

obile Payments have emerged as a catalyst for transactions across all markets.

In underdeveloped markets, mobile payment technology is enabling businesses to sell products and services to consumers that had previously been out of reach.

In developed markets, it has made the process of purchasing products and services even simpler.

PayPal, one of the most popular digital payment solutions on the market, facilitated \$66 billion in payment volume throughout 2015, and now has 188 million active registered user accounts across the US. Furthermore, Statista projects that mobile payments will account for more than \$210 billion in transactions by 2019.

Mobile payment technology is a step forward in the process of connecting businesses to the people they are serving. However, some merchants will find themselves miles behind their competitors by the time the transition to mobile payments is complete. The reason? A failure to implement the correct mobile payment strategy.

An ever-increasing number of digital wallet and mobile payment options have emerged over the past few years, and they all do the same fundamental thing. However, the popularity of each option is incredibly variable. Factors determining which mobile payments are being used can become as specific as the geographic location and demographic characteristics of the customers using them.

In order to successfully implement mobile payments as a merchant, it is critical to understand all of the complexities that mobile payments create for a business, as well as how to mitigate them.

# THE FUNDAMENTALS OF PAYMENT FLOW

On a fundamental basis, the concept of payments is extraordinarily simple:

### THE MOVEMENT OF DATA FROM ONE POINT TO ANOTHER.

Although some companies have tried to change how the payments system works over the past decade, they have all found that the entrenched interests are nearly impossible to disrupt. The flow of data remains more or less unchanged.

### HERE IS A VERY SIMPLE EXPLANATION OF HOW THE PAYMENT FLOW WORKS:

- 1. Merchants work with acquirers (their banks) to set up accounts and often hardware and software to accept payments. Issuers are banks that hold the money and authorize transactions for consumers.
- 2. Payment gateways receive the transaction and pass it onto the card associations (MasterCard, Visa etc.) which have networks to regulate the rules and flow of payments.
- **3.** The card associations pass the information back to the bank, which approves or declines the flow of money and sends a signal back to the acquirer.
- **4.** The issuing banks then transfer the funds back through the networks to the merchant account in the acquiring bank.

For the most part, the basics of this system are similar in all parts of the world.

The complexity of mobile payments shows up when looking at the entities involved in that process. Some countries use mobile carriers as the issuer, gateway and network (through what is called direct carrier billing). In others, the bank will serve as issuer, acquirer and network. The regional variations of the payment flow make for a massive amount of complexity in the ecosystem.

Not to worry! Most merchants do not necessarily need to know how the entire payment flow works for their in-store and digital payment options. The goal for merchants is to pick the most flexible set of services to be able to take payments in as many ways as possible.

# GETTING TO KNOW ALL THE NEW WAYS TO PAY

Over the last half dozen years or so, a massive battle broke out among technology companies, banks, card associations, cellular networks and merchants to assume dominance over the various steps of the payment flow.

The cellular operators attempted to band together to create a network with a mobile wallet called Softcard before selling its assets to Google in 2015. A coalition of retailers that called itself the Merchant Customer Exchange (MCX) and included the likes of Wal-Mart, CVS and 7-Eleven wanted to take over the entire stack (with a mobile wallet component called CurrentC). MCX shut down the beta of CurrentC in June 2016 and the project is considered to be dead.

In the end, all the players in the payment wars went back to what they do best. The technology companies released hardware and software. The banks (which sat out much of the chaos) continued to store money. The card networks continued to print cards and create payments hardware and services.

Yet a funny thing happened amidst the bedlam ...

FVERYBODY GOT A WHOLE LOT SMARTER.

The result is a plethora of new ways for consumers to pay and merchants to accept payments. All built on top of a more robust payment flow and network.

The payment flow is now built on top of the technology of the mobile era. Banks and card networks operate with robust security in the cloud. Hardware is built with connectivity to the Internet and secure element chips to store information locally.

This evolution has led to a new generation of payment mechanisms that provide surface area and variability to the merchant flow.

