

Mobey Forum's Series on Mobile Wallets

**Mobile Wallet –
Definition and Vision
Part 1**

**Mobile Wallet Task Force
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1 Purpose and scope of the report

This is the first part of a series of papers on the mobile wallet. The purpose of this document is to define the mobile wallet, with emphasis on the perspective of banks and the financial industry.

2 What is Mobey Forum and why mobile wallets

The author of this report, Mobey Forum, aims to facilitate the adoption and deployment of mobile financial services (MFS) on a global scale, and to provide an industry-wide forum for all industry players in mobile financial services. In its capacity as the leading bank-led MFS industry body, Mobey Forum contributes to aggregating information from the multiple stakeholders in the financial industry and to increasing clarity in the industry for all players.

The deployment of mobile wallets has begun, and already we are seeing numerous definitions and different visions for mobile wallets. Since semantics around mobile wallets is one of the current challenges in the industry, Mobey Forum sees value in clarifying the terms and use cases for mobile wallets.

This paper looks at the mobile wallet from a financial industry perspective, but it recognizes that there are numerous use cases beyond the financial spectrum. The paper is not a comprehensive view, and its scope does not allow for in-depth evaluation of implementation guidelines or detailed technical analysis, but to qualify the discussion with various stakeholders to clarify the role and purpose of the mobile wallet.

3 Motivation and market for mobile wallet

The term “mobile phone” is becoming increasingly misleading since the capability for voice calls is, for many users, no longer the primary feature of the device. Today the mobile *phone* is not only a full communication platform with email, instant messaging, video calls, and a social media interface, it also offers functional applications like navigation, a camera, calendar, address book, and a gaming device to name a few. In short, the smartphone has become the most successful “functionality aggregator” since the PC.

Users expect further convergence and user rationality seems to be “Why not?” rather than “I need...”. This has led to an evolution where users have been able to get rid of other devices like cameras, notebooks and calendars, so the last two things that most people carry in their pockets besides their mobile phone is keys and a wallet. Taking the next step toward merging everything into the mobile phone seems and feels like a

natural one from both a user and a payment service industry standpoint. But while the goal seems obvious, the plan for the creation of a viable solution is far from clear.

From a user perspective the key success factors for a mobile wallet are convenience, security and value:

Convenience:

While mobile phones and other smart objects have become smaller over the years, most physical wallets have not. The growing number of credit and debit cards along with ID cards, driver's licenses and a range of membership and loyalty cards has added more panels to the standard wallet over the years. Moving all or most of these cards to a mobile device would free up precious pocket space and give the user the option to carry all of his/her cards at all times.

Another convenience factor is the speed of payment: All mobile wallet pilots have shown a significant reduction in time spent paying when using mobile contactless payments in lieu of traditional payment methods. This is highly appreciated in stores located in high-traffic urban areas, such as train stations.

Security:

Increased security is an expectation rather than a direct demand from a financial services customer perspective. With the global increase in credit card fraud, it is in the interest of both the customer and the financial services industry to utilize new technological possibilities to increase security.

Security is a close cousin to trust. Trust and privacy are important factors in the minds of consumers. The concept of trust plays a central role in cultivating an effective, long-term, mutually rewarding relationship.

Security, trust and convenience are combined in the mobile wallet. As the owner of mobile wallet enabled mobile device, the user does not need to carry cash or pull out a leather wallet when he/she is in an area that does not feel safe.

Value:

Value represents the least concrete success factor, yet the most important. A straightforward one-to-one migration of the physical leather wallet to a virtual mobile wallet would drastically limit the mobile wallet's appeal and success. Hence the mobile wallet has to offer the user significant value added services as an integrated part of the mobile wallet implementation.

4 Various terms for mobile wallet

As indicated earlier in this paper, semantics is important for the industry. Mobey Forum uses the term 'mobile wallet' to emphasize the similarities with a physical wallet or leather wallet, but also to make it easier to see the differences.

The biggest difference naturally lies in the mobility and connectivity of a wallet in-built within a mobile device, enabling instant download and upload. Evidently the mobile wallet implementations should not simply imitate leather wallet 'features': most likely our imagination today cannot foresee all the possible use cases for mobile wallets in the future.

