FIS SUCCESS GUIDE: MAKING THE CASE FOR CONTACTLESS PAYMENTS
CONTACTLESS PAYMENTS OFFER FAST, CONVENIENT AND SECURE TRANSACTIONS THAT DRIVE CUSTOMER LOYALTY

Research shows that consumers, issuers and merchants benefit from the use of contactless payments. Consumers enjoy added convenience, speed and ease of use, while issuers and merchants enjoy faster transaction times, increased card purchase volumes, lower operational costs and penetration into the cash payment market.

As a quick refresher, contactless payments require no physical contact between the consumer payment device and the physical point-of-sale (POS) terminal.

Contactless chip cards have been available for use in the United States since 2004. As retailers have made the switch to NFC-enabled Point-of-Sale (POS) terminals, the infrastructure is now in place for contactless payments to succeed.

U.S. CONTACTLESS PAYMENTS MILESTONES

2004 Contactless Cards Used for First Time in the U.S.

2011 Google Wallet Launches NFC-Enabled Mobile Devices

2012 Softcard NFC-Enabled Mobile Payments Platform for Android Phone Introduced

2014 Apple Pay Reignites Interest and Use of Contactless Payments

2015 Android Pay and Samsung Pay Hit the Market
CONTACTLESS PAYMENTS OFFER FAST, CONVENIENT AND SECURE TRANSACTIONS THAT DRIVE CUSTOMER LOYALTY

In a contactless payment transaction, the consumer holds a contactless payment card, mobile device or wearable closely (less than 2-4 inches) to the merchant POS terminal and the payment account information is communicated via Near Field Communication (NFC) or Magnetic Secure Transmission (MST) technology.

Large investments are being made to securing and speeding up payments at the point of sale – implementation of EMV and investment in NFC, for example. Juniper Research predicts that more than half of global transactions and one-third of U.S. transactions will be contactless by 2022, requiring more investment in POS technology.

Market leaders are already issuing dual interface cards. They are doing so to accelerate the decline of dependence on cash, improve transaction times at the point of sale and to pursue other use cases such as mass transit. Those who remain should be actively planning for contactless demand with their processors if they haven’t yet done so.

In this guide, we will discuss the benefits of contactless payment capability by considering three use cases

- Issuer
- Merchant
- Cardholder / Consumer

“The emergence of contactless payments was always meant to be the second phase of the migration to EMV-chip cards in the United States. Much of the rest of the developed world has long-since bought into EMV-chip cards and has already made a big down-payment on contactless payments.”

Bastian Knoppers, Senior Vice President, Card Production FIS Payments Division

CURRENT U.S CONTACTLESS LANDSCAPE (VISA DATA)

95% of new terminals shipped are contactless capable
70% of locations are capable of contactless
48% of current face-to-face transactions are at contactless enabled merchants
CONTACTLESS PAYMENTS
MARKET TRENDS

Mandates Drive Momentum Elsewhere

Mandates by Visa, MasterCard and American Express outside of the United States gave contactless payments momentum for rapid adoption elsewhere. As a result, more than half of payments in face-to-face transactions in several countries are contactless, and half of all European cards will be contactless-enabled by 2021 according to the Retail Banking Research (RBR) forecast.

Without a mandate, adoption depends upon benefits outweighing resistance to market penetration by key stakeholders – consumers, merchants and issuers.

Large segments of consumers and business owners will continue to carry and leverage plastics for decades to come. While the option to be completely cardless exists predominantly as a future state, it will be close to a decade before consumers are ready to eliminate a card as a payment form factor. The impetus is on meeting the demand by providing a bridge that lets people reap all the benefits of contactless payments - regardless of the form factor they prefer - balancing both near-term and long-term shifts in demand and expectations.
CONTACTLESS PAYMENTS MARKET TRENDS

Strongest Use Cases So Far Are Where Lines Are Longest

The strongest use cases for contactless payments initially are among mass transit systems. Launched on buses in 2012, Transport of London’s contactless payments account for half of all pay-as-you-go fares on subways and rail lines and nearly as much on buses and trams, according to Digitaltransaction.net. Now, London’s mass transit system is licensing its ticketless technology to other transit systems in New York, Boston, Miami and Sydney, Australia. Additional U.S. cities already on board with contactless payments include Portland with Hop Fastpass and Chicago with a similar system called Ventra.

