

WHITE PAPER

THE SEVEN DEADLY SINS OF CASH CYCLE MANAGEMENT

TABLE OF CONTENTS

MEET THE PANEL	1
WHAT IS TRUE CASH CYCLE MANAGEMENT?	2
THE CURRENT LANDSCAPE	3-4
THE SINS	
INACCURACY	6
INDUCING CHAOS	7
WASTEFULNESS	
BAD TIMING	9
DEPRIVATION	10
FEAR	11
TUNNEL VISION	12
END-TO-END SOLUTION	13
AUTHORS	14

MEET THE PANEL

Experts from across Diebold Nixdorf's organization—and from around the globe—convened for a lively roundtable discussion about the challenges financial institutions face in managing the cash flowing in and out of their networks.



Eddy Carrioni SENIOR PRODUCT MANAGER, SYSTEMS





Marco Goltz SOLUTION MANAGER, GLOBAL CASH RELATED SERVICES

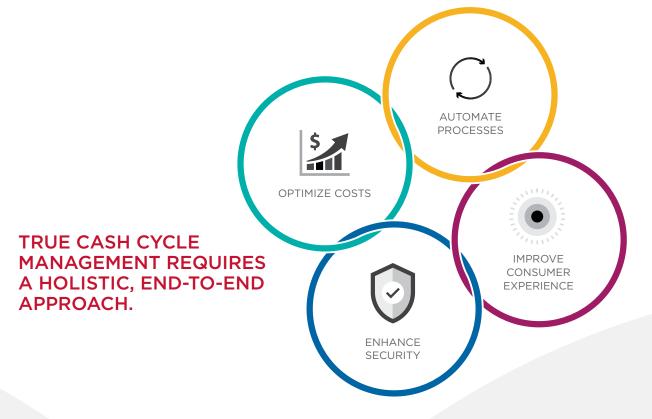


Stephan Okroy GLOBAL BUSINESS DEVELOPMENT LEAD, CASH CYCLE MANAGEMENT



Yvonne Stoeckle global product manager, software

WHAT IS TRUE CASH CYCLE MANAGEMENT?



Cash cycle management encompasses the complete, end-to-end physical journey of currency flowing through your network. The stakes are high, and inefficiencies are all too common. Every step along the way represents an opportunity to optimize costs, automate processes, enhance security and improve the consumer experience.

Of course, achieving truly optimized cash cycle management is easier said than done. In a cross-functional roundtable discussion with key subject matter experts from across our organization, a common theme emerged: True Cash Cycle Management requires a holistic, end-to-end approach. Think of it as a puzzle, or a series of interlocking components—for the complete picture, you must have all the pieces in place.

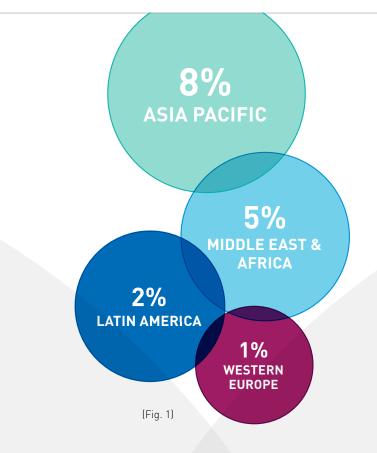
Now, that's not to say your organization must do everything at once. We do not ask that you eat the entire elephant, but rather, that you face the challenge of examining your current approach to cash cycle management. That first critical step can be the hardest... especially when your organization is plagued by one or more of the Seven Deadly Sins of Cash Cycle Management.

THE CURRENT LANDSCAPE

It is well established (although not as exciting as the "death of cash" headlines) that cash is, in fact, nowhere near expiring. In its exhaustive global study, Global ATM Market and Forecasts to 2021, RBR found that the volume of cash withdrawals is actually increasing, and will continue to increase (Fig. 1). The cash channel remains one of the most important consumer touchpoints your brand has to offer. How are you managing and optimizing this critical channel?