There are numerous terms currently in use for mobile wallets, with some significant differences or even confusing content. Below is a short list of some of the most widely used terms, and their definitions and limitations:

- *Mobile Purse, mPurse*
 - Often understood as a means for micropayments, an equivalent of pre-paid card.
- *Digital Wallet:*
 - A digital wallet is a service allowing the wallet holder to securely access, manage and use identification and payment instruments in order to initiate payments. This service may reside on a device owned by the holder e.g., a mobile phone (Mobile Wallet) or a PC or may be remotely hosted on a server but is anyway under the control of the holder. The remote digital wallet has the advantage that it can be accessed anywhere from any device¹.
 - Can also be understood as the electronic equivalent of a wallet for e-commerce transactions, especially when called an "e-wallet," it holds payment card data and passwords for logging into Web sites. The wallet data may reside on the user's own data storage or on the servers of the wallet service. When stored in the client machine, the wallet may use a digital, encrypted certificate that identifies the authorized card holder. Windows Live ID, Yahoo! Wallet and Gator's eWallet are examples of digital wallets.
- *Virtual Wallet:*
 - Refers to wallets that are offered in a "software as a service" model and operate in the 'cloud service'.
- *Electronic Purse/Wallet:*

¹ EPC White Paper on Mobile Payments, 2nd Edition [429-09](#)

- Wide term that refers to all online channels. PayPal is likely the best known example of this variety, initially used exclusively for eBay transactions, but is now used for all types of payment transactions across multiple markets.
- Sometimes in mobile payments only also used for pre-paid card.
- *Mobile Money:*
 - The use of a mobile phone for financial transactions, to transfer funds between banks or accounts, to deposit or withdraw funds, to purchase goods, or pay bills.

5 Definition of the mobile wallet

A Mobile Wallet is functionality on a mobile device that can securely interact with digitized valuables.

Mobile wallet may reside on a phone or on a remote network / secure servers. It may be only accessed via mobile device, but it can also be managed and 'used' with it. Most importantly, it is controlled by the user of the wallet.

Above all, Mobey Forum strongly believes in and promotes the concept of the mobile wallet as an **open platform** rather than a system limited to the provider's partnerships. Suggested parallels from the mobile phone world include generic services such as a handset's calendar and email capabilities.

When the mobile wallet is an open platform, the ultimate decision on opting for and managing services rests with the user. From a branding point of view, the wallet could very well be white-labelled, and the choice left to the user as to what services and brands the user connects to this. Branded services and goods exist within the wallet, not on top of the wallet.

6 Content of the mobile wallet

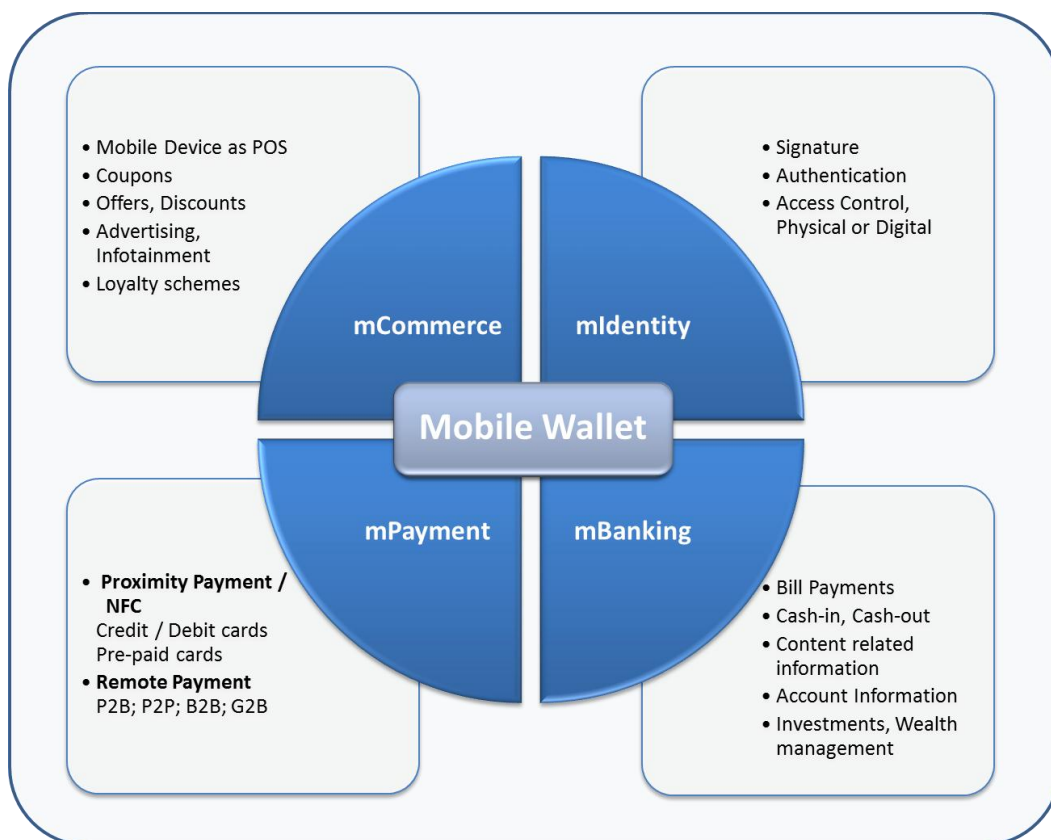
A mobile wallet contains a wide range of valuables, and the user scenarios can be rich and variable. The content will most likely vary rapidly. The reason for rapid variation is the online connectivity and location-based services: The holder of a wallet with rich content – not necessarily in monetary terms, but in value-related terms – can give permission to loyalty schemes to send offers or coupons.

