

Retail Cash Management

*From ATMs to Smart Safes and Recyclers:
Retail's Next Big Step*



Produced by the ATM Industry Association

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Foreword

The study in front of you boldly predicts strong growth ahead for cash management automation in the retail sectors of the USA, outlining, at the same time, the benefits to these businesses of expanding automation capability by adopting developing technologies like recyclers and smart safes. The research paper, expertly written by veteran industry thought leader Mike Hudson, unlocks the economic drivers of retail automation for the reader. At the same time, the author debunks myths about cash going away, perpetuated in the media on an almost daily basis by the anti-cash lobby.

It is estimated that there are about one million retailers in the nation who may be categorized as Workable Cash Management Retailers, ranging from low-tech operators to semi-automated and fully-automated operators. There is a sizeable opportunity within this sector for growing automation to save on running costs, increase efficiencies and enable staff to attend to customer needs instead of counting cash and conducting other manual jobs.

The insight and foresight revealed in this short, but powerful, paper makes it a must-read for all those in the business of retail cash management. Reading it will be time well spent for you.

Mike Lee, CEO ATMIA

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Executive Summary

The ATMIA offers a wide variety of services in, among other areas, the retail and financial products segments, including advocacy for members in government and legal regulation and oversight, development of best practices direction, and is engaged in the non-competitive promotion of the ATM industry. ATMIA's mission is "to promote ATM convenience, growth, and usage worldwide; to protect the ATM industry's assets, interests good name and public trust; and to provide education, best practices, political voice and networking opportunities for member organizations."¹

There is an opportunity to expand the reach of ATMIA beyond its traditional focus on ATMs and market drivers and issues that affect them. ATMs are cash management devices and, as such, are related to other aspects of cash management, especially in retail locations. It has been reported for the first time that 52% of ATMs deployed in the U.S. are now deployed off premises, in other words, in retail establishments.² However, handling cash for their ATMs is not the only cash management experience of retail marketers in today's economy.

In the retail space, cash management tends to be handled the same, regardless of the size of the retailer. Large or small, retail owners record transactions via their Point of Sale (POS) devices, cash exchanges hands and is stored in vaults to be transported to the bank at the end of the day. Store managers and cash room accountants count their cash frequently so they know where they stand in their day-to-day operation.

Retail businesses have enjoyed the benefits of improved processes and procedures via technological advances in all aspects of their operations: Human Resources, Loss Prevention, Operations, Information Technology and Accounting. Yet, the one common, critical component of retail (the exchange of money for goods or services) remains essentially the way it always has been. Furthermore, when using cash to conduct the transaction, there is an added challenge: it is a time-intensive, multi-layered, redundant activity that keeps key personnel tied up in the back room counting cash rather than promoting positive customer experiences on the sales floor.

¹ ATM Web Site: About Us; Mission Statement

² 2015 U.S. ATM Industry Overview, ATMIA and Tremont Capital Group, 2014

This paper addresses the market opportunities that may exist for the ATMIA to expand its reach and advocacy to cash management-oriented businesses beyond the singular scope of ATM products and services. The paper evaluates general economic drivers affecting retail cash management and specific automation drivers (smart safe and recycler). It also compares the previous ATM growth trends in the retail space with future projected trends of cash automation solutions in the retail cash management space.

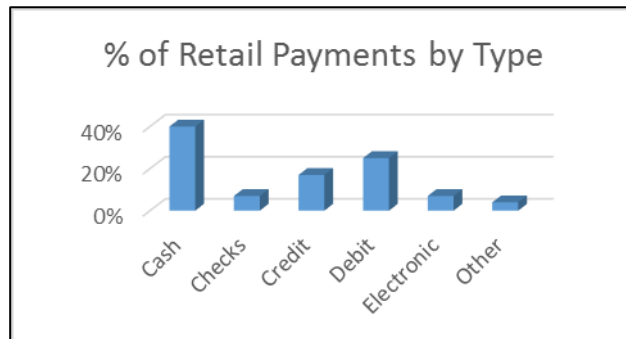
Finally, the paper provides next steps for the ATMIA to consider in order to appeal to and attract providers in the expanded retail cash management sphere beyond the reach of an ATM-only focused association.

