MODERNIZING THE ATM EXPERIENCE

Why banks need to improve their ATM solutions

An NCR white paper

INTRODUCTION

The last few years have seen the banking industry undergo some of its most significant changes in decades, as new technology has compelled consumers around the world to change how they think about interacting with their providers.

Strong self-service tools, whether online, on mobile or at the ATM, are now a minimum expectation for many consumers. To succeed, banks must respond to these evolving demands with new functionalities and services that make it easier and more convenient for customers to interact with them.

Modernizing your ATMs can help you deliver the experience your customers expect. But there are a range of factors to consider. Replacing your hardware to offer bigger, brighter screens and a more engaging interface is just one key step. Adding the extra functionality your customers want is another consideration entirely.

Customers expect modern ATMs to be much more than just a cash dispenser. They want to access all the services they need from their bank—they want a fully-fledged branch within a box. Often, however, financial institutions can't extend the functionality of their machines because the underlying software and infrastructure isn't suited to improvements that demand more processing power.

These older ATM systems have likely been in place for decades, and can seriously limit innovation. And at a time when agility and controlling costs are top priorities, these limitations can seriously hinder the effectiveness of a bank's ATM network—and their ability to compete.

So, what must banks do to modernize these systems and deliver an ATM experience that meets the demands of today's consumers while staying ready to adapt to tomorrow's changes?

1. THE CHALLENGES OF OUTDATED SYSTEMS

The banking industry has never been particularly quick to embrace innovation, and once processes and protocols are established, they tend to remain unchanged for years. This is particularly true of the protocols banks use in their ATM networks to connect their machines to the transaction processing engine and their wider network.

A decades-old way of working

Many banks still rely on communications protocols that have been in place since the very earliest days of the ATM. While they've been adapted with new functionalities to keep up with the evolving demands of the industry, they're still essentially based around the same structures used in the 70s and 80s.

Built on traditional IT thinking and still used today, these structures caused the business logic of the protocols to be split between the ATM and the switching environment. This means that when a bank wanted to add something to its network, changes have to be made in two places: the ATM itself and the switch. In the past, this meant if the bank wanted new functionality, they'd have to work with an ATM vendor and a separate switch vendor—something often too cost-prohibitive to do.

Today, this format has completely changed, with the world much more focused on client-server relationships. So, many financial institutions are finding these outdated protocols are now preventing them from adding new services and functions to their ATMs.

The barriers to better experiences

For many banks, self-service is the ideal way for consumers to handle their everyday needs—freeing up the bank's resources for other, more profitable activities—so many of the functions previously handled at the counter need to migrate to the ATM.

But this is often more than their legacy systems can deliver. And while today's hardware is more than capable of meeting these expectations, existing message protocols and switches are not.

That's because these protocols have many limitations on what banks can easily do with them. While they don't make it impossible to add new features to an ATM network, it's not a quick or easy task.

While banks can still implement a straightforward protocol for basic transaction types, such as cash withdrawals, they'll have to create a separate service connection using a completely different protocol to support other types of richer transactions. This means more time, effort and expense.

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2. THE NEED FOR FLEXIBILITY AND COST-EFFECTIVENESS

One of the biggest consequences of relying on older protocols is that financial institutions will find it much harder to bring new services to their customers in a timely and cost-effective manner. This means banks won't be able to respond to evolving demands or conduct adequate tests to identify the best future solutions.

Demanding a more agile environment

While bank leaders likely know what they want their ATM network to do, they may not be able to achieve their plans without significant effort. With a mobile app or online portal, for instance, it's relatively simple to add functionalities and run experiments such as A/B testing. However, traditional ATM protocols don't offer the agility financial institutions need to be able to adapt to future digital innovations.

For example, the head of the ATM channel at one bank asked us how she could test out some innovations on her channel to determine which would be the most effective for their customers. But, because the organization still used legacy solutions that required it to work with an ATM and a switch vendor, the cost was too high to make any experimentation viable.

