

Mobile Payments Guide 2015

Consumer Action reviewed the four general acceptance mobile payment systems for its mobile payments survey: Android Pay, Apple Pay, PayPal Mobile and Samsung Pay. We assessed each mobile payment system by reviewing the following information:

1. What can you do with this mobile payment system?
2. How do you use the system at checkout?
3. How many accounts (payment cards or bank accounts) can be linked?
4. Where can you use this system to pay in store?
5. What specific device or operating system do you need to use?
6. How does the system protect your payment information?
7. What's the process if there's a billing dispute or unauthorized charge?
8. Is it possible to load, send or receive money in/out of this account?
9. What fees are charged?
10. How do you receive your receipt?
11. Is it possible to pay online? If so, what is that process?

A brief explanation of mobile payment technologies

Before we dive into the survey, it may be helpful to review the technologies that enable mobile payments: near field communication (NFC) and magnetic secure transmission (MST).

Near field communication, or NFC, transfers data from one device to another. This technology (as well as Bluetooth) is common in keyless door entry systems. In the case of mobile payments, the customer must have an NFC-enabled smartphone and the merchant must have an NFC-compatible point-of-sale terminal. In order for the transaction to take place, the two devices have to be close to each other (or tap).

MST, also known as magnetic stripe technology, is what merchants with traditional point-of-sale terminals utilize. Users swipe the magnetic stripe on the back of their credit, debit or prepaid card to transfer financial account details and make a purchase.

ANDROID PAY

www.android.com/pay/

1. What can you do with Android Pay?

Android Pay is a free mobile payment app that comes preinstalled on new Android phones and is available for download on Android 4.4 KitKat phones and later. You can store an unlimited number of credit, debit, gift and loyalty cards in the app, and shop at over one million stores using its tap-and-pay NFC technology. When you tap-and-pay at select merchants, your loyalty points and offers are automatically applied at checkout. Android Pay is available for in-store purchases only, but users will eventually be able to make purchases online and in thousands of Android apps.

2. How do you use Android Pay at checkout?

Android Pay uses NFC technology for in-store purchases. Typically, your Android phone will need a data or Wi-Fi connection to tap-and-pay, but may be able to access the device's memory for a few offline purchases.

To use Android Pay at checkout:

- A. Open the Android Pay app
- B. You may be asked to enter a four-digit PIN (if your app has been inactive for a while or you have set up this extra security step)
- C. Hover the device near the payment terminal
- D. If prompted, choose "credit" regardless of the type of payment card you use
- E. The terminal will flash or beep to show that your payment was made.

Transactions are processed immediately. You choose a debit or credit card in advance as the default payment method. To change the default card, open the app and select a new card prior to checkout.

3. How many accounts (payment cards or bank accounts) can be linked?

There is no limit to how many credit and debit cards you can link to Android Pay, but there is no option to link bank accounts. For a list of participating card issuers, visit www.android.com/pay/#supported-networks.

4. Where can you use Android Pay to pay in store?

Android Pay is accepted in stores with NFC-enabled payment terminals, which allows customers to use the tap-and-pay function.

You can tap your phone to pay anywhere you see an NFC or Android Pay symbol (over one million locations in the U.S). To find where Android Pay is accepted in your area, visit www.android.com/pay/#merchants.

You will soon be able to make purchases in thousands of Android apps. To learn more, visit www.android.com/pay/#merchants.

5. What specific device or operating system do you need for Android Pay?

The Android Pay app comes pre-installed on new Android phones and is compatible with Android phones as early as 4.4 KitKat. For older models, download the Android Pay app from the Google Play Store.

6. How does Android Pay protect your payment information?

All payment cards stored in Android Pay are assigned a virtual account number (token). This virtual number is used instead of your actual card number so that actual payment information isn't shared with the merchant. Android Pay encrypts and stores all payment information on Google servers. Android Pay requires you to set up a screen lock (<https://support.google.com/nexus/answer/2819522>) on your phone for additional security.

For returns, you may be asked to provide the last four digits of your virtual account number, located on the Card Details screen in the app.