With roots in the Canadian market where contactless payments account for half of all face-to-face transactions, BMO Harris is already issuing contactless cards to its U.S. customer base. The bank is strategically prioritizing issuance to customers who reside in large transit markets, not waiting until their cards expire.

While the biggest benefit to mass transit is increasing system efficiencies, a secondary benefit is the cost reduction of handling cash. Visa found in its Cashless Cities study that transit agencies spend an average of 4.2 cents per digital dollar collected – less than one-third of the 14.5 cents per physical dollar collected.
Outside mass transit, contactless payments also provide a better customer experience at high volume merchants by reducing the time and overall friction with contact EMV. This is critical as brick & mortar retailers try to remain afloat in the face of eCommerce rivals. And, like mass transit systems, retailers also reduce their expense of handling cash when payments shift to digital.

In 2018, cash remains one third of all transactions at the point of sale and more than 60% of transactions are less than $10. Contactless payment cards have been shown to reduce the dependence on cash by 10 to 15% on average in other developed markets such as Australia, Canada and the United Kingdom. This has reduced the costs for the merchant and increased revenue for the issuers.

“For contactless payments, the major benefits are clear. There is less friction in payments yielding a better customer experience at point-of-sale, safer and more secure payments, and proven transaction lift.”

Jim Johnson, Head of Financial Institution Payments, FIS
ISSUER INSIGHTS

Contactless adoption will help issuers be competitive in the marketplace, while helping to retain existing customers.

As issuers acclimated the cost of their payment card strategy to support the migration to EMV chip cards, many opted not to adopt dual-interface cards because of the additional costs. Today, the cost differential between standard EMV chip cards and dual-interface (contactless) cards is a fraction of what it once was.

Removing friction and authorization lag times from the payment process will drive better consumer experiences that influence consumer payment preferences.

Contactless cards to flood the U.S. by 2021

<table>
<thead>
<tr>
<th></th>
<th>U.S. Contactless Card Shipments (millions)</th>
<th>Worldwide Contactless Card Shipments (billions)</th>
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<tbody>
<tr>
<td>2016</td>
<td>25.7</td>
<td>1.23</td>
</tr>
<tr>
<td>2018</td>
<td>78.4</td>
<td>1.46</td>
</tr>
<tr>
<td>2021</td>
<td>229.6</td>
<td>2.09</td>
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Source: ABI Research / Creditcards.com
ISSUER INSIGHTS

FIS is investing millions of dollars to ready its card personalization and processing platforms to support contactless payment card technology. This investment underscores the firm belief contactless payment cards will better enable issuers to deliver better customer experiences at the point of sale, increase transaction volumes and open up new opportunities to facilitate payments at new locations such as mass transit and unattended parking locations.

Issuers across the globe are capitalizing on opportunities to migrate costly cash transactions over to branded payments mediums - whether cards or mobile solutions. Visa conducted a survey in Europe and issuers saw an 18% lift in transactions after implementing contactless. A MasterCard Advisory study reflected that an average lift of approximately 30% in total spend in the first 12 months, post contactless adoption in the U.S.

Being on the forefront of the contactless adoption will help issuers be competitive in the marketplace, while helping to retain existing customers. Consumers adapt quickly to new technology and solutions that offer convenience. Enabling contactless payments improves the payment experience for existing cardholders and demonstrates the forward thinking and innovation that drives acquisition.

Processors Speed Readiness for Issuers

The goal of processors this year is to ensure support for issuers so that when they are ready to act they can roll out contactless payments efficiently. Processors such as FIS have already invested in readying platforms and enabling issuers’ bank identification numbers (BINS) for contactless payments.

Deploying chip cards with faster data transaction speeds is simple and cost-effective for issuers focused on improving cardholder experience at the POS.

ISSUER BENEFITS OF CONTACTLESS CARDS:

- **Differentiation** – ease of use for cardholder, the contactless card eliminates friction and speeds up the transaction. Also, early adopters will have an advantage in the market.

- **Top of Wallet** – helps ensure top of wallet preference for issuers’ card, and defends against migration to other cards, especially in open loop transit markets and high travel cardholder programs.

