LEVEL UP FROM LEGACY TO NEXT-GENERATION TRANSACTION PROCESSING

How to successfully and seamlessly migrate to a modern payments platform

An NCR white paper

INTRODUCTION

When it comes to payments and transaction processing, today's financial institutions are operating at a time of great change. Customer expectations, payment technologies, market competition, regulation, product models—all of these dimensions have evolved significantly in recent years and will continue changing in the years to come.

If you want to meet customer demands for frictionless, omni-channel experiences and next-generation products—all while maintaining efficiency and keeping costs under control—legacy infrastructure is simply no longer good enough.

Traditional, silo-based transaction processing systems, which are designed specifically for individual channels such as the ATM, point-of-sale, branch or mobile banking, can't offer the flexibility and agility modern banks need.

For institutions that are still using these legacy solutions, now is the time to migrate to a system expressly designed to navigate the challenges and leverage the opportunities of today's payments landscape.

In this whitepaper, we'll take an in-depth look at why it's so important to move on from legacy transaction processing, the biggest hurdles to overcome in this process, and how to maximize your chances of a smooth, successful migration.

1. THE BUSINESS CASE FOR NEXT-GENERATION TRANSACTION PROCESSING

There are a number of powerful reasons for financial institutions to invest the time and money required to migrate from legacy systems to next-generation transaction processing. Let's look at some in detail.