7. What's the process if there's a billing dispute or unauthorized charge?

If you discover an incorrect or unauthorized transaction, Google asks you to contact your credit or debit card issuer to resolve the problem.

8. Is it possible to load, send or receive money in/out of your Android Pay account?

No. Android Pay does not offer a peer-to-peer payment service, nor can you carry a balance in your Android Pay account. Android Pay links to your credit/debit cards.

9. What fees are charged?

Android Pay is a free payment app. Making purchases with Android Pay is free.

10. How do you receive your receipt?

You can find a list of recent purchases in the Android Pay app. To see a list of transactions, touch the icon/link for the card you used to pay.

The merchant's paper receipt will show merchant location, date and time of transaction, an itemized list of purchases, transaction total, the last four digits of the payment card used, and will note that you paid using Android Pay.

You will also be sent a text message and email notifying you of purchases made. (You can turn off these notifications if you prefer).

11. Is it possible to pay online using Android Pay? If so, what is that process?

Not at this time. Google says users will soon be able to use the service to make in-app purchases in thousands of Android apps.

APPLE PAY

www.apple.com/apple-pay/

1. What can you do with Apple Pay?

You can use Apple Pay to make purchases in apps and in stores. If you have an iPhone 6 or newer model, Apple Pay comes preinstalled on your phone. Apple Pay is built into Apple Wallet (previously known as Passbook). To use Apple Pay with an iPhone 5, users must download the Wallet app and pay using the Apple Watch. Your credit and debit cards are stored inside the Apple Wallet. The Wallet also holds tickets, loyalty cards, boarding passes, etc.

2. How do you use Apple Pay at checkout?

Apple Pay uses near field communication (NFC) technology. Your phone does not need a data connection or Wi-Fi signal to make an in-store purchase.

To use Apple Pay at checkout:

- A. Hold your phone close to the payment terminal while keeping your finger on the Touch ID (home) button
- B. Depending on your default card, you may be prompted to enter a PIN into the payment terminal
- C. When the transaction goes through, there will be a beep and subtle vibration

Watch Apple's demo to see how it works: www.apple.com/apple-pay.

You add credit and debit cards to Apple Wallet by taking a picture of the card or by entering the information manually. You may be asked to enter a verification code before you can start making purchases (the code will be emailed to you by your bank or card issuer as an extra security step). You can also add any payment cards that you already have on file at iTunes.

The first card you enter into Apple Wallet is your default method of payment, but you can change the default in Settings. You can also use a different card at checkout by opening your Wallet app and selecting the image of another card.

Apple Pay allows you to use credit cards from Visa, MasterCard and American Express, and debit cards from over 500 banks, including Bank of America, Citi, Wells Fargo and Chase.

For details on cards that can be linked to Apple Pay, visit <http://support.apple.com/en-us/HT6288>.

3. How many accounts (payment cards or bank accounts) can be linked?

You cannot link a bank account to Apple Pay, but you can link an unlimited number of credit and debit cards. For a list of banks that participate in Apple Pay, visit <https://support.apple.com/en-us/HT204916>.

4. Where can you use Apple Pay to pay in store?

More than 220,000 retailers accept Apple Pay, which translates to over 700,000 locations (and growing). Major retailers include Aéropostale, American Eagle Outfitters, Bloomingdale's, Duane Reade, Macy's, McDonald's, Nike, Office Depot, Panera Bread, Sephora and Staples. Apple Pay can be linked to more than four dozen apps and online stores.

5. What specific device or operating system do you need to use Apple Pay?

To use Apple Pay, you need:

- An iPhone 6 or newer, an Apple Watch (with iPhone 5 and Apple Wallet app) or the latest iPad (older versions don't have the NFC chip)
- iOS 8.1 or newer
- An iCloud account (for security)

6. How does Apple Pay protect your payment information?

Every transaction on your iPhone or iPad requires you to authenticate your purchase with Touch ID (fingerprint) or a passcode.