- **Incremental Transaction Volume/Spend** – ease of use is proven to drive incremental transaction volume and spend, from both preference to that card as well as migration of cash to contactless.
MERCHANDISE INSIGHTS

Merchants Laying the Groundwork in the United States

Although issuers led the migration to EMV, merchants are laying the groundwork for facilitating contactless payments. More than half (54 percent) of the top 100 merchants are already contactless enabled, according to the Secure Technology Alliance.

Fortunately, almost all of the new POS terminals required for EMV payments are contactless capable. Certification to enable that capability is a simple process that many large retailers are already taking advantage of. Merchants for whom long lines result in customer dissatisfaction and an uptick in cart abandonment are leading the way. For example, fast food restaurants, grocery stores, convenience stores, drugstores and high-volume mass merchants such as Walmart and Costco, are among the greatest proponents.

The business case for merchants to adopt contactless payments is clearly focused on improving the face-to-face customer experience. After all, the majority of consumers (59 percent) believe that their chip cards are slower than mag stripe, according to Visa Global Market Research on EMV. In contrast, consumers view contactless card and mobile payments as fast and easy. Merchants also benefit from contactless by reducing the expense of handling cash.
MERCHANT INSIGHTS

One softer benefit for both merchants and issuers is the added security of Dual Interface EMV Contact and Contactless cards. If the terminal fails to read the contactless transaction, EMV remains a secure way to accept payments.

Faster Checkout Experience; Serve More Customers

A faster checkout experience equates to a better checkout experience and the ability to serve more customers. The use of contactless cards will help to optimize the investment in new terminals that was made for initial U.S. EMV migration. Most terminals are already equipped to support contactless payments and merchants need only enable that software functionality vs. investing in new terminals. Additionally, reduced cash-based transactions improve payment handling costs overall and offers greater security and protection from fraud losses with the layering of contactless and EMV acceptance at the physical POS.

Merchant Acquirer Benefits of Contactless Cards

- Faster transaction speeds compared to contact cards
- Differentiates cards from competition with faster checkout experience
- No impact to acceptance: EMV approved terminals already support faster transmission rates

IMPORTANT FACTS:

<table>
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<th>Acceptance Landscape for U.S. Cardholders</th>
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<tr>
<td>70% of merchants are contactless capable.</td>
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<tr>
<td>95% of all new terminals being deployed to the field are contactless capable.</td>
</tr>
<tr>
<td>+48% of merchants are accepting contactless payments.</td>
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<tr>
<td>95% of F2F U.S. transactions occur at contactless enabled merchants.</td>
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CONSUMER INSIGHTS

Consumer expectations for speed or instant gratification is reinforced in many ways daily. Consumers expect it to be just as fast and easy to make a payment as it is to order a ride on Uber or search a global database. Mag stripes and EMV cards, cash and checks all require the consumer to give of their time. Contactless authorizations are nearly instantaneous. The ability to “tap and go” is easy – whether with a plastic, a wearable or a mobile device frees consumers from any remaining friction in the payment experience. They also provide seamless and ubiquitous transaction experience with the rest of the world (for customers who travel outside the U.S.).

Consumer preference will shape the future of payments. It’s all about ease, convenience and secure transactions. With contactless cards, transactions take 1 second to tap versus 9 seconds to dip. No matter the form factor, contactless cards enable speed and convenience.

According to CGI, dual-interface cards offers consumers a convenient, fast, frictionless experience at the point of sale. Consumers prefer to pay quickly at the point-of-sale which positions contactless payments to overtake cash transactions. The cards also provide EMV chip technology security so consumers feel secure with their card payments, regardless of whether they insert or wave their card at point-of-sale terminals.
There is pent up demand for contactless

Consumer expect an improved experience and contactless cards remain one of the most accessible payment forms across all consumer segments. According to Visa data:

- **59%** of consumers think chip is slower than mag stripe
- **<10%** are really bothered by the chip
- **57%** expect the EMV experience to improve in the next year
- **40%** who own a contactless card use it whenever they can

“With contactless cards, transactions take 1 second to tap versus 9 seconds to dip.”

