

# White Paper on Mobile Digital Wallets

## For Restaurants and Retailers

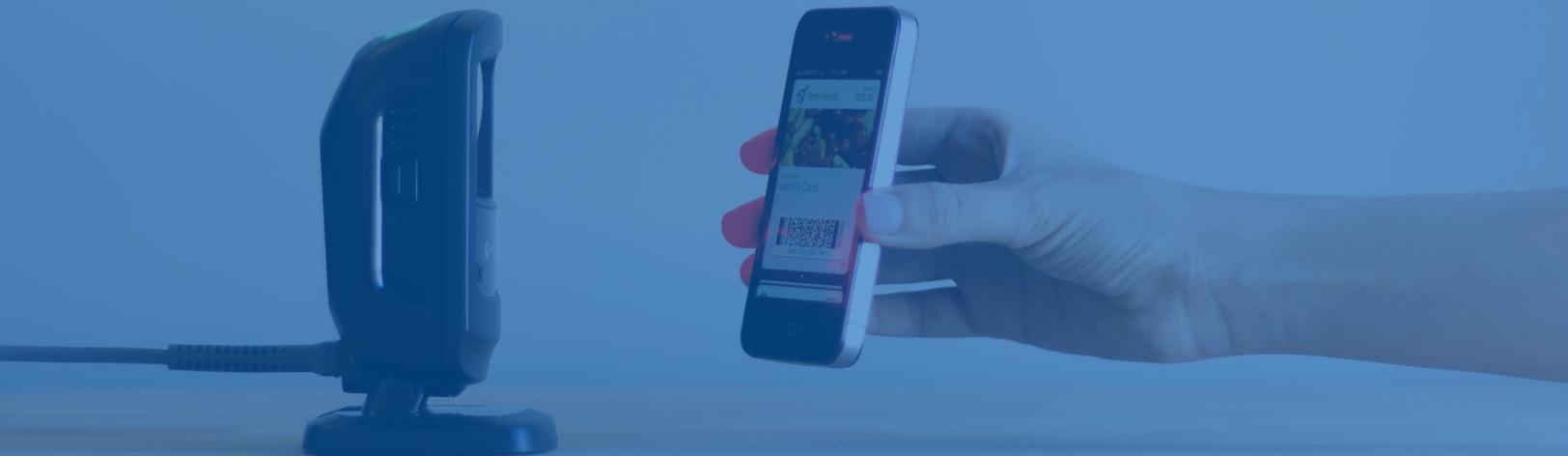
Since the launch of the iPhone in 2005, over one million apps have been launched in the Apple's app-store. While the app market is still growing, new research indicates that only a small portion of apps are giving return on investments. According to Gartner, less than 0.01% of consumer apps will be considered a financial success by 2018. This has raised an important question: Should a consumer-facing business launch an app?

In the summer of 2012, Apple announced the launch of the PassBook digital wallet at their developer conference. Scott Forstall, Apple's Mobile Vice President of Operating System, said,

"PassBook is the simplest way to get all your passes in one place. There are lots of great apps in the app-store. There are many event passes, store cards, boarding passes, and movie ticket passes in the app store. The problem is when you get to the movie theatre, airport, or the restaurant, you have to fumble through all your apps and find the right one. PassBook solves this problem and helps you quickly find your card. "

Since 2012, digital wallets have experienced a significant growth in the market. This paper discusses benefits of digital wallets and what they mean to the future of restaurants and retailers.

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## What is a digital wallet?

A digital wallet is an app provided by the smartphone's operating system, such as Apple or Android, as a placeholder for coupons, gift cards, passes, and payment cards. It is estimated that by 2020, physical wallets will be replaced by digital wallets.

Theoretically, digital wallets will replace actual physical wallets because they will live in our ever present smart phones. Instead of carrying countless cards, coupons and tickets, we can store them all in our phone's digital wallet. This means no more concerns about losing credit cards, loyalty cards or boarding passes – they will all be digital and in our phones. Get a new phone? No worries – your digital wallet migrates because all the card content lives in a secure environment hosted by Apple, Google, and Microsoft's cloud services.

iPhone's digital wallet app is called iPhone PassBook and since 2012, it has been shipped with every iPhone. This app cannot be deleted from the user's iPhone. In Android phones, Google Wallet offers similar functionalities and Windows' Wallet Hub provides a similar service on Windows phones.