Instead of maintaining your actual credit and debit card numbers in your Wallet app, a unique Device Account Number is assigned, encrypted and securely stored on a computer chip in the latest iPhones. This unique number replaces your payment card numbers. Credit and debit card numbers are not stored on your device or on Apple servers and are not shared with merchants. When you buy something, the Device Account Number and a security code specific to that transaction (token) is used to process the payment.

Apple Pay doesn't save or store purchase information. However, the date and city of your last transaction are kept in your Apple Wallet app under each separate card you have saved.

To pay with an Apple Watch, you'll need to re-enter payment card details that will be encrypted and secured separately on the Watch. To enter card details, you must use the Watch app on a supported iPhone (iPhone 5 and 6 models).

To add a card that's already on your iPhone to your Apple Watch:

- A. Open the Watch app on your iPhone and tap the My Watch tab
- B. Tap Add next to the card that you want to add
- C. Enter the card security code
- D. Tap Next (Your bank will verify your information and decide if you can add your card to Apple Pay)
- E. After your card is verified, you'll receive a notification on your Apple Watch that your card is ready for Apple Pay

To add a different card to your Apple Watch:

- A. Open the Watch app on your iPhone and tap the My Watch tab
- B. Scroll down and tap Wallet & Apple Pay
- C. Tap Add Credit or Debit Card, then tap Next
- D. If you have a supported credit or debit card on file with iTunes, enter the card's security code; otherwise, use the phone's camera to capture your credit/debit card information, and then include the card's security code
- E. Tap Next and continue with the verification process, if necessary

In case your phone is lost or stolen, you can delete financial information remotely. You must have the Find My iPhone option turned on (in Settings) to remove your credit and/or debit cards from Apple Pay. Visit www.icloud.com/settings, sign in, choose your device and remove your cards from the Apple Pay section. You can also turn on Lost Mode to lock the device and suspend Apple Pay.

7. What's the process if there's a billing dispute or unauthorized charge?

Apple says that any billing disputes or questions about payments need to be addressed with the credit or debit card issuer.

8. Is it possible to load, send or receive money in/out of your Apple Pay account?

It is not possible to load money in/out of Apple Pay. Apple Pay links to your credit/debit cards.

9. What fees are charged?

There are no fees to make purchases with Apple Pay.

10. How do you receive your receipt?

With Apple Pay, you get a physical receipt from the store that includes your name, purchase date and time, the last four digits of the Device Account Number, and the name of the bank for the card with which you made the purchase.

Apple Wallet will send you notifications of transactions made with Apple Pay (when the notification feature is turned on in Settings). You can also find date and location details of past transactions in the Apple Wallet app, but for the amounts spent you'll have to refer to your bank statement.

11. Is it possible to pay online using Apple Pay? If so, what is that process?

No, it is not possible to pay online using Apple Pay.

PAYPAL MOBILE

www.paypal.com/webapps/mpp/mobile-apps

1. What can you do with PayPal Mobile?

Customers can use PayPal Mobile (a digital wallet) to pay in stores, online and in apps, to order ahead at participating restaurants and to make peer-to-peer payments.

2. How do you use PayPal Mobile at checkout?

Before using PayPal Mobile in stores, you'll need to sign up for a PayPal account online or in the app. (If you have an account, just download the app and log in.) You will have to register your mobile phone number and choose a PIN.

You will not need a data connection (or Wi-Fi signal) at checkout. There are two ways to make a purchase in store with PayPal:

To use your mobile phone number and mobile PIN at checkout:

- Press "PayPal" at the payment terminal and then enter your mobile phone number and PIN.

To use PayPal's app and temporary code at checkout:

- Open the PayPal app on your smartphone or tablet. Using GPS, PayPal matches your location to nearby merchants that accept its mobile payment system. Choose a store by clicking on the store's name in the PayPal app. The app will generate a four-digit code. The code is good for two hours only *at that specific store location*. You enter the temporary four-digit code at the time of purchase.

Merchants that accept PayPal Mobile with your phone number and PIN do not accept a PayPal temporary code as payment. The merchant decides which method it accepts.

The PayPal Mobile app adds another level of security by having users upload their photo when they enroll. Your photo will appear on a merchant's machine when you make advance food and drink purchases to verify your identity when you pick up your order.