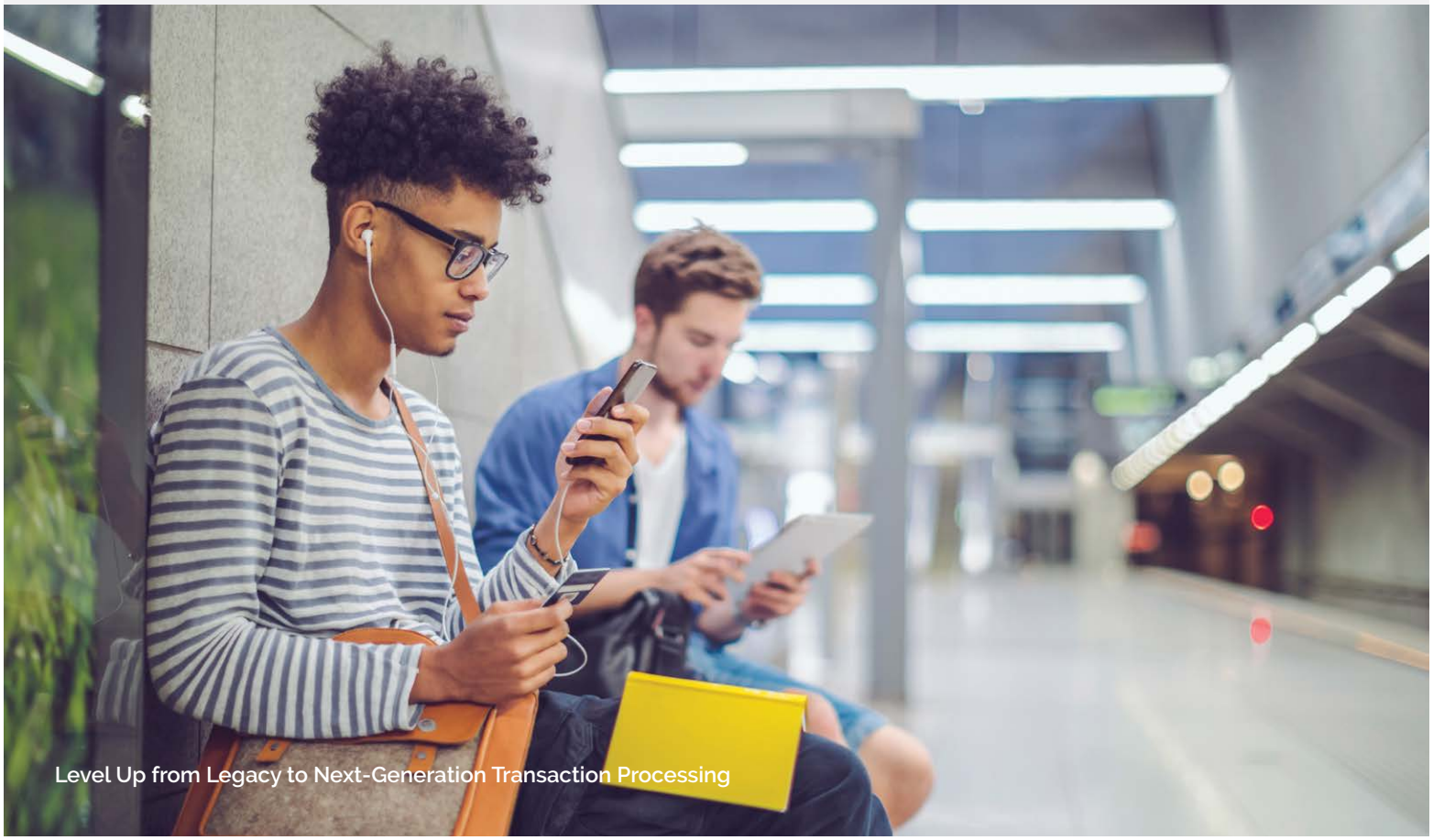
Staying competitive

The financial services industry—and particularly the payments space—is more competitive than ever before. Regulatory shifts such as the EU's PSD2 directive are driving open banking, opening up the marketplace to new entrants and product types, and encouraging increased collaboration and data sharing.

One specific trend that provides an insight into recent competition growth is the rise of fintechs. Smaller than traditional financial institutions, these firms leverage technology and innovation to enable agility and to provide a responsive, user-focused customer experience.

The World Fintech Report 2018[1] from Capgemini and LinkedIn noted that fintechs are "unburdened by legacy systems and old-school culture." More than 90 percent of these firms said agility and providing an enhanced customer experience are vital to achieving competitive advantages. More than 76 percent said their ability to rapidly develop new products and improve existing ones is critical to their success.

In order to stay relevant and competitive in the current era, established institutions must be able to adapt to changing market conditions. Outdated, silo-based legacy solutions, which are slow and expensive to adapt, are not conducive to overcoming challenges and seizing opportunities in an increasingly fast-moving industry.



Handling new transaction types

Unlike cumbersome legacy systems, modern transaction processing platforms provide the flexibility required to handle new payment methods and support the emerging technologies consumers want to use.

Key developments in the last few years alone have underlined just how important it is for financial institutions to be ready to respond to major changes in the payments space.

No longer are credit or debit cards the standard way of carrying out transactions. There are a plethora of alternative payment mechanisms which successful acquirers integrate into their services, while issuers will want to ensure their customers have options available. In the ecommerce world, bank transfers are expected to become the second most popular payment method above credit and debit cards.[2]

In the United States, one of the most significant trends of recent years has been the rollout of EMV chip technology for in-store card payments. Since October 2015, the liability for any instances of in-store counterfeit fraud has rested with the party—either the issuing financial institution or the merchant—that has not adopted EMV chip technology.

This triggered a widespread shift in how card-present transactions were conducted across the U.S. According to EMVCo[3], the percentage of card-present transactions in the country that used EMV technology increased from 18.6 percent in 2016 to 41.2 percent the following year. EMV chip card deployment and adoption rates rose from 394 million and 26.4 percent, respectively, in 2015, to 785 million and 58.5 percent in 2017.

These figures make it clear that any institution unable to make a timely and efficient adjustment to supporting EMV transactions would have been at risk of losing ground to its competitors and falling short of customer expectations. Having to accept a greater liability for counterfeit in-store transactions was another significant risk.

In Europe, and particularly the UK, recent growth in contactless payments has provided further evidence of the need for financial institutions to respond to changing technologies and consumer habits. A recent Visa report[4] showed that a record 34 percent of card payments in the UK used contactless technology in June 2017. Two-thirds (66 percent) of UK consumers have used contactless cards since they were introduced in September 2007.