Acknowledgements

Retail Cash Management was prepared by Michael Hudson, President & Principal at MF Hudson Associates LLC, a consultancy which has unique experience in the retail cash management and process automation market as well as the self-service financial systems market. Michael is the former CEO of Revolution Retail Systems and former COO of Tidel Engineering, L.P.

MF Hudson Associates LLC brings an unparalleled background and perspective to the manufacture and deployment of retail cash management systems, such as ATMs, Teller Cash Recyclers (TCR), smart safes and automated cash management and recycling devices that maximize the value proposition and return on investment (ROI) to retailers of these products and services.

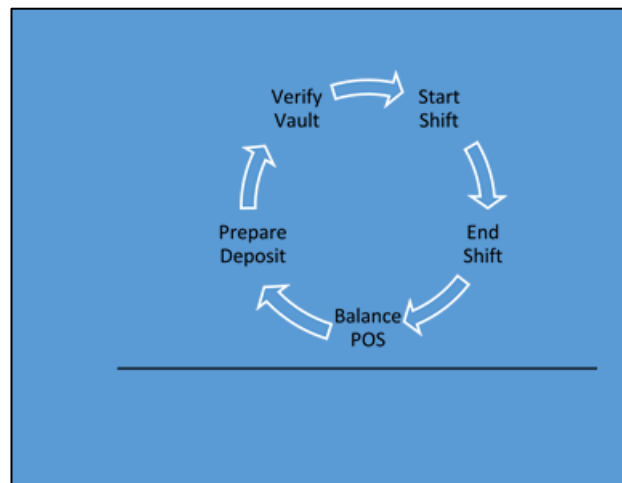
Chapter 1. Cash Is Here to Stay



Cash continues to be the means by which the largest number of retail customers purchase products.³ According to the United States Federal Reserve, there is a staggering \$1.48 trillion dollars of U.S. currency in circulation driving cash

transactions.⁴ Of these methods of payment, cash, check, credit, debit, electronic (ACH) and other, cash is used in the most number of average transactions.⁵

In a Federal Reserve Bank of San Francisco paper published in 2014,⁶ the author, Eric Cheng, reinforced what retailers have practiced for decades in the retail business. He touched briefly on the differences between the processes a retailer employs in the management of cash and the functions that are consistent, regardless of



the size, shape or purpose of the segment. Whether supermarket, big box, c-store, Quick Service Restaurant (QSR), drug store or other type of retailer, all cash management is composed of three basic functions:

1. Starting and ending the shift, which includes:

³ Diary of Consumer Payment Choice, 2012 Survey

⁴ Federal Reserve System, October 2016

⁵ Federal Reserve System, Cash Office Products Survey, 2014

⁶ Trends in Retail Cash Automation, Federal Reserve Bank of San Francisco, Eric Cheng, March 14, 2014

- Establishing and providing a cash fund to operate the registers and conduct business with customers (starting a shift by checking a drawer with a cash fund out), and
 - Returning cash in the register to the vault to be verified and processed by the cash room (ending the shift by checking the cash drawer in);
2. Balancing the cash registers at the end of the day; and
 3. Handling the deposit:
 - Determining and preparing the deposit of funds at the end of the business day, and
 - Verifying the funds in the vault that are required to conduct business the next day.

Although retailers may have different processes for accomplishing these three cash management functions, the three functions are always the same. Automating both the processes and the three cash management functions will create economies and efficiencies in the back rooms and at the cash registers, resulting in reduced cash management cost and improved profitability.

Chapter 2. Retail Market in the U.S.