However, modern protocols that remove these cost and time limitations can transform how financial institutions engage their ATM network and deploy new technologies and functionality. The greater flexibility and lower costs associated with this means it's now feasible for banks to run pilot schemes on a small section of their network to gauge the popularity of new services, identify what features will be the most useful to customers, and roll them out to the entire network.

Managing the migration of the ATM network

This flexibility is also essential because banks will still need to maintain connections using their existing protocols. It's not realistic to migrate an entire ATM network—which could include thousands of devices—to more modern protocols at one time. It is often a gradual process, so having a system that can support both old and new technologies simultaneously is essential.

Similarly, older legacy ATMs also need to be replaced over time with newer, more functional models, to provide customers with the full banking experience they expect from the self-service channel. Again, this isn't a speedy process, so ensuring older ATMs maintain full connectivity with the network is vital.

Being able to ensure every device on the network can communicate using modern protocols (such as ISO 20022) helps ease any disruption during the transition phase and allows banks to continue delivering the services their customers expect on every device.

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3. IMPLEMENTING A MODERN ATM EXPERIENCE

Today's environment, based around modern protocols, has been redesigned from the ground up to be much more conducive to faster, less expensive deployment. Banks using these technologies no longer have to deploy an engineer to make code changes at the switch and the ATM every time they want to add a new transaction to their devices.

Contrast this with older systems, where the amount of development work required to make even simple changes was completely out of proportion to the expected benefits.

So, with the constraints of those back-office linkages released, what can banks expect to achieve when offering customers a more modern ATM experience?

More transactions, more features

Among the most common benefits of modern protocols is the ability to roll out a wide range of new transaction types that give customers the experience they expect.

For example, no bank can afford to be without mobile integration. Yet, so far, this has proven slow to gain penetration because, while it's possible to implement such systems with older protocols, it's slow and expensive, and it requires complex coding to implement. This means the few banks that have focused on this have widely different solutions in place, leading to greater fragmentation in the market. It's the same for other emerging transaction types.

With effective software solutions in place, capabilities such as mobile initiation and cardless withdrawal—where a customer can begin a transaction using their smartphone instead of their card—are much easier to implement and roll out across the network.

Improved security and authentication measures are some of the other features banks may be able to deploy much more cost-effectively as a result of having the right foundations in place on their network.

Older protocols relying on traditional architecture have a very rigid process for authenticating transactions that are very difficult to break from. This may not be an issue for everyday card-based transactions, but in an environment where multi-factor authentication is becoming the norm and more transactions take place across multiple channels, such as pre-authorized high-value withdrawals, orchestrating these using traditional protocols becomes much more challenging.

It also opens the door for banks to focus on lower-volume transaction types in addition to the core functionalities of an ATM. Previously, the high costs associated with rolling out services that would have more limited appeal meant banks could only afford to focus on the broadest transactions.