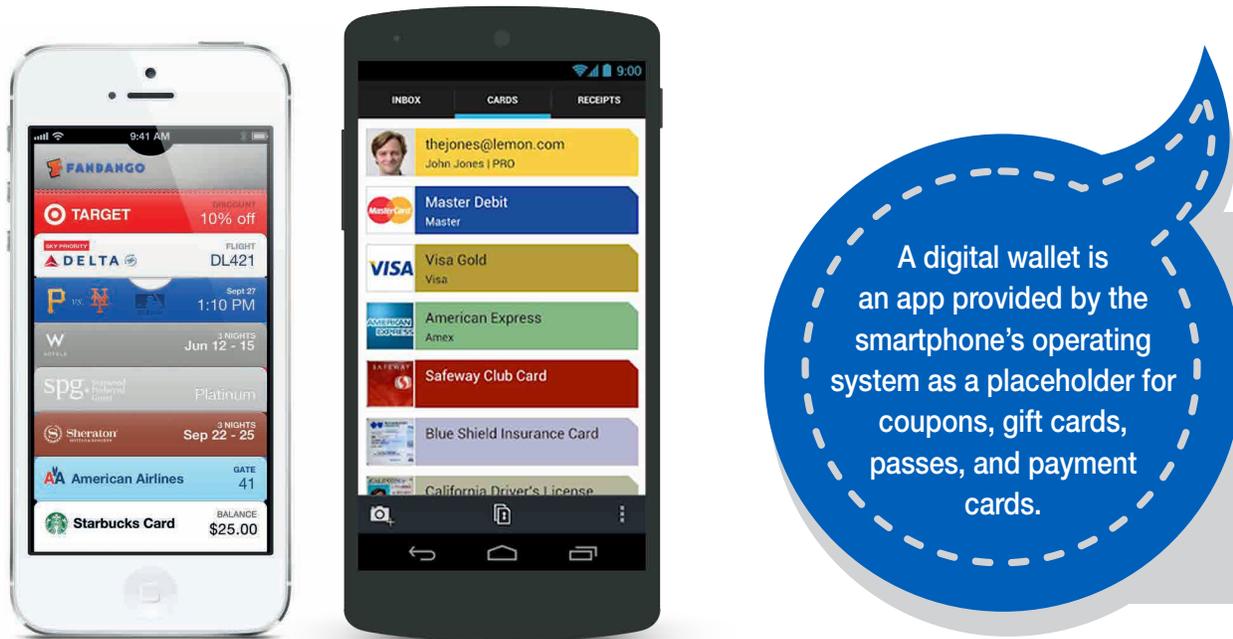


Figure 1 – iPhone Passbook on the left, Google Wallet on the right



When apps first came on the scene they were revolutionary, and it didn't take marketing professionals long to implement this new technology to drive sales, and more importantly, engender customer loyalty. Before long, however, some of the draw backs became obvious. Each restaurant chain or retail brand had to launch their own app because it was the only way to offer an in-store mobile experience to customers. The challenge of this, is that there are tens of thousands of retailers and restaurant chains out there. The average customer eats in about 50 different restaurants per year and visits over 100 different retailers every year; there was no way these customers would want to download all these different apps.

It is also interesting to note that 60% of all apps are deleted after the first try; if you're considering building one you must take that into consideration. Imagine spending a lot of money and resources for the development and marketing of an app only to have 60% of users deleting that app after its first use. Considering these challenges, Apple came up with a brilliant idea: put all the benefits of apps for retailers and restaurant chains into one place on the user's phone. After Apple, Google followed suit and launched Google Wallet. Microsoft also launched Microsoft Wallet Hub to offer similar functionalities. Windows also announced in the Spring of 2014 that they will support Apple's PassBook on their Windows phones.

The reason these 3 tech giants are paying so much attention to digital wallets goes beyond the mere physical attributes of this technology. Most importantly, the user is able to benefit from a digital card without sacrificing their smartphone's homescreen. This removes a huge barrier in user adoption of digital passes, coupons, and cards. In addition, digital wallets are location aware, and the benefits of location based offerings are just starting to be recognized.

**Digital wallets outperform branded apps for restaurants and retailers in engagement rate due to their simple model and lack of need to download another app.**



## What are the benefits of Digital Wallets for restaurants and retailers?

By offering a mobile service without an app, retailers and restaurants receive higher participation from customers. The fact that digital cards do not take any real estate in the customer's homescreen has a direct impact on the customer's participation rate. Only 3% of digital card users delete their card after one month of download. Compare that to the case of apps where about 84% of users delete their app after one month of download.

Digital Wallets can update the contents of a customer's loyalty card at any time. Program details and promotions can be added and modified remotely and easily, enabling the merchant to offer a promotion and push it onto the user's phone or update the card immediately based on their set of criteria. The digital card can include information for a coupon, loyalty card, or gift card, and it can also be connected to a credit card for payment.