Banks using agile and adaptable transaction processing infrastructure would have been the best equipped to respond to this trend and meet the needs of their customers.

Enabling omni-channel delivery

Consumers are becoming increasingly accustomed to accessing the products and services they need, in the channel of their choice, at whatever time suits them. They want seamless, frictionless, omni-channel experiences. These demands are just as relevant to banks as they are to online retailers, tech brands and video streaming services.

With channels such as mobile and digital banking becoming just as important as the ATM or branch for consumers looking to engage with their banks and access core services, there is a growing need for the barriers between these channels to be reduced, and ideally removed altogether.

Legacy, silo-based systems are not fit for purpose in this omni-channel environment. Channels that are built, managed and delivered in isolation from one another result in a fragmented and ultimately unsatisfying customer experience.

One of the most compelling advantages of a flexible, unified transaction processing platform, like NCR's Authentic, is its ability to enable omni-channel payments, encompassing everything from the ATM and branch to POS and mobile.

Driving business efficiency

As well as helping banks respond quickly to market developments and keep their customers satisfied, next-generation transaction processing can offer key cost and efficiency benefits for individual businesses.

Primarily, using a single system to manage a number of channels is simply a more efficient and cost-effective approach, enabling more productive use of time and staff resources.

Next-generation platforms can also offer lower overall cost of ownership—through the use of open systems, industry standards and commodity hardware—as well as making it more feasible for banks to migrate transactions away from the branch to less costly digital channels.

These efficiency benefits can also be realized in the ATM channel, which is increasingly serving as an extension of the branch. ATMs are providing a growing range of services and allowing convenient, 24/7 engagement with customers, without the cost considerations of a large physical footprint. But to achieve these advantages, banks must move beyond legacy technology in the ATM driving and transaction switching platform, and adopt a system that enables efficient, responsive management of the ATM estate.

Of course, the process of migrating from legacy infrastructure to a next-generation platform is far from straightforward. With the right planning and a structured, proven approach, it's perfectly possible to complete a smooth and seamless migration, but it's important to consider the inevitable challenges involved in this process.

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1 https://www.capgemini.com/gb-en/news/capgeminis-world-fintech-report-2018-highlights-symbiotic-collaboration-as-key-to-future-financial-services-success/
2 https://www.worldpay.com/global/insight/articles/2017-11/global-payments-report-2017
3 https://www.emvco.com/about/deployment-statistics/
4 https://www.visaeurope.com/newsroom/news/the-contactless-revolution-ten-years-on

2. THE CHALLENGES OF MIGRATION

It's not uncommon for banks still running legacy transaction processing technologies to have been using those systems for 10 or 20 years, or even longer in some cases. Many financial institutions are entrenched in their established methods, and undertaking a migration to an entirely new solution may not be something that has ever crossed the minds of executives and decision-makers.

For the reasons above, however, sticking with legacy infrastructure is becoming less feasible and ever more problematic for many banks, particularly those feeling the pressure of rising costs, new competition and evolving customer expectations.

If your organization is considering the possibility of moving to a next-generation transaction switch platform, the potential challenges involved in the migration are likely to be a key part of your decision. Your key considerations might include:

Service consistency

For many financial institutions embarking on a project such as this, maintaining consistent services for customers will be their primary concern. A truly successful migration is one that reaches its objective with no noticeable impact on service delivery or the customer experience.

This risk can be minimized by ensuring your migration strategy includes proven steps and back-up plans to help avoid service disruption.

Time demands

You want to embark on the process of moving to a new system with confidence that it will be completed in a reasonable timeframe. In the past, there have been examples of businesses abandoning migrations because they have taken too long.

Of course, a procedure as complex as this does take time—particularly for larger financial institutions that could be handling hundreds of transactions every second—but with realistic targets and a structured approach, it's possible to make the shift within a reasonable and agreed-upon timescale.

What if something goes wrong?