Enabling a full-branch experience

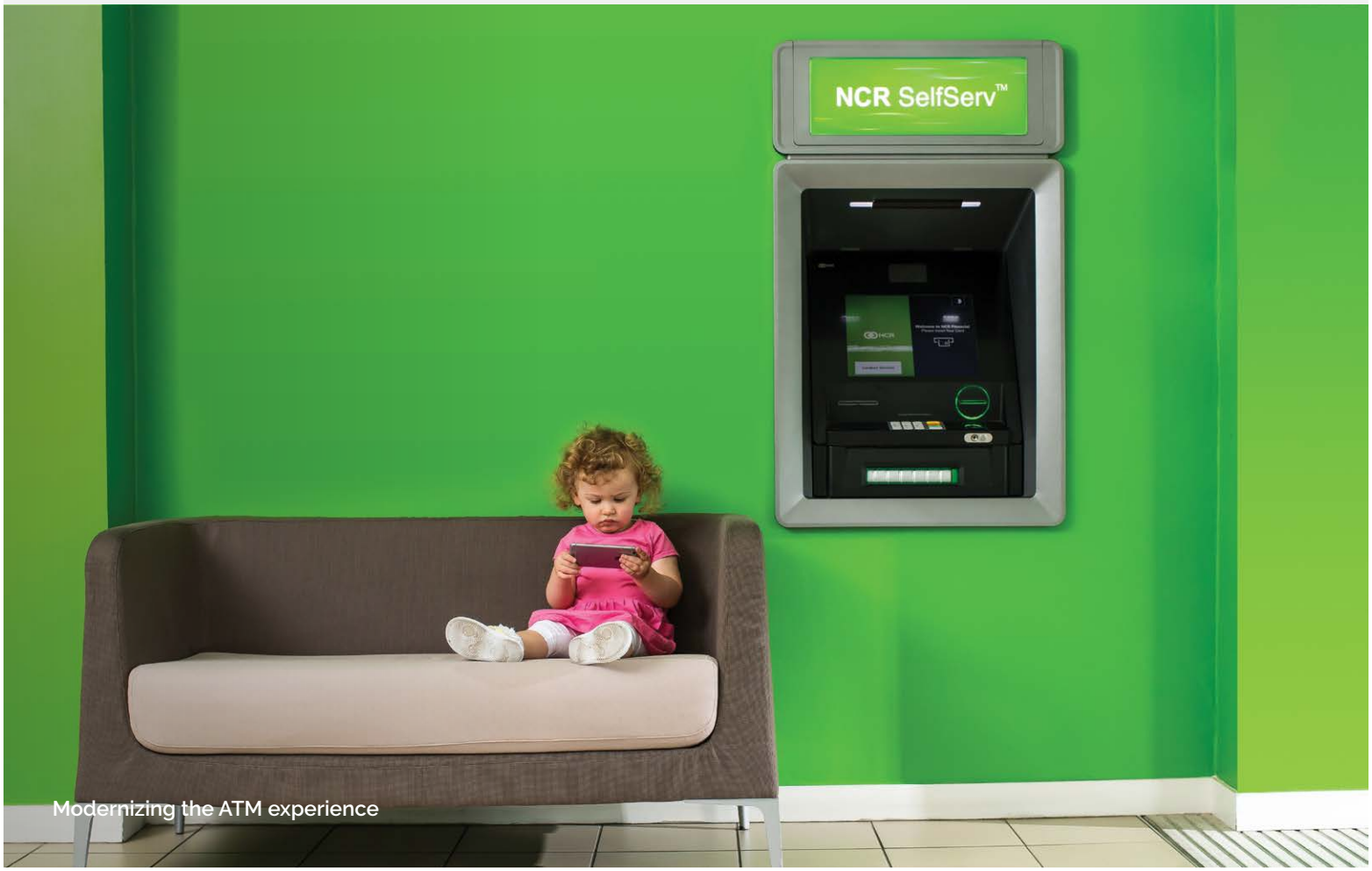
For many banks, the ultimate goal is to create a self-service environment that enables customers to manage every aspect of their finances. The use of modern protocols is the key that allows banks to offer these services in a way that makes financial sense for the organization.

One example of this is in the UK, where a bank wanted to add deposit functionality to their ATMs. While NCR's tools offered the most modern solutions for this, the bank's switch could only support older manual deposit capabilities; users had to put their notes into an envelope, which would then be picked up by an employee later in the day and counted. Therefore, the bank had to develop a workaround to use more modern automated solutions—they had to make it appear to their switch that the system was still using the old envelopes.

With more modern solutions, however, banks can avoid these costly, complex patches. And, as cash recycling becomes a higher priority, having modern protocols will be essential in adopting these tools effectively.

This can already be seen in certain parts of the world, such as southeast Asia, where cash recycling is still rare. This is because the majority of ATMs in the region run on highly-customized versions of proprietary switches and terminal drivers, and the costs of migrating to other versions is too high to be practical.

However, the new generation of technology releases financial institutions from the limitations that held them back; now, they can experiment and innovate with more niche services. This might involve partnerships with firms such as insurance providers, for example, to offer a wider range of services at the ATM, or enable banks to deliver more personalized marketing messages to the ATM based on a customer's individual profile.