Digital wallets will ultimately enable retailers and restaurant chains to establish an engaging relationship with their customers without having to launch their own branded apps.



The rapid development of the digital wallet ecosystem has enabled other technologies and businesses to contribute to the market. Below we have covered some of the key trends in the digital market:

### 1) iBeacons

Currently, merchants primarily use bar codes to complete mobile transactions and identify customers. Apple announced in 2013 the launch of a new technology called iBeacons. iBeacon is Apple's implementation of Bluetooth low-energy (BLE) wireless technology to create a secure and seamless way of providing location-based information and services to iPhones and other iOS devices. Since the launch of iBeacon in 2013, Google has also announced that they will be using the same technology in their upcoming operating systems. This technology will enable your phone to be recognized by other iBeacon-enabled devices around you. Apple has yet to integrate iBeacons into digital wallets, but it is expected to happen in 2015.

With the integration of iBeacons, one is able to receive relevant promotions upon entering the store. Customer promotions could also be a function of the location in the store (e.g. if you are in the grocery section, you can see a promotion about milk).

## 2) Seamless Storage

Digital wallets are gaining in popularity. According to recent reports, 25% of boarding passes are currently saved on PassBook. Since Apple's iPhone owns only 40% of the market, this hints at the significant the growth of digital wallets. People are starting to store more and more of their passes, cards, and tickets in PassBook. It is expected that in 5 years, most people won't carry physical cards and wallets as using their digital wallet to store these things will make their lives easier and grant them greater protection from theft.

## 3) Simpler Relationships

Many brands have learned the hard way that it is not easy to convince customers to engage with their brands in the mobile space. Traditionally, customers were asked to carry a physical card to participate in a brand's membership program. Businesses soon realized that it wasn't easy to earn a share of the customer's physical wallet simply because customers didn't visit them frequently enough to warrant carrying their physical loyalty card. In fact, each customer had very few loyalty cards in their pockets, the ones they frequently used such as ones for a gas or grocery store.

With the rise of smartphones, restaurant and retail brands flooded the app store with their branded apps. Soon, there were thousands of branded apps in the app store. This resulted in another problem: customers were faced with too many options and didn't keep retailer and restaurant apps on their phones. One can validate this by asking oneself how many restaurant apps they currently carry on their phone.

There are over 1 million apps in the Apple App Store and over 4,000 of them are for mobile loyalty and payments. The average customer is downloading more apps, but they are also deleting them at a faster rate than ever before. In fact, 84% of apps are deleted within 1 month of download. Users only end up keeping ones they use frequently such as gaming or utility apps like a Clock, Calendar, or Zipcar app. If an app is not used multiple times per week, it will be deleted by the user.

You might think Starbucks has been successful in offering an app and this would be true, however, the Starbucks app is more of a utility app. The average loyal Starbucks customer visits the store more than once per day. If you have the same level of purchase frequency by loyal customers, launching a smartphone app may make sense.

As a restaurant chain, business operators have to decide if their users are likely to keep or delete their app. The fact is that users will use restaurant and retailer apps very infrequently and as a result, will delete them when they download new ones.

So, how will you most likely connect to your customers in the future? Using the phone's digital wallet to offer all the benefits of apps to your customers without an app! Your branded digital card will be stored in the phone's digital wallet and can include loyalty, gift card, payment, and even promotions.

#### **4) Brand control**

From a restaurant or retailer position, the rise of Digital Wallets gives them the ability to build brand loyalty without the expense and headache of developing an app, and allows for the additional benefit of longevity on their customer's phone. With the launch of Apple's app store, many aggregated loyalty and payment companies entered the market. The main challenge they soon faced was that it was difficult to convince the users to download the apps and keep them on their phone. In addition, medium to large sized businesses were not interested in participating in these programs because they didn't have full control over their brand and customer data. After all, the user data were owned by the aggregated program provider. If the program operator decided to discontinue it or the user decided to delete the app for reasons outside the brand's control, the brand would lose that relationship.

Digital wallets enable merchants to offer branded customer experiences to their customers. This plays a vital role in the marketing and brand development of a company.

As more companies enter the digital wallet market, a need for each brand to fight for a share of the consumer's digital wallet before the market is saturated will emerge. Today, it is about the first mover's advantage and the race to market. Tomorrow, it will be a competition based on the benefits of one's loyalty program and promotions versus another.

Digital wallets enable restaurant chains and retailers to establish relationships with their customers in the mobile space without the need to launch an app. Given the higher participation rate users with digital cards and the lower cost of operating them, it is predicted that many organizations, which traditionally did not play an active role in the loyalty or mobile industry, will start offering customer retention and loyalty programs.