As some recent high-profile examples have shown, migrations that aren't effectively planned or executed can have serious repercussions. Reputational damage, customer dissatisfaction and financial losses are arguably the biggest risks of a failed migration.

However, rather than discouraging migration outright, these potential issues can be viewed—much more positively—as indicators of why it is so important to take a carefully structured approach to the process, and to have contingency plans in place should any problems occur.

By working with an experienced partner that has been there and done it before, with demonstrable results, your organization can make the transition to a modern transaction processing platform with confidence.

3. DOING IT RIGHT

NCR has helped a diverse range of clients—from relatively small banks handling dozens of transactions per second, to major global institutions handling upwards of 500 transactions per second—plot and execute their journey from legacy infrastructure to Authentic, a platform fit for today's changing payments industry.

Past migrations have shown the value in following a gradual, phased process that splits the transition up into stages. This removes the pressure of attempting to complete a large, complex project all at once, and makes it easier to roll back any stages that do not go as planned.

Here is a standard, five-step sequence NCR has developed:

1. Establish Authentic, a link to the legacy system and to the core banking system
2. Move the card scheme interfaces
3. Transfer authorization processing
4. Move connections to ATM and POS terminals, starting with a low number to ensure stability before moving larger groups
5. Shut down the legacy system

For some customers, keeping the two systems separate is more appropriate with this sequence:

1. Establish Authentic and a link to the core banking system
2. Establish connections to the card schemes so they are connected to both systems
3. Start to move card scheme traffic by BIN ranges from the legacy system to Authentic
4. Move connections to ATM and POS terminals (this could be in parallel to step 3)
5. Shut down the legacy system

Deciding the right sequence will depend on the scale and complexity of the customer's environment and the requirements from the business.

Testing is vital at each stage, to ensure you feel confident with the steps already taken before focusing on the next phase of the migration. Automated tools can expedite and optimize the testing, while NCR can provide valuable support thanks to its experience in this area.

The five-step sequence can be adapted to suit the needs of individual organizations. One common motivation for moving to a new transaction switch platform is to enable new services or functions, something that can be incorporated into the sequence at the right stage.

If your institution wants to introduce new types of ATMs that your current system cannot support—cash recycling machines, for example—this could be worked into the process after step two or three, before existing terminals are moved. This demonstrates how migrating to a new transaction processing platform can enable the delivery of new services that benefit your business and its customers, as well as transferring existing functionality.

NCR has witnessed the value of these sequenced approaches in its work with past clients, which has involved migrating to Authentic from widely used systems such as Postilion and BASE24.

One of the key elements of NCR's method is "legacy wrapping," which involves enclosing existing applications in a technology wrapper to allow integration with both internal and external systems. This makes it possible to implement changes and deliver new services, while the insulated legacy system continues to deliver value without requiring additional investment.

These technical aspects are a key part of any migration to a new transaction platform. However, equally important is the customer service and support experience NCR is able to offer, having completed such projects successfully with many clients in the past.

Leaving legacy technologies behind and establishing a new system is a challenge, without question, but it is something your business can achieve with the right partner by your side.