GLOBAL VOLUME OF CASH WITHDRAWALS IS ON THE RISE ¹







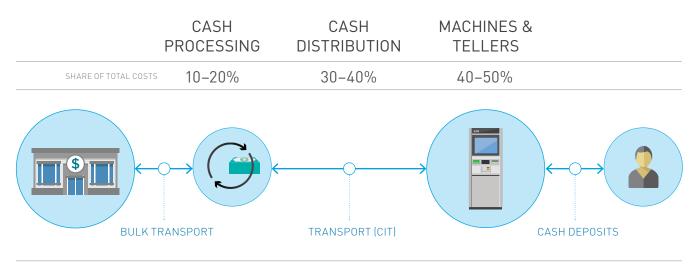
"EVERY RETAIL BANK HAS CASH."

"Every retail bank has cash," says Okroy. "And cash handling represents a major portion of the operations in the branch network. So whenever you are talking about handling and managing the cash from withdrawals and deposits, in the branch and off premise, whenever, wherever you have cash, you are facing a lot of inefficiencies: in the processes, the entrenched costs... there are so many areas to find room for improvement and eliminate manual processes."

¹ RBR 2016, Global ATM Market and Forecasts to 2021

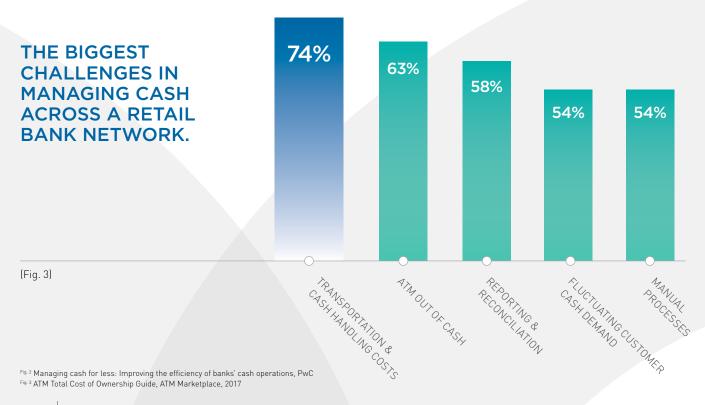


As shown in Fig. 2, there are endless moving parts in the cash cycle process, from cash in transit (CIT) to fluctuating currency levels in your ATMs to counting, sorting and keeping track of every bill and coin. In fact, according to Datamonitor, nearly 50% of ATM network operating costs on non-recycling terminals are due to cash management.



(Fig. 2)

Fig. 3 offers both solace and cause for concern—ATM Marketplace polled FIs around the globe for their "ATM Total Cost of Ownership Guide" and found that banks share common (and frequent) challenges to cash cycle optimization. With headwinds coming from all directions, new fintech competitors crawling out of the woodwork and cost pressures on the increase, the cash cycle is an area where your organization can wring out precious funds that can be redirected to other areas of the business. The first challenge is identifying the problem you are trying to solve... and the obstacles that are stopping you from solving that problem.



THE SEVEN DEADLY SINS





The days when a manual spreadsheet could help you accurately manage your cash are long gone, says Stoeckle. "Often when we talk to FIs, they're still relying on internal, manual documents like Excel, and their own personal knowledge of cash management. But this approach misses a couple of critical steps: transparency and accuracy. Without proper monitoring tools, there is simply no way to have full transparency in the cash flow process, and without proper cash optimization software no accurate, optimized planning is possible—especially when you introduce cash recycling." Excel is simply not enough.

