



AN INTEGRATED CASH RECYCLING SOLUTION

CASH RECYCLING AND BEYOND

INTRODUCTION

For all the talk of a cashless society through mobile payments and contactless cards, banknotes and coins aren't going anywhere. Trusted, symbolic and easy to use, cash remains a valid and preferred payment form all over the world. For financial institutions, this attachment to cash is something of a double-edged sword. Drawing cash from ATMs or human tellers is one of the most common ways in which customers interact with their bank, which makes effective cash management a priority. But that customer interaction comes with its own challenges, not least the costs of keeping cash in circulation.

Technology developments such as cash recyclers and intelligent cash handling equipment can provide a solution to this problem. But as detailed in this paper, it is only a partial solution. Further changes to processes and

procedures are necessary for financial institutions to drive even greater efficiencies into their cash management operations.

In the following pages, you will see how an integrated service, consisting of cash recycling hardware, cash management software and effective modeling of individual branch effectiveness, can help financial institutions achieve significant savings through advanced cash planning. Furthermore, by adopting these technologies and advisory services as an integrated solution, financial institutions can make more effective use of their ATM networks, branches, staff expertise, and direct customer engagements. In doing so, you can optimize your operations so that more attention, innovation and effort can be focused on delivering strategic goals.

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1. AN INTEGRATED CASH RECYCLING SOLUTION

Around the world, financial institutions have already started to see the benefits of deploying cash recycling technologies within their ATM networks. Many have also adopted cash management software, either alone or in conjunction with cash recycling programs, to derive greater insight into their cash planning operations.

The benefits that these solutions deliver can be greatly enhanced when deployed together as an integrated solution in conjunction with effective cash management consulting and optimization modeling.

Cash recycling technology

The first element of the Integrated cash recycling solution is the hardware. Cash recyclers act as an enabler to help financial institutions achieve their core objectives. They offer a direct route to improving profitability, reducing costs, and improving the customer experience, while underpinned by enhanced security.

By automating the cash handling process, recyclers enable financial institutions to reduce the time and resources spent on counting, re-counting, transporting and managing cash, and on troubleshooting problems associated with under or over stocking ATMs.

In doing so, recyclers can have a transformative effect on branches, enabling them to directly manage cash re-circulation safely, securely and in compliance with the applicable regulations and central bank directives.

The advantages of using cash recyclers can be divided into three clear areas:

- **Greater customer experience.** Customers have quicker access to withdrawal and deposit services, while business customers can re-bank their cash efficiently and quickly. In effect, the cash recycler gives customers more choice on when, where and how they use banking services. At the same time, branch staff has more time to focus on engaging customers and improving valuable services because they spend less time on filling and monitoring ATMs.
- **Greater benefits.** Cash recycling lowers cash handling costs as well as reducing the amount of 'idle' cash. Financial institutions benefit from reduced operational expenditure and lower interest payments. Automatic cash recycling also reduces reliance on CiT services, and allows branch staff to focus more of their efforts on revenue-generating activity and increasing sales, and less on the mundane tasks of adding cash to ATMs. Cash recycling plays an important role in ensuring the all-important availability of ATMs, since they are taken out of service to refill the cassettes far less often.
- **Enhanced security.** All of this is underpinned by a greater level of security around cash management operations. With less human interaction with physical cash, there are fewer opportunities for mistakes to be made, and less potential cash reconciliation errors from infrequent ATM balancing. It also helps manage the considerable risks of having too much physical and idle cash on hand, assuring a greater level of security for cash management activities.

At NCR, our own experience shows us that customers using automatic cash recyclers reduce their overall operating expenditure by approximately 30 percent.



"Cash recycling performs best when paired with a solid cash supply chain management strategy and capability to maximize the value of the technology."

— James Trocme, Citi Bank's former Global Retail Bank Senior Vice President for ATM Channel Management

Beyond hardware

Cash recyclers enable operational efficiencies that yield almost immediate cost benefits to the organization, while providing an on-brand customer experience. However, as a transformative technology, they also bring substantial change and new challenges to existing processes and infrastructure.

For example, deployment of cash recyclers raises questions around best practices for managing deposit cassettes, ensuring the right mix of denominations, and leveraging data about customer demand for cash.

NCR is a consultative partner that can help deployers avoid inappropriate or poorly planned use of cash recyclers, which could result in simply replacing one set of costs and risks with another.

Cash management software

The second element of the integrated cash recycling solution is cash management software. The experience of NCR's customers shows that the savings made by deploying cash recyclers can be even greater when used in conjunction with effective software. On average, organizations save a further 20 percent when using cash recyclers as part of an integrated solution.