According to the National Retail Federation (NRF),⁷ the retail market is categorized in seven segments, as follows:

Retail Segment	Number of Stores in the U.S.
Pharmacy and Drug	40,000
Liquor, Bar, Food	90,000
Other Restaurant	230,000
Grocery	65,000
C-store	125,000
Quick Serve Restaurant	200,000
Other Store Retailers	750,000

The NRF shows that the total market size is at least 1.5 million locations.

Validating the report published by the NRF, the U.S. Census Bureau defines the retail segments in a slightly more expansive fashion in its latest published report.⁸ The Census Bureau lists the following breakdown by segment:

Retail Segment	Number of Stores in the U.S.
Quick Serve Restaurants	200,000
C-Store/G-Store	125,000
Grocery/Supermarket	65,000
Other Restaurant	230,000
Liquor & Specialty Food	90,000
Pharmacy/Drug Store	40,000
General Retail (DIY, Big Box, etc.)	160,000
Clothing	145,000
Electronics/Appliances	135,000
Other Retailers (Hobby, Office Supply, Dept.)	310,000

⁷ NRF Top 100 Retailers, 2015

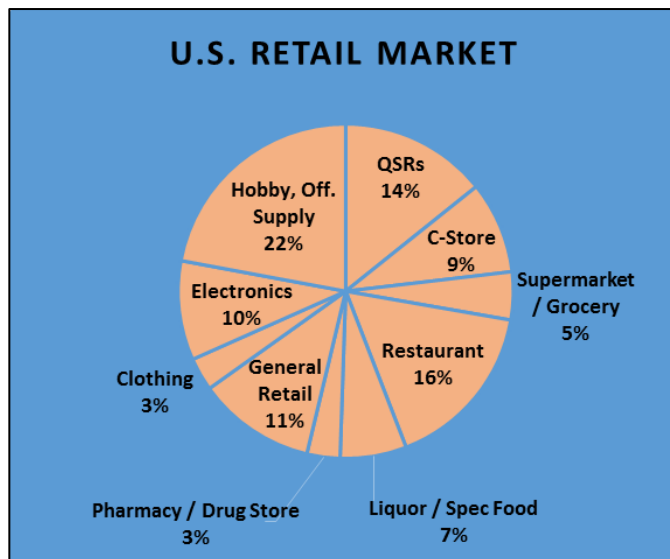
⁸ U.S. Census Bureau, 2014

Both organizations agree there are approximately 1.5 million retail locations in the U.S. handling cash in one way or another.

While not all retailers will be of the size, level of profitability or mind-set to automate their cash management processes, they are all handling cash and, therefore, should be addressed. All retailers fit into one of two categories of cash management prospects:

- Workable Cash Management Retailer
- Non-Workable Cash Management Retailer

It is estimated that, in the near and foreseeable future, approximately one-third of the total market (or about 500,000 sites) fall into the Non-Workable Cash Management Retailer group. They are no-tech retailers. Their size or revenue preclude them from making pricey technology acquisitions. They are



what Everett Rogers, in his book *Diffusion of Innovation*,⁹ calls “laggards,” – the last group to adopt an innovation. Unlike other *Diffusion of Innovation* categories (innovators, early adopters, early majority or late majority), laggards have little or no opinion leadership and typically have an aversion to change agents. Laggards tend to focus on traditions, often have low financial liquidity and are of the opinion that technology will not provide a sufficient ROI to make it worthwhile.

Excluding the laggards from the total U.S. population of retail locations, there are approximately one million retailers that can be categorized as Workable Cash Management Retailers.

Within this category, there are three types of retailers:

- Low-tech or low-revenue retailers
- Semi-automated retailers
- Fully-automated retailers

⁹ Rogers, Everett (18 August 2003), *Diffusion of Innovation, 5th Edition*, Simon & Schuster

2.1. Low-Tech or Low-Revenue Retailers

Low-tech retailers comprise the largest category by number of Workable Cash Management Retailers. Following are characteristics of the low-tech group:

- The group is dynamic; retailers are willing to migrate their cash management needs from no-tech or low-tech processes to whatever basic technology can support them.
- They may be one of the slower groups to adopt technology (late majority adopters).
- The group tends to manage its cash defensively, mostly interested in reducing exposure to loss, theft or crime.