Consider whether you're able to pull valuable data from your manual spreadsheet:

- How, when and where your consumers are waiting in line to conduct their transactions
- What denominations your consumers would prefer
- The number of transactions taking place at certain hours, on certain days, and in certain locations
- Incident and out-of-cash patterns
- Regional and holistic views of system availability and cash levels (in near real time)
- CIT visits per month—and the amount they're picking up and distributing at each visit
- How much cash is coming in from retail customers vs. business clients
- Visibility over how your cash is moving along the supply chain
- Reliable forecasting results without manual intervention, independent from the type of cashpoint (ATM, cash recycler, branch vault, etc.).
- How much money you're paying in interest on the cash sitting in your self-service terminals





Bankers who said custom reporting and real-time analytics was an additional functionality they would like to see from their ATM monitoring solution.³



"WITH THE RIGHT TOOLS, BANKS CAN UNDERSTAND HOW AND WHEN QUEUES ARE HAPPENING."

"You can get better visibility into the number of transactions taking place at the teller line and at their self-service terminals, what sort of denomination choice people are seeking, where cash recyclers might make sense, and when is the right time for cash service."



"A MAJOR BENEFIT OF A PHASED TRUE CASH CYCLE MANAGEMENT ROADMAP IS THAT IT CAN HELP A FINANCIAL INSTITUTION REALIZE COST REDUCTIONS, GAIN PROCESS EFFICIENCIES AND BETTER SERVE CUSTOMERS."

"Managing cash levels minimizes costs associated with excess cash in your network. On the flip side, you're going to be able to offer your consumers a better experience at the ATM, with higher availability and the potential for new transaction capabilities like denomination choice."

³ 2017 ATM Total Cost of Ownership Guide from ATM Marketplace





Consider the serene duck sailing effortlessly across the pond while its legs are paddling furiously under the surface: Would you rather be doing the sailing, or the paddling? If your bank is mired in the complex day-to-day responsibilities of cash-cycle management, you're devoting time, money and resources to behindthe-scenes activity. Meanwhile, your organization is likely prioritizing customerfacing initiatives—and that means an internal team is managing the cash cycle as best as they can. That team may be just a few people—or even a single person—or it could be a small group tasked with many roles and responsibilities.

In this scenario, cash cycle management is probably much more chaotic than it needs to be. If you run your cash management operations internal, what would your answer be to these questions:

- Are you utilizing intelligent tools to manage the flow of cash through your network?
- Who is managing cash handling—and who is managing cash planning? Are they working in tandem, with full insight into the end-to-end cash journey?
- How many vendors have you contracted with? And who is managing those relationships?
- If you're using vendors, do they have the capability to schedule cash services that meet the demand of your cash channel?
- How much are all those individual relationships and contracts costing you?
- Are your cash-management solutions multi-vendor and adaptable to future system changes?



"I HAVE SEEN BANKS THAT OUTSOURCED ATM CASH HANDLING TO CIT TO INCREASE SECURITY AND TO FREE-UP BRANCH STAFF, BUT THEY DID NOT IMPLEMENT A PROPER STRATEGY FOR EFFICIENT CASH PLANNING."

"Banks and especially branch staff are frequently overwhelmed by this task and tend to horde cash to avoid cash outages. With the right partner, cash planning can be outsourced, resulting in increased uptime, efficiency and more time to focus on clients."



"YOU DON'T NEED TO BRING A VARIETY OF PARTNERS TOGETHER TO HANDLE YOUR CASH MANAGEMENT PROCESS."

"This is the highest value we offer our customers: the end-to-end ability to manage this very complex topic, even in a multi-vendor environment."

Engaging with a single and vendor agnostic partner, one with a global perspective and local support, can dramatically simplify cash management, whether your organization is an international FI or a regional community bank. Every individual SLA represents time, money and man hours that could be reduced.



The cash cycle is complex, and wastefulness is rampant—from keeping too much cash in an ATM unnecessarily, to services that are rendered far too frequently and inefficiently. Recirculating cash can mitigate those issues, but introducing cash recyclers increases the complexity. Varying regulations, switches and compliance issues around the globe add to the headaches.