Our experience is borne out by analysis from industry commentators:

- PricewaterhouseCoopers suggest that banks can reduce the total cost of managing cash by up to 15 percent by using cash management software.¹

- Consultants at Stolle and Heinz show that German banks could save nearly €1 billion (\$1.24 billion) or approximately 25 percent by using cash management solutions.²
- The ATM Industry Association suggests that effective cash management strategies could net banks an annual saving of between \$3,000 and \$10,000 per branch.

Cash management software can deliver these savings because it analyses transactions made through the ATM and the cash recycling network, and gives financial institutions accurate insight into customer interactions with cash and how those interactions change over time.

As a result, financial institutions can optimize cash replenishment cycles to meet those needs, and adjust to new needs as customer demands change.

Equally, financial institutions can use the insights provided by cash management software to maintain an optimal balance between customer self-service and teller-based service, and continue to derive the benefits of low-touch convenience on one hand, and value-adding interpersonal relationships on the other. In other words, cash management software helps branches avoid introducing new costs or inefficiencies when implementing a cash-recycling network.

¹Strategy&: Improving the efficiency of banks' cash operations (originally published by Booz & Company, 2011)

² ATM Marketplace: ATM Cash Management 101, 2015



Integrated Consultancy

NCR's Cash Recycling Excellence Team provides consultancy services that help financial institutions and ATM deployers optimize their ATM network. It's the first **proactive cash recycling consultancy of its kind** — that means no more waiting until a service interruption to get data or insights needed to improve processes and workflows.

Instead, a team of cash recycling experts work closely with FIs and IADs to present sophisticated data analysis that helps deployers strategically manage, and see more value from, their ATM estate.

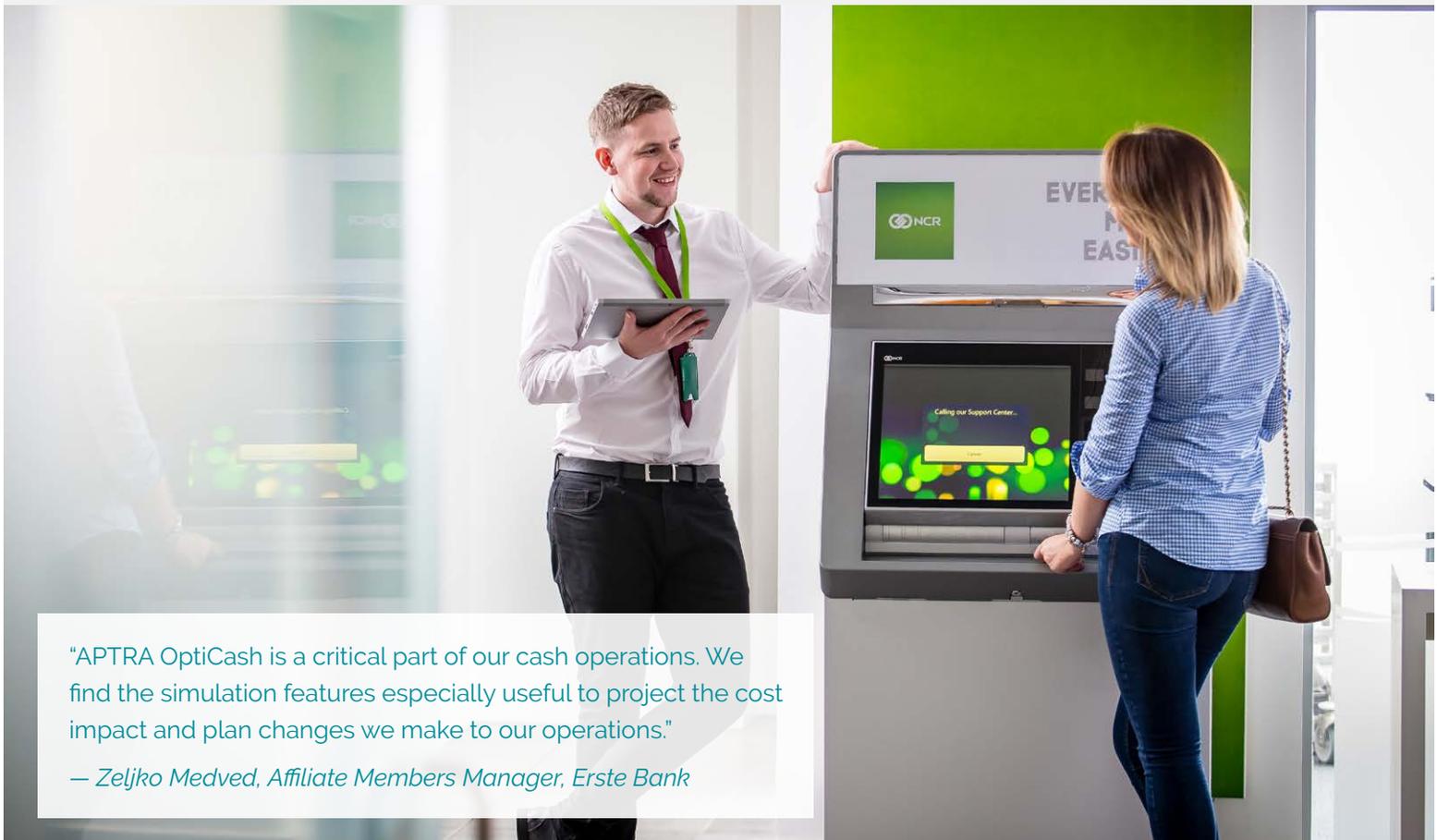
Most financial institutions know that their cash management operations can be managed more efficiently, yet they are challenged to pinpoint where and how the improvements should be made. With cash management life cycle consulting, FIs get a holistic view of how to achieve cost-effective cash distribution and supply.

