day time savings: **50% reduction**
- Tellers more member focused during transaction
- Reduced cash exposure minimizing cash theft risk

East coast institution with 18 branches using TCR primarily for vault buys and sells

- Lowered teller drawer cash limits by **over 50%**, reducing robbery exposure and decreasing time for end of day drawer counting
- **Eliminated** intra-day vault buys/sells which required dual control
- **Reduced** the amount of cash in a buy transaction due to the ease and quickness of obtaining from the TCR rather than from the vault
- **Eliminated the need to have the main vault open for the early morning drive-in hours and the shortened Saturday hours which meant the vault teller or a branch supervisor was not required to be present anymore**

↳ **Cash usage in the US shows no sign of slow-down**

↳ **Membership and share deposit growth, with the need to control costs**

↳ **Cash Automation can provide proven benefits, but...**

–It is not yet widely used in the market

NCR is a NAFCU preferred partner, and offer a complete Cash Automation Portfolio of solutions

NCR - Leader in Cash Recycling - Automation Solutions



Encore!Teller

Offline

Scalable Multivendor Software Suite

Full-Integration



NCR Cash Recycler



NCR Teller Cash Dispense

NCR Teller Cash Recycler

NCR Teller Cash Recycler Pro



Customer Service and Professional Service

**Completely Scalable Hardware & Software Offerings
Tailored to Specific Customer Requirements**



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