3. How many accounts (payment cards or bank accounts) can be linked?

You must link a bank account to your PayPal account. After your account is verified, you can add up to eight credit and/or debit cards. To add an account, take a photo of your credit or debit card and upload it to your digital wallet, or enter the details manually.

4. Where can you use PayPal to pay in store?

The majority of the 18,000 retail locations that accept PayPal use the mobile phone number and PIN system. These include Home Depot, Foot Locker, Guitar Center, JC

Penney, Office Depot and Toys”R”Us. You can find a list of major retailers at the PayPal website: www.paypal.com/webapps/mpp/store-locator.

When you open PayPal’s mobile app, it will let you know which stores near you accept PayPal Mobile payment using the temporary two-hour code. According to PayPal, thousands of small, local merchants and two major chains, Dollar General and AutoZone, accept the PayPal mobile app with temporary code for in-store purchases.

5. What specific device or operating system do you need to use PayPal Mobile?

PayPal’s mobile phone and PIN system operates with any phone that receives text messages to confirm payment. To use the temporary two-hour code system, PayPal operates with any smartphone after downloading the PayPal Mobile app.

6. How does PayPal Mobile protect your payment information?

PayPal does not share your financial information with merchants. According to PayPal, as long as you don’t share your mobile phone number, PIN and login information, your information should be secure.

If your mobile phone gets lost or stolen, you will need to change your PayPal Mobile PIN. This will ensure that no one can access your PayPal account.

7. What’s the process if there’s a billing dispute or unauthorized charge?

If there is a billing dispute, regardless of the type, PayPal recommends users contact its dispute team. The team will send an email with step-by-step dispute instructions and contact the merchant in question. PayPal says it investigates all reports of unauthorized account use and tries to resolve those claims within 10 days.

As to customer disputes, pay close attention to your transactions. PayPal’s website (<http://bit.ly/1k84ymg>) states that merchants or sellers are advised to resolve disputes with buyers within 20 days. If a problem isn’t resolved *before* that time, customers should contact PayPal and ask to file a “claim.” After day 20, disputes are closed and “cannot be reopened or escalated to a claim.”

Regardless of PayPal’s policies, if a credit or debit card was used in a contested purchase or for unauthorized (fraudulent) charges, Consumer Action recommends that customers preserve their legal rights and dispute the PayPal charge with their card issuer as well.

8. Is it possible to load, send or receive money in/out of your PayPal account?

With PayPal, you *can* maintain an account balance. Using your bank account to load funds into the account takes three to four business days. When using PayPal to send money, funds are removed from the account instantly.

9. What fees are charged?

Buying in stores or online with your PayPal account is free.

Sending money to friends using your PayPal balance or linked bank account is also free in the U.S. Sending money using a linked credit or debit card will cost you \$0.30 + 2.9% of the transaction amount. (The sender decides who pays this fee.)

You can also use a debit or credit card to make an international transfer. Fees range from 0.5% to 3.9%.

10. How do you receive your receipt?

An electronic sales receipt is sent to your email immediately after the purchase is made. You can also see your recent transaction activity in the PayPal Mobile app.

11. Is it possible to pay online using PayPal Mobile? If so, what is that process?

Yes. You log in to your PayPal account during the online merchant's checkout process.

SAMSUNG PAY

www.samsung.com/us/samsung-pay/

1. What can you do with Samsung Pay?

Samsung acquired mobile payment system LoopPay, which created a technology called "magnetic secure transmission" (MST), similar to the magnetic stripe technology standard credit cards use. This means you can use Samsung Pay at most payment terminals, regardless of whether they accept "tap-and-pay" (NFC) technology. As long as the register accepts traditional magnetic stripe payment cards, Samsung Pay should work.

2. How do you use Samsung Pay at checkout?

Samsung Pay will use NFC or MST technology for in-store purchases. It stores your financial information in the "cloud." Samsung Pay can operate without an Internet connection for up to 10 transactions. After that it requires an Internet connection to tokenize the transaction.