# BUILT ON THIS BACKBONE, NEW WAYS TO PAY AT STORES, WEBSITES AND APPS INCLUDE:

- **» PAY APPS:** Includes pay-at-store apps like Apple Pay, Android Pay, Samsung Pay, PayPal and peer-to-peer payments like Venmo etc.
- **» EMV POINT-OF-SALE:** Secure chip on plastic cards. A "slot" instead of a "swipe." As of October 1, 2015, the liability for fraudulent transactions that do not use EMV shifted from banks to merchants.
- » MERCHANT CARDS AND APPS: Many retailers offer their own credit cards and loyalty systems. Since these cards do not go through the normal card network to issuing bank to consumer flow, merchant cards need to work directly with the card networks for security, verification and authentication services.
- **» INTERNET OF THINGS:** Washing machines that hold customer accounts, refrigerators that can order groceries, buttons that can order household items.
- **» WEARABLES:** Smartwatches with payment apps. Smart jewelry, key fobs or even clothing.
- » APPS AND WEBSITES: Payment portals like PayPal, Google Wallet, MasterCard MasterPass, and Visa Checkout. Even Apple Pay can now be used as a portal to make payments on apps and websites.

All of these varied forms of making or accepting a payment may seem very different.

But here is the secret: They are not.

All of these ways to pay are just different end points sitting on to top of the same robust payments infrastructure and flow that has grown so robust in the last decade.

"The way I think about it a lot is that we are kind of in the midst of a third wave. We started completely offline. Paperclips, knuckledusters, charge plates, whatever it was. You have to recognize that the value was so compelling. More convenient for consumers. Merchants can sell more. It got kind of the enterprise going," said MasterCard CIO Ed McLaughlin.

"The second phase, the real leap forward was in the early 70s when we started building the network, putting MagStripes on cards. Basically saying that we are moving to electronic payments. And then you are multiple orders of magnitude better than what you had ... We are in the start of the third phase."

# THE GROWING ACCEPTANCE OF PAYMENT APPS

A report by research company Phoenix Marketing International said that 32% of smartphone owners now have credit or debit card details in a third-party mobile wallet. Phoenix's 2016 Credit Card Monitor report said that in the 18 months after Apple Pay was launched, there was increased interest in mobile wallets, likely due to the number of retailers that began accepting mobile payments through an app.

The majority of third-party smartphone wallet adopters are aged between 18 and 32, said Phoenix. Around 67% of all smartphoneowning card holders in that age range have input their card details into Apple Pay, Android Pay or Samsung Pay apps.

Generation X—those aged between 33 and 48—are also adopting the mobile wallet; 50% of people have loaded at least one card to one of the major mobile payment brands.

"If we look at adoption alone (excluding usage), the approximately 23 million Millennial and Generation X third-party wallet adopters taken together point to the next big thing," said Phoenix's senior vice president Leon Majors, in a press release. "Right now, it's not so much about winning the brand race as it is giving these 'apped up' consumers more places to shop."

Phoenix's data is based upon the activities in March 2016 of 3,000 credit cardholders.

In terms of market leaders in the mobile wallet sector, Apple Pay is the king, the report said. In the last 12 months, 74% of people who use Apple Pay have loaded two or more credit cards to their mobile wallet. Around 64% of these app users said that they intended to add more credit cards in the future. As a result of this surge, the Apple Pay adoption rate has risen by 18% in the last 16 months.

Apple Pay is also the most likely to attract younger cardholders, the report said. Apple Pay is used by 39% of 18 to 32-year-olds, compared to the 29% and 27% of people who use Android Pay and Samsung Pay, respectively. Adoption tails off after the age of 49; only 4% of so-called Baby Boomers and 3% of those over 68 use Apple Pay. Nobody aged over 68 uses either Android Pay or Samsung Pay.

## THE IMPORTANCE OF EMV

If you run a physical retail location, you need to know what EMV is and be able to accept credit and debit cards that work on the Chip and PIN model.

EMV stands for Europay, MasterCard and Visa (these are the three companies that created the standard). EMV is a set of standards for "smart" cards that have a chip ingrained into them that work by placing them into slots on payment terminals. Instead of a signature, EMV-enabled cards often ask for a personal identification number (PIN) instead. EMV cards are considered more secure than the class MagStripe card readers where people swipe cards through magnetic readers at the point-of-sale.