Cash management consulting is the key to bringing together these often disparate challenges. By applying best practices, financial institutions can re-engineer their cash management processes to achieve cost reduction and increased operational efficiencies.

In recognizing the critical importance of strategic alignment across the cash management value chain, End-to-end cash optimization means looking enterprise-wide and building a dynamic cash management solution which can adapt to changing cash component costs. By focussing on the end-to-end, enterprise-wide cash lifecycle, an integrated optimization solution can be developed which:

- Balances cash inventories against capital availability for investment
- Looks for alignment and opportunities to leverage branch and cash center staff
- Develops forecasting algorithms that balance cash demand across all cash point types
- Examines enterprise-wide complex forecasting functionality against historical trends
- Optimizes transportation scheduling, cost of cash and logistics costs

By integrating consultancy and enterprise-wide solution architecture, and treating cash distribution channels as an integrated continuum through a dynamic set of complementary solutions, optimization moves from channel to enterprise and efficiencies are exponential.



"APTRA OptiCash is a critical part of our cash operations. We find the simulation features especially useful to project the cost impact and plan changes we make to our operations."

— *Zeljko Medved, Affiliate Members Manager, Erste Bank*

Re-inventing the ATM channel

The integrated solution is designed to give financial institutions more benefits than would be available from the deployment of a single element. With an integrated solution, financial institutions can ensure that cash is available when and where it is needed without incurring additional costs.

Through the introduction of automation and self-service, the ATM channel has been re-invented, adapting to the changing ways people interact with cash, while minimising risks. These solutions offer a tailored approach that's based on cash demand at a branch level as it changes over time and then optimizing recycler deployment to match.

Automation also provides opportunities to deploy branch staff away from time-consuming cash handling duties, where errors are easy to make. Instead, branch workers can develop meaningful face-to-face relationships with customers and focus on value-added services.

With an integrated cash management solution, financial institutions can:

- Optimize cash replenishment cycles
- Reduce cost and risk of cash in transit (CIT)
- Reduce amount of 'idle' cash held in ATMs
- Increase amount of cash in circulation
- Improve ATM and cash availability
- Reduce risks of human contact with cash
- Improve productivity with efficient branch workflow
- Free staff for more interpersonal, sales-related activity
- Enhance customer satisfaction and loyalty



2. IMPLEMENTING THE SOLUTION

Faced with the twin challenges of aging technology and a more demanding consumer, deciding where to start when creating an effective cash management operation can be overwhelming. By following three simple steps, financial institutions can minimize the risks associated with any program of change, to develop a more profitable ATM channel.

Step 1: Preparation

- Conduct customer workshops to identify the business case and specific success criteria
- Develop a complete picture of current infrastructure
- Draw up a business case to ensure that cash recycling is the correct solution in each situation
- Use cash management software to assess historical cash-demand data and understand trend patterns regarding cash requirements



Step 2: Pilot

The second step is to implement a pilot scheme before rolling out the solution on a wider basis. The pilot should:

- Monitor and measure performance of the solution against the established success criteria
- Make sure the solution is performing against agreed key performance indicators (KPIs), and adjust configuration parameters as necessary
- Ensure the deployed technology is meeting and exceeding value-based expectations
- Validate and refine the solution based on initial assessments

Step 3: Management

From the pilot, financial institutions can gather data to develop a more refined solution that can be rolled out across the branch network. Once deployed, the solution will require on-going management to ensure the expected benefits continue to be delivered. Management of the solution involves:

- Using cash management tools to pull and analyze data regarding cash demand
- Identifying changes to customer behavior and adjusting cash planning to continue cost optimization
- Ensuring performance improvement
- Managing cost



3. CONCLUSION

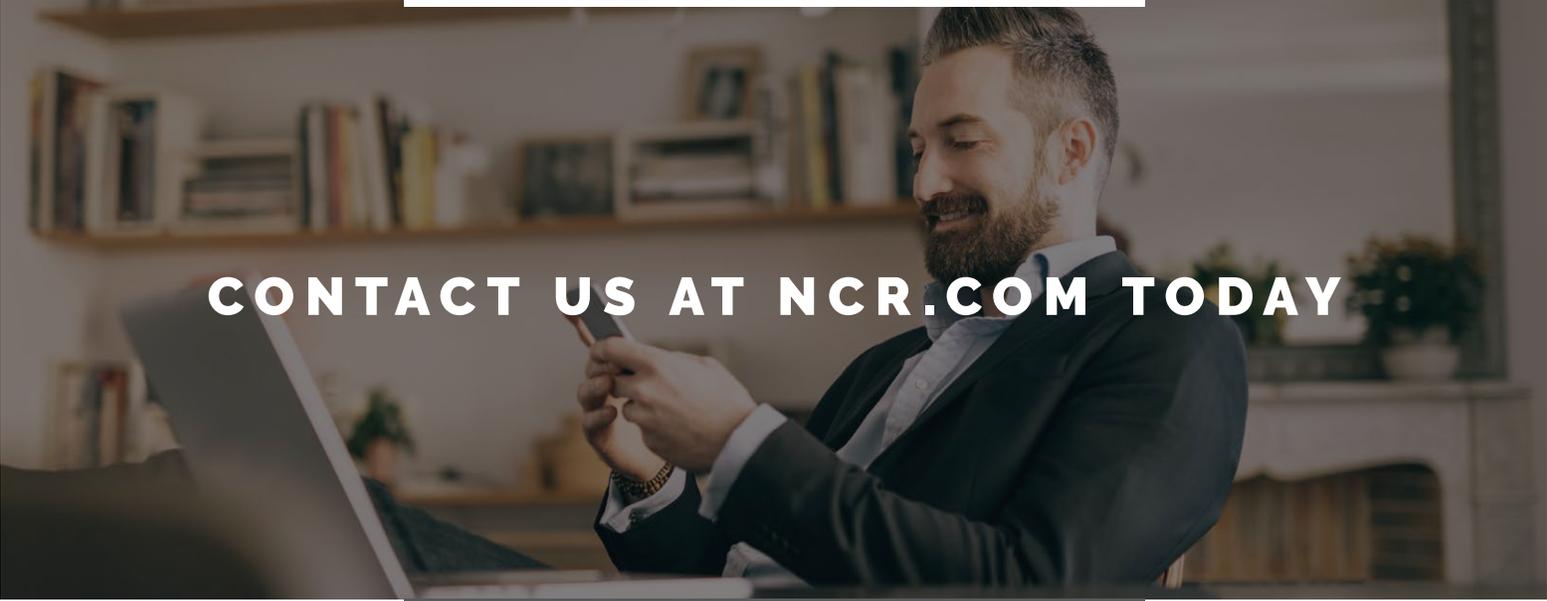
Consumers have more choice than ever before, and are demonstrating greater willingness to exercise that choice. They are certainly looking for a bank they can trust. But they are not prepared to sacrifice convenience, availability and usability. Customers want their bank to understand their financial needs, including ready and immediate access to their cash.

For financial institutions that are continually being asked to do more with less, optimizing the ATM network to meet that demand for cash availability has to be accomplished

in a smart, efficient way. The integrated cash management solution from NCR, based on hardware and software wrapped in services accomplishes that.

By helping financial institutions and their branches develop a tailored solution that meets the unique requirements of their particular customer base, it ensures a lean, streamlined and responsive cash management operation. The result is a more profitable organization, a more secure operation, and a more satisfied customer.





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WHY NCR?

NCR is a leading global technology company that brings unexpected value to every interaction between customers and businesses. The company behind the world's **#1 ATM SelfServ brand** and ranked **#1 globally for ATM multi-vendor software**, NCR enables 700M+ transactions daily. We power 6 of the 10 highest-ranked banking apps with digital banking solutions used by 15M+ consumers.

Digital first but not digital only, our software and services help financial institutions bridge their digital and physical operations. From apps to branch transformation, our future-proofing technology delivers customized, secure, “anytime, anywhere” banking experiences that create more value for FIs and their customers.

NCR continually improves products as new technologies and components become available. NCR, therefore, reserves the right to change specifications without prior notice.

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