To use Samsung Pay at checkout:

- A. Open the app and swipe from the bottom of the screen to the top to access your payment cards; if necessary, swipe left or right to access the desired card
- B. Place your finger on the Home key to verify your identity; if you are using your Samsung Pay PIN, touch Enter Pin and enter your four-digit code
- C. Place the back of your device against the payment reader

- D. If you are using a debit card, enter your debit card PIN or sign for the purchase; some terminals will prompt you to verify the total charges are correct

3. How many accounts (payment cards or bank accounts) can be linked?

Up to 10 credit, debit or store-branded cards can be added to Samsung Pay. Samsung Pay can link to American Express, Visa and MasterCard cards issued by Bank of America, Citi and U.S. Bank, as well as store-branded cards issued through Synchrony Financial.

Samsung Pay requires an Internet connection to add or remove a payment card and to download transaction history. To add a payment card to Samsung Pay:

- A. Open the Samsung Pay app and touch Add Card or, if this is the first payment card being added, touch the + symbol
- B. Position your card inside the photo frame to capture the card number and expiration date, or manually enter the card information
- C. If prompted, enter your billing address and touch Save
- D. If necessary, select a method to authenticate your identity using a one-time password (www.samsung.com/us/support/answer/ANS00043869/997410188/), which will be sent to you by your card issuer; enter the password and touch Submit
- E. After your card is added to Samsung Pay, it will be verified by the payment card network (Visa, MasterCard, American Express) and the card issuer (i.e., Bank of America, Citibank, U.S. Bank) (verification takes, on average, about five to 10 minutes)

4. Where can you use Samsung Pay to pay in store?

Samsung says its system will work with almost all point-of-sale systems: NFC (contactless) and magnetic stripe (swipe). This means that Samsung Pay has the potential to be accepted at over 30 million merchant locations worldwide.

Samsung Pay does not work with readers where you physically insert a payment card into a slot, such as those found at gas stations and ATMs.

5. What specific device or operating system do you need to use Samsung Pay?

Samsung Pay only works with Samsung Galaxy S6, S6 edge, S6 edge+ and Note5 smartphones. Samsung Pay comes preloaded on these devices and is not available for download.

6. How does Samsung Pay protect your payment information?

Samsung Pay is secured by its own Knox security software. For NFC transactions, Samsung Pay uses tokenization, which replaces sensitive account data with a unique, secure token (number). This means that even if a retailer's database is breached, the data the hacker obtains is useless.

Transactions are verified by fingerprint identification on the device or by entering a Samsung Pay PIN before information is sent to the payment terminal. Additionally, the system does not store customer account information on the mobile device.

Should you lose your phone, you can lock, disable and/or erase device data remotely. To turn off access to Samsung Pay, use Samsung's Find My Mobile feature.

7. What's the process if there's a billing dispute or unauthorized charge?

Samsung says if there is an error in the transaction amount, contact the card issuer and the merchant with whom you made the purchase.

8. Is it possible to load, send or receive money in/out of your Samsung Pay account?

There is no option to maintain a wallet balance. Samsung Pay links to your credit/debit cards.

9. What fees are charged?

Samsung Pay is free for in-store purchases.

10. How do you receive your receipt?

In addition to a paper receipt from the merchant, you will receive a notification from Samsung Pay confirming the merchant's name and the amount of the purchase. This information is saved in the Samsung Pay app under each payment card.

11. Is it possible to pay online using Samsung Pay? If so, what is that process?

No, Samsung Pay is designed for use only with in-store payment terminals.

About Consumer Action

Consumer Action has been a champion of underrepresented consumers nationwide since 1971. A non-profit 501(c)(3) organization, Consumer Action focuses on consumer education that empowers low- and moderate-income and limited-English-speaking consumers to financially prosper. It also advocates for consumers in the media and before lawmakers to advance consumer rights and promote industry-wide change.

By providing consumer education materials in multiple languages, a free national hotline, a comprehensive website (www.consumer-action.org) and annual surveys of financial and consumer services, Consumer Action helps consumers assert their rights in the marketplace and make financially savvy choices. Nearly 7,000 community and grassroots organizations benefit annually from its extensive outreach programs, training materials and support.

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