Europe has employed EMV for many years, but the standard is just now being implemented en masse in the United States. As of October 1st, 2015 merchants are now liable for any fraudulent charges or breaches (instead of banks or consumers) if they are not using EMV. Chances are, you and the people who shop at your store have at least one EMV card in their wallet.

According to a MasterCard announcement from March 31, 2015, two-thirds (67%) of U.S.-issued MasterCard branded cards feature chips. Throughout the U.S., 1.2 million merchants—including one million local and regional merchants—are accepting chip cards.

The Payments Security Task Force projects that 98% of credit and debit cards in the U.S. will have chips by the end of 2017.

# INDUSTRY LEADERS EXPAND MARKET REACH AND DELIGHT CUSTOMERS BY STRATEGICALLY POSITIONING MOBILE PAYMENTS



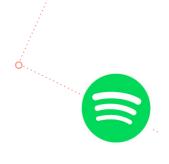
Brand: STARBUCKS

Mobile Payment Solution: Payment App Strategic Positioning: Added mobile payments to its customer loyalty app and now sees more than 1 in 4 transactions executed through mobile in the US.



Brand: GOOGLE PLAY

Mobile Payment Solution: Boku Direct Carrier Billing Strategic Positioning: Added accessible payment method to a market where only 17% of consumers have a credit card and only 46% have a bank account.



Brand: **SPOTIFY** 

Mobile Payment Solution: PayPal Strategic Positioning: Enabled young listeners that didn't have credit cards to upgrade to Spotify Premium accounts by accepting PayPal.

# CONCLUSION

The most important part of all commerce is the buying and payment process. It's vital that this process is quick and accurate for all customers, regardless of payment instrument, device, location, or other factors.

When implementing a payments strategy, there are three key priorities that emerge. It starts with understanding what mobile payment solutions customers are using. With all of the different options that customers have within each specific market across the globe, implementing the ones that are most commonly used, in a way that's familiar, is critical.

Next, understanding what customers are thinking and experiencing while navigating the checkout process is also a focal point for payment strategies. The most direct way for merchants to understand why carts are being abandoned and how to increase conversion rates is to put their digital properties in the hands of real users.

Finally, once customers are in the last stage of checkout, it is critical that the transaction process is successful. Failed or inaccurate transactions can be tremendously disappointing for customers after investing the time and energy into shopping. If a transaction fails in its final stages, it can be expected that customers won't try again.

### **» APPLAUSE CAN HELP**

Applause enables companies to address each of these challenges, with its three-pronged approach to in-store, online, and omnichannel Payment Strategy and Validation:

- 1. PAYMENT RESEARCH: Research and competitive benchmarking from the Applause global community of experts uncovers market trends, government restrictions, and regionaly-favored payment methods that impact your payment experience across the globe.
- 2. EXPERT-LED USABILITY STUDIES: Usability studies with real customers led by Applause experts enable companies to optimize their payment flows in two key ways. It enables them to gain an understanding of where customers are being held up during transactions and determine the most relevant and impactful adjustments to increase conversions.
- **3. TRANSACTION VALIDATION:** Utilizing testers who make real transactions with personally-owned payment instruments, Applause helps merchants ensure each aspect of their checkout process functions as designed and is accurate from coupons, to item quantity, to payments.

While mobile payments offer merchants an opportunity to cut down barriers between their offerings and their customers, it is crucial that they are approached attentively. Applause helps uncover what your customers expect and experience during the purchasing process so you can deliver successful transactions, increase conversions, and build brand loyalty.

# APPLAUSE

Applause empowers companies of all sizes to deliver great digital experiences (DX) - across web, mobile and IoT as well as brick-and-mortar - spanning every customer touchpoint.

Applause delivers unmatched in-the-wild testing, user feedback and research solutions by utilizing its DX platform to manage communities around the world. This provides brands with the real-world insights they need to achieve omni-channel success across demographics, locations, devices and operating systems that match their user base.

Thousands of companies - including Google, FOX, Best Buy, BMW, PayPal and Runkeeper - rely on Applause to ensure great digital experiences for their customers. Learn more at <a href="https://www.applause.com">www.applause.com</a>.

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