CONCLUSION

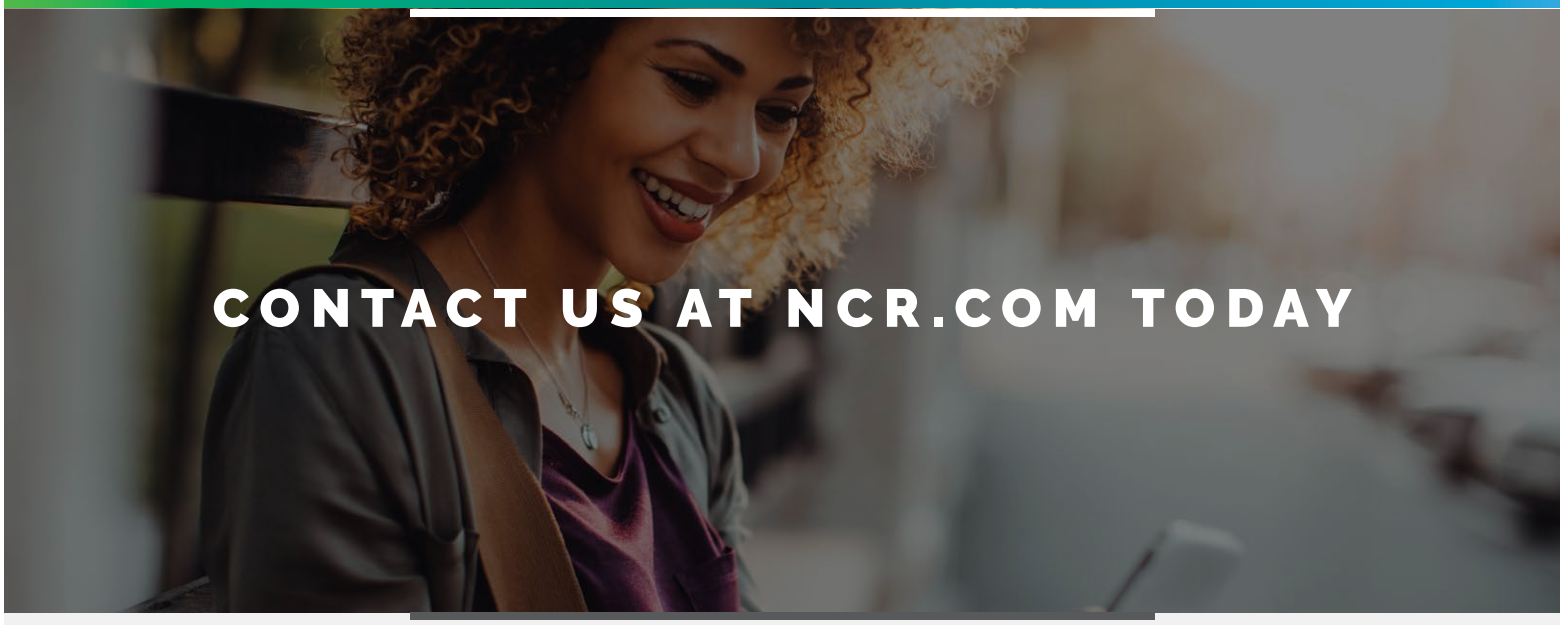
The payments landscape is shifting and evolving at an unprecedented pace, with regulations changing, new competitors emerging and customer expectations escalating. Businesses that want to stay competitive, deliver an excellent customer experience, and maintain cost efficiency must be able to keep pace with the wave of change sweeping across the industry.

Outdated, silo-based transaction processing technologies make it extremely difficult to achieve this sort of agility, so forward-thinking financial institutions need to shift their focus to modern alternatives.

Platforms such as Authentic offer organizations the flexibility and control they need, but migrating away from infrastructure that has been in place for decades is no simple task, with various risks, costs and time factors to be taken into account before going ahead.

Crucially, however, it is a challenge that can be overcome, as NCR's experience of migrating clients from legacy systems to Authentic has shown. NCR's combination of technical knowledge with customer support and servicing expertise makes it possible to complete the transition smoothly, in a reasonable timeframe, with minimal risk.

With a tried-and-tested approach to migration, tailored to meet your specific needs, and an experienced partner by your side, your organization can realize the full potential of next-generation transaction processing. Solutions fit for the modern era will ensure you are prepared for whatever challenges and opportunities the payments industry may bring, now and in the future.



WHY NCR?

NCR Corporation (NYSE: NCR) is a leader in omni-channel solutions, turning everyday interactions with businesses into exceptional experiences. With its software, hardware, and portfolio of services, NCR enables nearly 700 million transactions daily across retail, financial, travel, hospitality, telecom and technology, and small business. NCR solutions run the everyday transactions that make your life easier.

NCR is headquartered in Atlanta, Ga., with over 30,000 employees and does business in 180 countries. NCR is a trademark of NCR Corporation in the United States and other countries.