Basic cash control functionality typically provides all the technical support required by this group. In the U.S. today, it is estimated there are 350,000 – 375,000 simple cash control devices in a market size of 450,000 locations, a 75 – 80% penetration of the low-tech, workable market. At the average price point of simple cash control devices, this remaining market opportunity is estimated to be roughly \$675 million. Examples of low-tech retailers include mom-and-pop stores, single locations or small regional businesses and non-chain liquor stores.

2.2. Semi-Automated or Low to Medium-Revenue Retailers

Semi-automated retailers have migrated the cash management process to some level of automation, such as smart safes, giving them a higher level of accountability and control over their cash. Smart safes count and sort cash and automatically credit the money to customers' accounts.

Devices that provide some level of automation generally provide a modest ROI, usually generated by:

- Cost reductions in the sales counter area,
- The lower-priced initial investment, and
- Cost reductions associated with managing cash due to improved accountability, improved accuracy and more meaningful data analytics.

SMART SAFE

Sales Counter Return on Investment

- Accountability
- Analytics
- Accuracy
- Cost Management

The semi-automated retailers invest in more affordable technology because of their lower level of revenue or profitability. It is estimated that smart safes number approximately 50,000 – 60,000 units in use in the market today, and the likely workable market size for smart safes may be as many as 400,000 of the one million+ stores that are considering some type of cash management technology.¹⁰ Smart safe penetration of the smart safe workable market is about 12.5 – 13%. At the current

average price point for smart safes, the workable market opportunity is estimated to be about \$6.75 billion dollars.

Small or medium-sized retailers may be as small as non-supermarket grocery stores, small QSRs, and non-chain pharmacies; and as large as global QSRs (such as McDonalds, KFC, Chick-Fil-A, or Subway), chain pharmacy and drug stores, restaurants, and large, global C-stores (such as 7-11, Circle K or Arco AM/PM).

2.3. Fully-Automated Retailers

Fully-automated retailers anticipate fully automating their cash management functions, including the complete recycling of cash (notes and coin). The benefits of full automation include:

- Reducing Key Performance Indicators (KPIs), such as payroll, cash variation, cost of cash, cost of armored services, bank service fees and other KPIs;
- Developing ROI through cost reductions or eliminations that are also focused on the cash office, not just the sales area; and
- Most importantly, by automating the time-consuming, but mundane tasks of cash management. In doing so, retailers free up their cash room managers to engage in more customer-facing activities. As a general rule, retailers assign the tasks of cash room management to their longer-tenured and highly-trusted employees, who are best at converting customer-facing time into increased revenue and profitability.

¹⁰ MF Hudson Associates Market Research

Typically, retailers will have already employed some form of cash management; that is, they may be among the first adopters of smart safe technology and are looking to upgrade. Currently, it is estimated that there are 3,000 – 3,500 cash recyclers active in the U.S. retail market space (excluding Teller Cash Recyclers (TCRs) in financial institutions).¹¹

Given the higher costs of cash recycler technology, an expected or acceptable ROI is realized by larger, higher-revenue-generating retailers. However, it is estimated that the serviceable market for recyclers is approximately 150,000 such retailers. Assuming the accuracy of the estimated number of units installed, that represents roughly 2.5% of the workable market, which is calculated to be a \$7.5 billion dollar market.

Examples of fully-automated retailers could be DIY stores (Home Depot, Lowes, BJ's Wholesale), large format retailers (Walmart, Target, Costco), supermarkets (Kroger, Albertsons, Safeway, HyVee, Whole Foods) and high-traffic entertainment centers (casinos, waterparks, Universal Studios, Disney World).

