



## ATM INDUSTRY TRENDS

### Abstract

Latest technologies in today's world are helping ATM's to transform from being a simple cash dispenser machine to a more personalized and richer communication channel helping financial institutions to achieve major operational efficiencies and building customer loyalty by deploying more integrated and value added services. Thus enhancing customer convenience as well as experience of interacting with the ATM leading to the increase ATM adoption rate. Failing to innovate and modernize ATMs puts financial institutions at great risk of losing business opportunities and being prone to sophisticated fraud attacks.

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# ATM

A woman with long brown hair, wearing a denim jacket, is using an ATM. She is holding a card and looking at the machine. The ATM has a large 'ATM' sign above it and a 'CASH' sign on the side. The background is a blurred indoor setting.

## 1.0 Introduction

Ever since the first ATM went live at Barclays Bank in London in the year 1967, the growth of the ATM has been fascinating. ATM installations have spread across different kind of places ranging from densely populated places to scarcely populated places including hilly regions like the Himalayas.

As ATM industry is expanding and with the latest technologies, the functionalities performed by ATMs also increased drastically over the years.

ATM operators and financial institutions have transformed ATMs, from being just a cash-dispensing machine to perform complex value adding services quickly, efficiently and seamlessly for building customer loyalty and achieving major operational efficiencies.

However, the ATM industry have always showed vibrant growth and opportunity in spite of facing many challenges during the process of transformation in terms of cost, fraud attacks etc. which put a major risk of financial loss.

Availability of more integrated and enhanced services at ATMs devices will help financial institutions to enhance customer experience and improve a bank's revenue.



## 2.0 Challenges faced by ATM Industry

Regulatory and compliance issues play key roles in business and technology strategies of financial institutions, as the end goal of the compliance regulations is to manage and mitigate risks since security at the ATM has become one of the major challenge as the threats are becoming more diverse in nature than ever before.

It is the responsibility of every stakeholder in the ATM industry to protect customer sensitive information and meet all compliance requirements, which are designed to accomplish the desired requirement.

Some of the key regulations and compliance requirements common to all ATM operators, Financial Institutions across the globe include:

### EMV Compliant

As EMV (Europay, MasterCard and Visa) proved to mitigate card fraud by card skimming, many of the cardholders and merchants are adopting EMV technology to mitigate the risk. Even the global payment schemes like VISA, MasterCard have urged the need to push for EMV

to prevent card frauds. Majority of the POS terminals across the globe have implemented EMV but ATM industry adoption of EMV is slightly behind the target in some regions. As majority of the cards around the world are EMV enabled, financial institutions need to understand that if ATMs are not EMV compliant, they can be held liable for any fraud happening when an EMV enabled cardholder does a transaction at the ATM.

### Operating System Upgrade

As Windows 10 is the current generation operating system offering various features related to security, remote support, enhanced customer experience and acts as a platform to launch next generation software technology, the ATM industry is aligning itself to adopt it in order to meet regulatory compliance after January 2020, as Microsoft is planning to end the support for previous versions of Windows operating systems. Financial institutions need to start planning their migration of their ATMs since it may require additional costs in terms of money, effort and time in migration of the hardware and software components of the ATM. The cost incurred to upgrade/replace the equipment

depends on various factors like the age of the equipment, the upgrade feasibility and the timing for replacement.

### ATM Security

Automated teller machines (ATM) have always been a big target for criminals. ATM related fraud has become a worldwide issue, which affects financial institutions as well as its customers. Financial Institutions need to assess their fraud-prevention capabilities to detect gaps that need to be filled and to attempt to get one step ahead of fraudsters. Of all the various types of fraud attacks, ATM skimming remains a top concern for financial institutions as it brings the biggest fraud cost to the global ATM industry annually. With the technological advancements happening, leading vendors have developed anti-skimming devices to mitigate the risk due to ATM skimming and to extend the lifespan of existing ATMs.

ATM security will continue to remain a priority for the near future as modern network technologies and the open nature of internet are creating an environment where security has become an essential parameter that should be embedded into the foundation of corporate strategy.



### 3.0 Opportunities at ATM

ATM plays an important role when cardholders evaluate their bank relationship as its the customer's most preferred point of contact for most financial institutions. However, due to the rise of digital payments in the recent years have led to the decline of ATM profitability.

With the growing innovative solutions in digital payments space, ATMs need to reinvent themselves to be competitive in the market.

By integrating latest technologies with ATM channel, financial institutions can enhance the interaction between the customer and ATM and provide its customers with wide range of value added services at the ATM itself without the need of visiting the actual branch. Thus meeting customers' expectations in terms of convenience and faster service, and also serves as an efficient solution for smaller banks and credit unions to compete with larger competitors, by expanding their services without the need for opening physical branches.

The deployment of new technologies is expected to be a key factor in revenue growth across the ATM industry over the coming years.

#### 3.1 EMV Adoption

In the initial days when there was not much innovation in technology and fraud techniques, ATMs were considered secure since the design principle relied on PIN combined with online authorization to authenticate the transaction, which met the expectation of reducing the fraud. Hence, there was no push for the financial institutions and ATM operators to adopt EMV chip technology.

However, with the latest technologies available, fraudsters have become innovative in using various techniques like magnetic stripe skimming, pinhole cameras etc. in committing fraud and this has led to the increase in the rate of ATM transaction frauds.