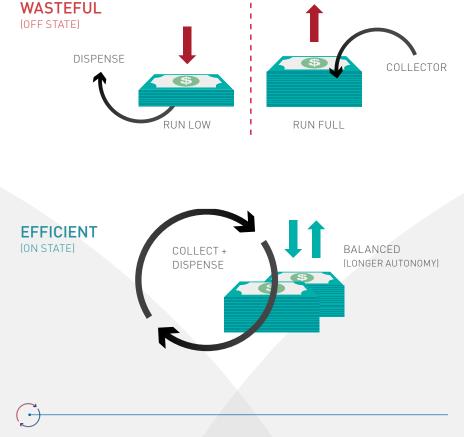
But deploying and installing cash recyclers, and not turning the recycling functionality on? It's a cardinal sin that unfortunately, we see far too frequently.

"Banks implement recycling technology to offer their clients the ability to make deposits. But, when the recycling is not activated, synergies are missed—and that's the worst thing you can do," says Goltz. "Cash recycling ATMs are the best way to create the shortest cash cycle of all: within a single machine. If your terminal has the capability, but you don't turn it on, you're wasting an amazing opportunity—both for yourself and for your consumers."



"WITH CASH RECYCLING ATMS, YOUR CLIENTS ARE REPLENISHING YOUR ATMS FOR FREE—FEWER CIT VISITS ARE REQUIRED."

"When a bank is implementing cash recycling, we can simplify the increasing complexity and enable that journey. We are experienced in organizing cash services that meet demand to ensure that the technology is fully functioning and generating efficiencies for the bank."



Recycling offers your clients the option for 24x7 deposit with immediate validation and credit. Money deposited by one client is paid out to the next. "Self-replenishing" as they are, ATMs with activated recycling typically lower cash handling costs significantly.



Let's talk about replenishment.

Who handles cash replenishment, cash retrieval, cash movement in general? Often, it's a mix of responsibilities: You may be locked in to a standard CIT schedule, with employees picking up the slack on an ad hoc basis as needed in the branch.

"Today, banks attempt to satisfy cash replenishments with a regular schedule: The CIT comes whether there is a need to service the device or not, and often they're actually taking significant amounts of money out of machines AND putting new money into the machines on the same visit," explains Goltz. "Inside the branch, employees are piling cash into ATMs, and still cash-outs happen. A static schedule never satisfies demand, and without proper forecasting, expensive emergency replenishments will be required, often during business hours when branch staff should be taking care of their consumers."

When you outsource cash services to a CIT company, it becomes "somebody else's problem" (SEP). Sounds good, until you take a closer look at how well that somebody else is typically solving the problem.

The cash cycle process should be predictable, flexible and transparent. Any third-party partner should be working for your benefit—and that means optimizing the logistics of the cash flow to minimize costly CIT visits, redundant replenishment activities and excessive cash stock.



"BANKS OFTEN AREN'T FORECASTING THEIR CASH FLOW AS WELL AS THEY COULD BE."

"They know, OK, it's a weekend, the volume of cash withdrawals will be different, but often they don't even know whether withdrawals will be higher or lower, and they don't know how much cash they actually need to have available. Or, they may not realize that they need more than one ATM in a particular spot—there may be a location where the transaction levels are so high, even if the ATM is full of cash, it won't be enough to make it until the next CIT visit. They don't always know how much cash they have or how much they need. They have the information, but they aren't taking full advantage of it."





Bankers who said their biggest challenge to managing cash is transportation and CIT costs. $^{\rm 4}$



"AT THE END OF THE DAY, AVAILABILITY IS INCREDIBLY IMPORTANT."

"Your terminals may be able to perform some really exciting transactions, but if they don't have any cash, then your consumer is going to have a terrible experience."

Outsourcing management responsibilities to a CIT company may have felt like a "set it and forget it" scenario initially but if you're searching for areas to drive efficiencies and reduce costs, the SLA you have with your CIT company is a good place to start. Often, these organizations don't have the technological maturity or cash planning insights to ensure a well-optimized cash supply. Don't make the journey of your cash an SEP—take an active and collaborative role in ensuring your cash cycle is properly managed and working for you, not against you.