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<tr>
<th>CONTACTLESS CHIP CARDS BENEFIT ISSUERS &amp; CARDHOLDERS</th>
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<tr>
<td><strong>Seamless consumer experience</strong></td>
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<tr>
<td>- Consumers still prefer to use cards over other form factors</td>
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<tr>
<td>- Consumers find “tap-to-pay” to be simple, quick, and secure as they can pay in about a second</td>
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<td>- Happy, engaged cardholders have more frequent transactions and higher spend</td>
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<td><strong>Competitive differentiation</strong></td>
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<td>- Issuing contactless cards demonstrates payments leadership and innovation</td>
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<td>- As contactless sees increasing global momentum, contactless cards offer consistency around the world</td>
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<tr>
<td>- Contactless cards are more likely to achieve top-of-wallet status</td>
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<tr>
<td><strong>Strong contactless business case</strong></td>
</tr>
<tr>
<td>- Contactless cards have proven effective in converting cash to card-based payments</td>
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<tr>
<td>- Cash is used for one-third of transactions in the U.S., representing a $2T opportunity</td>
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Visa 2018
WHAT’S NEXT?
Being an early adopter in contactless payments will provide issuers and merchant acquirers with a multitude of benefits. Like the value of being differentiated in a marketplace that is still evolving. Also, it positions the financial institution or business with demonstrated relevance by way of an innovative payment strategy. And, there is immediate efficiency associated with migrating more cash based transactions like transit and quick-service, to a contactless form factor with robust security.

WHY NOW?
The global value of contactless debit/credit transactions is predicted to exceed $2 trillion by 2021. In the U.K., a country leading the way in contactless adoption, over one-third of card payments were contactless in June 2017 while in Canada, contactless payments saw a 36 percent year-over-year gain from Q2 2016 to Q2 2017.

ABI Research predicts that U.S. contactless card shipments will hit 196.8 million in 2021 and global payment cards in circulation will continue to increase through 2022. In the near term, it’s expected that next generation payment form factors including mobile devices, wearables and payment objects will complement traditional cards and that dual interface technology will help to make the overall payment experience consistent and seamless.
WHY NOW?

The use of non-cash payment methods continues to grow worldwide, with the U.S. ranking 5th in the world in terms of countries embracing cashless technology. Unsurprisingly, Millennials are major proponents of this trend, with nearly one in five predicting a cashless society in the future where currency is no longer used for transactions.

According to CPI’s white paper, “Catch the Dual Interface Wave Now,” the rapid acceleration of dual interface cards in the U.S is due to increasing consumer and retailer acceptance, advances in technology, and Issuer benefits, thus making the timing right for dual interface.

Contactless Payments Market Revenue in the United States
(billions of dollars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
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<tbody>
<tr>
<td>2014</td>
<td>$15.87</td>
</tr>
<tr>
<td>2015</td>
<td>$21.39</td>
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<tr>
<td>2016</td>
<td>$29</td>
</tr>
<tr>
<td>2017*</td>
<td>$37</td>
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<tr>
<td>2018*</td>
<td>$48</td>
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<tr>
<td>2019*</td>
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<td>2022*</td>
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<tr>
<td>2023*</td>
<td>$199</td>
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<tr>
<td>2024*</td>
<td>$269</td>
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<tr>
<td>2025*</td>
<td>$358</td>
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Interested in hearing more?

The team at FIS is eager to discuss how we can help you with payments solutions that are right for you and your customers.

Please contact your FIS strategic account manager at GETINFO@FISGLOBAL.COM

For ongoing insight into the world of payments, Please visit us at:
PAYMENTSLEADER.COM
RISEWITHFIS.COM

About FIS

FIS is a global leader in technology, solutions and services for merchants, banks and capital markets that helps businesses and communities thrive by advancing commerce and the financial world. For over 50 years, FIS has continued to drive growth for clients around the world by creating tomorrow’s technology, solutions and services to modernize today’s businesses and customer experiences. By connecting merchants, banks and capital markets, we use our scale, apply our deep expertise and data-driven insights, innovate with purpose to solve for our clients’ future, and deliver experiences that are more simple, seamless and secure to advance the way the world pays, banks and invests. Headquartered in Jacksonville, Florida, FIS employs about 55,000 people worldwide dedicated to helping our clients solve for the future. FIS is a Fortune 500® company and is a member of Standard & Poor’s 500® Index.

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