Hence, financial institutions and ATM operators started to focus on the requirements for EMV migration at the ATM. In addition, global payment networks like VISA, MasterCard have published deadlines for EMV migration for everyone in the payment ecosystem to be compliant to reduce the fraud liability.

Today's consumers expect convenience and security to be given the top most priority when handling financial transactions. In order to achieve that,

financial institutions need to provide access to EMV-compliant ATM services in order to protect their customers' financial information, as well as to reduce the threat of fraud liability.

Until and unless EMV is adopted at all ATMs owned by financial institutions, ATMs would be more vulnerable to fraud attacks which puts the security of customers' data at risk.

#### 3.2 Mobile Integration

ATMs are considered as important platforms where financial institutions can gain customer loyalty by offering seamless experience of accessing cash.

As smartphone capabilities are rapidly expanding at a rapid pace and the number of customers using smartphones are increasing accordingly, ATMs also need to get smarter by integrating latest technologies available in the market like Near Field Communication (NFC) or QR codes etc. to be able to provide better banking experience for smartphone users at their ATMs and to mitigate the risk due to various fraud techniques like card skimming and card trapping.

ATM-mobile integration offers financial institutions significant amount of



opportunities to enhance customer experience by offering services like including the ability to store transaction preferences, mobile card-less ATM access, faster completion of transactions and many more and also helps financial institutions to be on par with digitalization and market changes in physical channels.

### 3.3 Cash Recycling at ATM

In many countries, customers prefer cash as their primary choice of making payments due to the convenience factor. With the latest advancements in technology, customers are looking for faster, secure and convenient means of accessing cash. With the increase in customers' demand of cash increases, the cost of managing, handling, transportation and security related expenses are bound to increase.

To have an efficient cash management solution, Cash Recycling is one such efficient cash management solution which offers many benefits for banks.

Using Cash recycling, financial institutions can perform depositing as well as dispensing cash from same cassette residing within the ATM. Through this mechanism, ATMs make use of the cash deposited by the customer for future withdrawals, thus reducing the frequency of cash replenishments by the financial institutions. Thus reducing the labor cost needed and possible human errors due to manual intervention while handling the cash.

### 3.4 ATM Data Analytics

The demand for Big Data analytics is growing in the financial services industry. One such area where it can prove valuable is in the ATM industry.

With the latest technological innovations and sophistication at the ATMs, ATMs facilitate customers to perform wide range of transactions which were typically handled by traditional branch representatives. Thus there has been

a significant increase in the customers opting for self-service channel which led to the need for data analytics in ATM industry to understand customers' preferences and behavior and to achieve operational efficiencies in areas like demand forecasting and cash management.

Financial institutions can deploy advanced data based models and data driven decisions, to produce a wide range of customized statistics and increased customer satisfaction.

### 3.5 Video Banking/Remote Teller Technology

Today's customers expect their interaction with their bank to be convenient as well as personal.

Interactive Teller Machines (ITM), has turned out to be as the financial industry's efficient solution which offers customers the ability of performing wide range of transactions, starting from the simplest of transaction such as dispensing cash to complex activities such as performing personalized banking through remote tellers.

Using Interactive Teller Machines (ITM) customers can perform 95 percent of the activities performed by the branch through real time communication with remote teller generally situated in a call center.

Hence it serves as an ideal solution for the financial institutions looking for an optimal efficient solution in order to establish and expand their services in areas where the feasibility of opening of a branch is minimal and it also helps financial institutions to add value to its customers by providing extended access to banking services and financial experts to its customers.

### 3.6 Deposit Automation/Check-Imaging

The ATM channel plays a key role in improving the customer banking experience as it provides financial

institutions with ample opportunities to reduce costs and increase efficiencies and drive value-added services with the use of technology.

Latest technological advancements led to the continuous evolution of branch transformation initiatives by financial institutions in order to take advantage of varying customer preferences.

Deposit automation is one of such value adding, efficient and convenient initiatives gaining popularity in today's banking environment.

Major benefits of Deposit Automation are:

- As traditional teller transactions can be moved to self-service channel, financial institutions can focus on building relationship with the customer and providing high-value services
- Due to its 24x7 availability, it provides hassle free experience to customers to deposit money during anytime of the day
- Cost Reduction for financial institutions

### 3.7 ATM Branding

ATMs are considered as valuable tools for any financial institution for strengthening their brand, increasing their customer loyalty, and driving additional revenue opportunities.

ATM Branding facilitates increase in transactions and helps to generate new opportunities by gaining customer attention and ATM present a profitable opportunity to promote brand awareness.

In the traditional form of ATM branding, an ATM operated by an 'Independent ATM Deployer (IAD)' builds a partnership with a financial institution (FI), in which the ATM bears the name, logo and graphics of the financial institution. Through this, a financial institution can offer surcharge-free transactions to its customers thus boosting customer loyalty and helps in generating new opportunities.



## 4.0 Conclusion

As the growth of the ATM channel increases, ATM plays a crucial part in any financial institution's reinvention strategy, as it would provide numerous opportunities to implement self-service technologies to adapt to user demand. Failing to innovate and modernize ATMs puts financial institutions at great risk.

With the help of latest technologies financial institutions can incorporate advanced features which will result in enhanced security, increase in ATM adoption and enhanced customer experience which in turn will improve the revenue of the financial institutions.



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