⁴ 2017 ATM Total Cost of Ownership Guide from ATM Marketplace





Cash cycle management is a niche business that requires broad knowledge. How experienced and informed are your internal employees about emerging trends, available automation tools and new optimization methods? If you're a small or medium-sized bank, the chances are high that cash cycle management is just one of the many hats worn by a few members of your staff—and that could mean the process isn't getting the attention it needs to run as smoothly or as efficiently as it could be.

Our partnership can be tailored to your needs, and dialed up or down as your priorities change:





"OUR SERVICES TARGET CASH AVAILABILITY AND COST EFFICIENCY."

"To achieve this goal, we combine the most modern software, a global knowledge base, best practices and trained subject matter experts into a service offering that allows you to focus on the outcome, rather than keeping you busy with managing technical details. Our approaches and solutions have been perfected over time and experience. We work with small banks looking to offload the complexity of cash cycle management, but also with larger banks that realize it's not a part of their core business."



FIs that are managing their ATM network's cash demands in-house.⁵



FIs that do not use a technology solution at all.⁵

 (\cdot)

No matter how small or large your organization is, you should have the freedom to stay informed yet still remain unfettered by day-to-day management and manual tasks.

⁵ ATM Total Cost of Ownership Guide, ATM Marketplace, 2017





Culturally, is there a fear of change within your organization—especially at the teller level? Automation technology can be perceived as a replacement, rather than a useful tool. That perspective keeps many financial institutions mired in the status quo, taking no risks and achieving no gains in the short term, and in the long term, missing the boat on major emerging trends that should not be ignored.

Implementing technology to take the place of tellers is misguided at best, and a huge missed opportunity at worst. Your employees should be empowered by new technology. Freed from manual tasks, how could they be spending their time in ways that would enhance the consumer experience and drive growth for your organization?



"WE WORKED WITH A BANK IN ASIA THAT WANTED TO REDUCE THE LONG QUEUES IN ITS BRANCHES."

"They would have 20 customers in a line, and the tellers were manually counting large bundles of cash that customers were bringing in to deposit. We literally went into their branches with a stopwatch and timed the transactions, and showed them how much time we could free up for their tellers if they invested in new technology."

TELLERS

SELLERS & UNIVERSAL BANKERS

\bigcirc

The roles and responsibilities may evolve as tasks become automated, but the branch channel will remain a cornerstone of your brand's image. It's the best place for your consumers to connect face-to-face with your staff, to ask questions, get advice and build a lifelong relationship. Implementing technology and services in the right way, with a strategic approach that recognizes the benefit of both human interactions and self-service technology, will be critical to success as our physical and digital worlds converge.



In our modern digital era, consumers expect more. Brand loyalty is diminishing, while the last great experience is what consumers remember and crave. Organizations that continue to operate the way they always have do so at their own peril. Branch transformation is nothing new, but this transformative perspective should extend beyond branch design and technology implementations, to process transformation that drives efficiency and optimizes the cash flow. Transforming the way your business manages the cash journey will require process changes, cultural changes and a willingness to embrace new innovations in cash management.

That's the way we've always done things.

The final nail in the coffin of change.



"WE SEE THAT BANKS ARE BEGINNING TO REALIZE THIS IS TECHNOLOGY THEY WILL NEED - BUT OFTEN, THEY DON'T THINK THEY WILL NEED IT 'TOMORROW.'

"They think they'll need it 'next week.' The reality is, the competition is already harnessing the power of recycling technology, software monitoring tools and cash management services today—so the time to start building a strategy around optimizing your cash cycle is now, not tomorrow and definitely not next week."

\bigcirc

The traditional "rules" of running a financial institution no longer apply.

Ten or 15 years ago, building a connected ecosystem was still a futuristic vision. Today, the tools are available—and they're modular, scalable, flexible and multi-vendor. Software, hardware and services can be mixed and matched to meet your organization's current-state priorities, and evolved over time to meet your long-term strategic goals. Within a siloed organization, the concept of a completely connected ecosystem may still be seen as a futuristic vision—but it doesn't have to be.