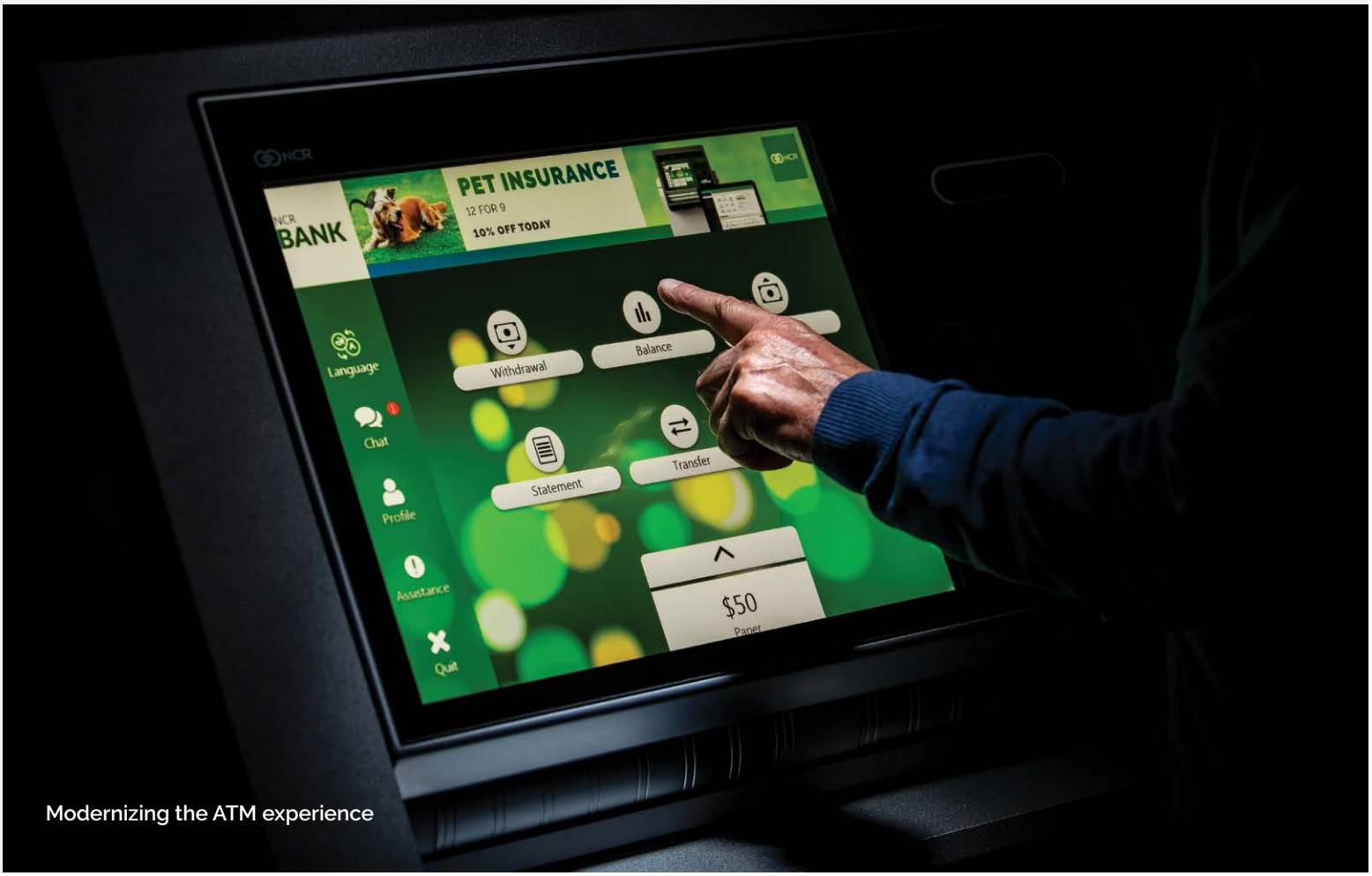


CONCLUSION

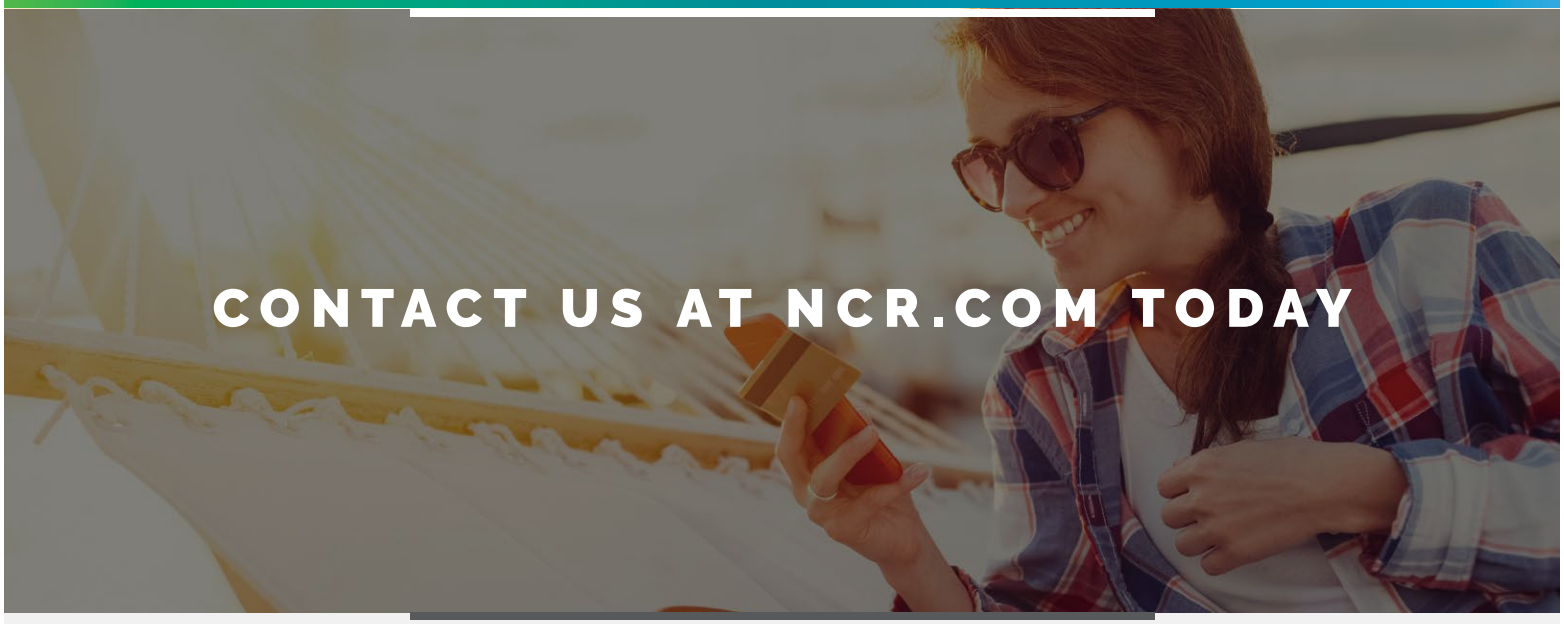
The banking sector is currently undergoing a period of great change as new channels emerge and customer expectations evolve, and this evolution is set to continue for the foreseeable future. Therefore, it's vital that financial institutions are not only building the tools they need for today, but are putting in place the right platform to enable them to extend their capabilities indefinitely, and do so quickly and cost-effectively.

NCR's solutions, for example, have been specifically designed to have clear points of customization that banks can use to help with their migration without needing to go into the core code when they migrate from one release to the next update.

These capabilities will be central to the future of ATM network development in a more agile environment, freeing up financial institutions from the limitations of older protocols. The result of making these upgrades will be a more modern ATM environment that allows customers to enjoy services and functionalities that they have not experienced before.



Modernizing the ATM experience



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