## Cross section of digital wallets with mobile payment, loyalty and coupons

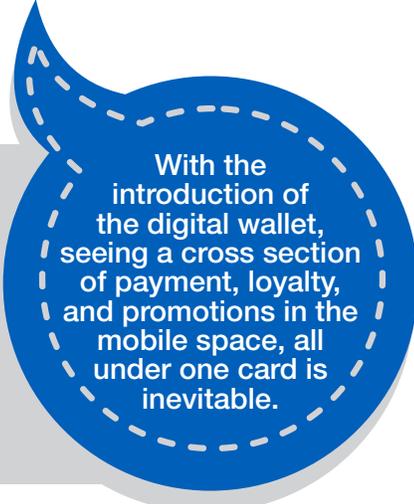
Payment and loyalty transactions were traditionally two separate transactions. In some industries such as quick service, the transaction time plays an important role in the business's bottom line. One of the challenges fast food businesses have traditionally faced is how to offer loyalty programs without adding extra time to customer service. When payment and loyalty are separate transactions, the loyalty transaction adds about 30 seconds to the overall experience. Some fast food restaurants such as Subway and McDonalds tried combining the two programs. However, they realized that it was a challenge to drive user adoption to a rate that generated a reasonable return on investment for the program to exist. It was very difficult and expensive to convince a customer to carry an extra plastic card with them so that in case they visited a store and wanted to use the card.

The mobile space has created a unique opportunity for restaurants and retailers to address these challenges. Users can carry more cards because they don't have to worry about having a heavier physical wallet. Merchants are also able to collect payment more quickly using mobile services. They can also combine payment with loyalty in one transaction and use the payment data to learn more about their loyal customers. For the first time ever, the retailer is able to offer loyalty programs to their customers without adding complexity to the customer check-out experience. In fact, transactions have been simplified. As a result, digital card adoption rates are significantly higher than physical card adoption rates. In case of digital wallets, users do not have to choose if a brand deserves a place on their homescreen. The digital card is saved in the phone's existing digital wallet and this single wallet cannot be deleted from the smartphone.

With all the payment data collected on a single transaction and passed to the digital card solution provider, the merchant is also able to offer more relevant promotions to their customers as part of the loyalty program. This results in higher margin promotional programs, faster transactions, and a more personalized relationship. Before mobile technology, there was no real way to offer relevant promotions in an effective way to a large number of customers. Without an understanding of a customer's previous purchases and buying patterns, businesses were using flyers and less targeted promotions to drive up store traffic. The new approach presents a significant opportunity for businesses to identify their best customers and to encourage an increased share of wallet through highly targeted promotions based on purchase behavior.

There are many benefits to combining payment with loyalty. However, some customers might not be ready for this. Since the breach of Target's customer data in 2013, many customers are not comfortable with mobile payments due to security concerns. For this reason, one should consider a mobile solution that combines loyalty programs with payments, but also allows the customer to use their mobile phone for loyalty programs alone. The best way to address this is by offering a mobile loyalty solution that includes an optional mobile payment. This way, as demand for mobile payment increases, people can activate the mobile payment option when they're ready.

Combining payment and loyalty brings various benefits to the merchant: it speeds up the transaction time, helps merchant to gain more customer insight, and enables them to offer rewards based on previous customer payment transactions.



With the introduction of the digital wallet, seeing a cross section of payment, loyalty, and promotions in the mobile space, all under one card is inevitable.

## Launching a Digital Store-Card Program for Digital Wallets

It is inevitable that many customer-facing businesses are considering launching a digital store-card program. Those who launched an app in the market are at a disadvantage because they have to deal with legacy systems and app user migration. Adding a digital card as part of an app has also proven to be ineffective since customers tend to think cards stop working if their apps are deleted.

To launch a digital store card program, a retailer generally works with a third party company such as Virtual Next to 1) create the branded digital cards for the business, and 2) provide the technology that connects those digital cards to the business operation using ERP services and Point of Sale system. While the first step, creating the cards, is fairly easy to achieve, the second step requires knowledge and experience in employee training, IT management, POS systems, setting up the right program details, and establishing a secure environment for mobile payment and advanced data analytics.

## Digital card designs and user experiences

Apple and Google have developed guidelines on the look and feel of the digital cards to create a more consistent and cohesive experience for the end users. Apple has released five templates as the main templates for the design of digital cards. Any card saved in PassBook follows these design templates. Figure 1.1 highlights the design templates available.