RECYCLER

Cash Office Return on Investment:

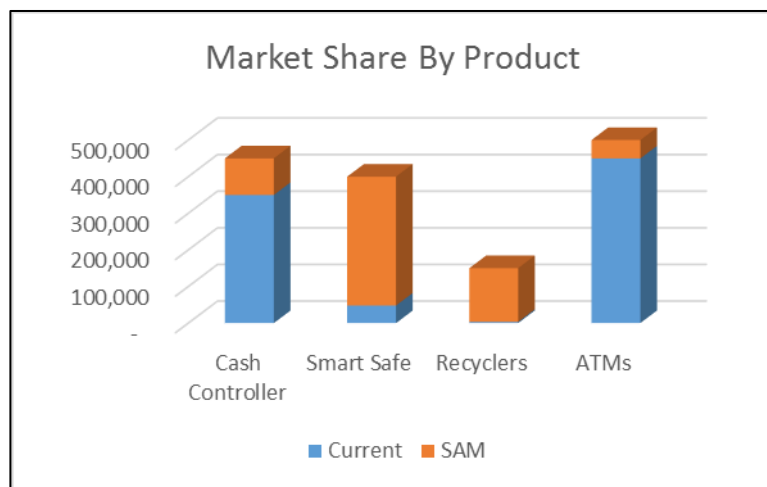
- Reduce Payroll Hours
- Analytics
- Reduce (Eliminate) Cash Float
- Accuracy
- Increase Customer-Facing Contact
- Cost Management
- Eliminate G&A Expense

¹¹ Ibid.

Chapter 3. Summary

Cash management in retail is more than just the cash management provided by and through ATMs. While the growth and impact of ATMs in the retail space over the past 30 + years is evident, another cash management process has been at work: Cash controllers have been providing retailers fundamental support in their cash management processes and functions during this time.

Basic support for cash management did not change for twenty years, from the late 1970's to the late 1990's. With the introduction and expansion of smart safes in the mid to late 1990's, and



with the growth of the market over time, as well as the expansion of cash management to the fully-automated recycler products, the retail market is poised for an explosive growth in products, solutions, services and support in automated cash management.

The estimated workable market for cash management products is based upon reports and experience:

- The least technical portion of the market, the cash controller, represents almost one-third of the total workable retail market, and it is almost two-thirds saturated.
- Smart safes currently enjoy between 12 – 15% saturation of their workable market, which, like cash controllers, could be as much as 25 – 30% of the total retail space.
- Cash recyclers, with their price and complexity, may only make sense in 10 – 12% of the workable retail space, which is still over 100,000 locations with only a 3% penetration.

Validation of these estimates is provided by information available to us related to ATMs in the space. Comparing ATM trends and future expectations gives us insight into the trends and expectations for smart safes and recyclers.

In the retail segment alone, the market cap for the respective platforms is tremendous and virtually untapped. While it is true that cash control products, which have been around the longest, are rapidly approaching a saturation point, the evolution of smart products, followed by fully automated products, has opened up huge new markets for development.

Further, while all of the traditional segments of the retail industry are included in this review, the less traditional locations, such as hospitality, entertainment (sports venues and casinos), service agencies, municipal offices, parking garages and the like, are not included in the workable market analysis, thus increasing the total market opportunity.

Chapter 4. Next Steps

The objective of this project is to evaluate and demonstrate opportunities that exist for the ATMIA to expand its membership, using its core competency as the launch pad for future growth. Since the fundamental drivers in the ATM business are the same as the fundamental drivers in retail cash management, it is logical to assume that the businesses and individuals that make up the ATMIA are likely to realize the benefit of an expanded reach by the Association in related fields.

The next step for ATMIA is to undertake a study that will lead to a roadmap for accomplishing the expansion of its reach and influence. Branding ATMIA to include a broader reach of participants and developing a list of target companies for membership and contribution to the goal of expanding the reach of the Association must be the first order of business.

Beyond the impact of this project in the United States, this same objective applies to the global nature of the Association.