NEVER FEAR! THE END-TO-END SOLUTION

A holistic approach to cash cycle management requires examining the entire process, from your hardware to the software and services supporting it.

Our tailored, collaborative True Cash Cycle Management program can help:



Drive costs down

Shift the transaction volume from the teller line to self service



Shorten the cash cycle

Make the journey of cash more transparent

Forecast the future, based on analysis of the past



Bring predictability to the cash cycle

Improve uptime, availability and the consumer experience



Free your staff for other tasks



Enhance security



"WHEN EVERYTHING IS WORKING IN A COORDINATED WAY (THE SOFTWARE, THE HARDWARE, AND THE SUPPORTING SERVICES), THEN OUR CUSTOMERS ARE ABLE TO HAVE THE MOST TRANSPARENT VIEW OF THEIR NETWORK AND GET NEW INSIGHTS, ALLOWING THEM TO EVOLVE THEIR OWN

BUSINESS."

"The application at the endpoint is talking to the application in the back office, and everything is happening in near real-time. The information is there today, many times, it's just that the bank has not made the necessary connection points, through their software, to be able to access and use the data to their advantage."

(-

Monitor your cash cycle from start to finish. Implement reliable, accurate forecasting. Finally solve the complex equation of cash cycle optimization. We have the tools and experts to help no matter where you're at on the path to True Cash Cycle Management.

AUTHORS



Eddy Carrioni SENIOR PRODUCT MANAGER, SYSTEMS

CREDENTIALS Eddy manages the lifecycle of Diebold Nixdorf's recycler solutions and provides strategic direction on product positioning and global market segments. He is Diebold Nixdorf's subject matter expert for the Americas on cash recycling systems and True Cash Cycle Management.

KEY INSIGHT "Upgrading from non-recycling to recycling is not rocket science! It can be done, properly and efficiently, with the right tools and the right partner."



Marco Goltz

SOLUTION MANAGER, GLOBAL CASH RELATED SERVICES

CREDENTIALS Marco manages the lifecycle of Diebold Nixdorf's global service solutions, focusing on optimizing cash logistics to help banks save on cash-related costs while increasing availability and security. As an internal and external evangelist, he drives best practices, interface standards, efficiency and security for the cash logistics industry.

KEY INSIGHT "When you partner with an end-to-end service provider on cash management, you have access to the most modern software, and trained people who understand the business, and have seen many challenges from many diverse customers, so they can cross reference their experiences – so you get a solution that has been perfected."



Stephan Okroy

GLOBAL BUSINESS DEVELOPMENT LEAD, CASH CYCLE MANAGEMENT

CREDENTIALS Stephan is responsible for leading Diebold Nixdorf's True Cash Cycle Management strategic banking program, and has been instrumental in the deployment of cash recycling solutions in the international marketplace. Over the past 15 years, he has held senior positions in product management related to cash recycling and global sales.

KEY INSIGHT "We listen to our clients about their business objectives, demands and pain points. Out of this holistic picture, our approach is to develop a tailored business solution."



D

Yvonne Stoeckle

GLOBAL PRODUCT MANAGER, SOFTWARE

CREDENTIALS Yvonne specializes in availability and operations management for Diebold Nixdorf's software line of business, managing the products in our portfolio that optimize network availability and cash management. During her 30-year career at Diebold Nixdorf, she's driven the development and architecture of a wide range of financial software solutions.

KEY INSIGHT "There are several layers of software on an ATM, and we have the deep understanding of how to manage terminals in a multi-vendor environment. We gained this experience from proven installations on different machines, including recyclers, around the world. We know how to maximize their availability and optimize the cash cycle with our software."

Discover how True Cash Cycle Management could optimize your processes and transform your network. Talk to your Diebold Nixdorf representative today or find out more at DieboldNixdorf.com/TCCM.

DIEBOL



DieboldNixdorf.com