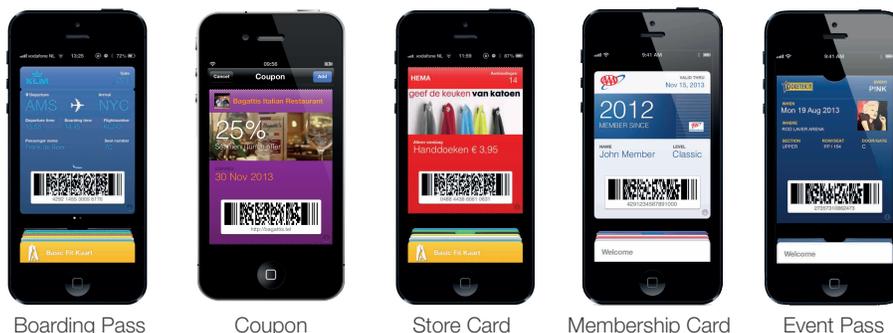


Figure 1 – iPhone PassBook card designs

Each digital card shown above serves a different purpose, its contents can be modified remotely, and the location awareness functionality enables the card to pop up on the customer’s phone when they enter a store. In addition, the contents of the digital card can change based on the user’s proximity to a store.

The digital store card enables the card owner to engage with their customers in various ways such as mobile payment, stored value, loyalty, and promotions, all provided by the store-card. A store’s loyal customer can have a digital card, which can be used as a payment card, provide loyalty status, and store coupons available to the particular customer. Promotions can be changed as required for particular customers.

To sign up for a digital card, the user generally visits the restaurant chain or retailer’s website and uses their email addresses or phone number to receive the link to the digital card.

## Loyalty Programs Structure

There are two popular loyalty program formats among retailers and restaurant chains: point-based loyalty program and visit-based loyalty program.

Fast food chains like the simplicity of visit-based loyalty programs. In the case of fast food stores, since the amount spent upon each visit is usually quite limited, it makes sense to offer a visit-based loyalty program instead. The most common program model grants one point per visit. Every x number of visits gets you a free meal. Generally, the program is structured in a way so that merchants grant a 10% discount to the customer participating in the program.

Outside the fast food industry, retailers and restaurants select a point-based loyalty program over a visit-based loyalty program because there is generally a larger variation in the amount of money spent per visit, making it difficult for the business to prevent system-abuse.

## Leveraging Data to Identify and Keep Your Best Customers

A recent study conducted by the world's leading strategy consulting firm, McKinsey & Co, revealed that big data and advanced analytics in the digital space is a high priority for 38% of executives in the next 3 years. Currently, only 15% of executives are giving big data and advanced analytics a high priority.

Digital wallets will be instrumental in helping businesses know their customers better and offer relevant promotions to keep them coming back. Starbucks has done a great job of bringing their loyal customers back to stores more frequently by offering promotions that are customized according to individual customer spending habits. If you visit Starbucks every day, your promotions will be different from the ones that someone who visits Starbucks less frequently receives.

Digital wallets enable restaurant chains and retailers to take advantage of some of these benefits by rewarding customers for spending in the stores and visiting the stores more frequently. Using the transaction data that is collected by the digital wallet service provider, one can know a customer's favorite items, spending patterns, and success rate in previous promotions.



## How to drive up participation in a digital card program?

Digital Wallets enable merchants to employ various tactics and strategies in engaging with their customers. Below are some of the promotions one can offer to strengthen the relationship with the user at critical times of engagement:

- Sign-up: The customer's first and most important experience with the store's digital card program is at the sign-up stage. It is essential to keep the sign-up process super simple for the customer and to offer an immediate benefit to the program sign-up. There are various promotions a merchant can offer to the users at the sign-up stage such as a percentage discount, a dollar discount, or a free menu item. The offer depends on the industry and the customer demographic. In the case of restaurants, a simple offer such as "sign-up and get a free menu item on your next order" works well. In the case of a retailer, a percentage or dollar-based discount is more suitable for the customer.
- Milestones: Every once in a while, the user hits a milestone and becomes eligible to redeem their accumulated points and exchange them for a reward. It is essential that the right marketing message with a fun and engaging tone is communicated back to the customer at this point.
- Birthday: By asking for the customer's birthday during the sign-up, you will be able to offer rewards and promotions to the customer as a birthday gift. It is important to note that there are many users that do not feel comfortable about sharing their birth year in the web environment. We learned that in order to avoid a negative impact on the sign-up conversion rate, it is best to only ask for the customer's birth day and month, without the year.



Virtual Next is a provider of digital store cards that work with digital wallets for restaurant chains and retailers.