A mobile wallet can contain, generate, and facilitate multiple items, such as:

- **Financial**
 - Mobile banking application
 - Single or multiple account access
 - Account status / balance information
 - Financial transaction options (money send/transfer, bill payment, cash-in or cash-out, wealth management, stock exchange investments)
 - Transaction or wallet information, history, and logs
 - Payments cards from multiple issuers (Debit, Credit, Pre-paid)
 - Mobile Remote payments: paying for goods and services; paying for digital goods
 - Mobile proximity payments, typically done at a point-of-sale (POS)
 - Stored value account or accounts from multiple service providers
- **Identity**
 - Digital identification done with mobile device, supplied by various issuers, like governmental organizations, telecom operators or banks
 - Digital signatures
 - Access control (physical or digital) via log-on credentials
 - Authentication
 - Membership cards, boarding passes, driver's licenses
- **Mobile Commerce or mCommerce:** Mobile commerce is any transaction, involving the transfer of ownership or rights to use goods and services, which is initiated and/or completed by using mobile devices.²
 - Coupons and offers
 - Loyalty cards
 - Tickets for transport or entertainment
 - Receipts for usage or transactions
 - Mobile advertising
 - Alerts
 - Location-based or contextual services

Below you can see a picture that illustrates the dimensions of mobile wallet.

²Tiwari, Rajnish and Buse, Stephan, The Mobile Commerce Prospects: A Strategic Analysis of Opportunities in the Banking Sector. Hamburg University Press, 2007.



Picture 1: Mobile Wallet: Content and Visualization

7 Going forward

Mobey Forum believes that cash usage will be reduced and, in certain areas, even replaced as mobile phones increasingly become equipped with a mobile wallet. The advent of mobile wallet-enabled phones will also enhance user confidence and reliance on the mobile phone as a truly personal, trusted device setting new requirements to all stakeholders, including financial institutions. As part of the new demands on financial institutions, mobile banking and payments will need to be as painless as possible, with trusted user experience.

Mobey Forum believes that an essential aspect of any mobile wallet is payment. In general, payment as a use case is not the most appealing one: it is more of a hygiene factor, something that lies between the object and its ownership. Payment –whether mobile or not– is ‘just’ an underlying facilitator, whereas the driving force of the mobile wallet are the mobile marketing services connected to the mobile wallet. Mobey Forum recognizes that payment alone will not drive the market, but rather acts

as an enabler for other, more appealing processes. *However, Mobey Forum holds that a mobile wallet without payment means is not a working wallet.*

Defining the mobile wallet is the first step toward a wider study of the mobile wallet area and various interrelated themes, such as how a wallet is implemented, what is the business case for each stakeholder, and what can be the challenges to use and deploy mobile wallet.

This is the first chapter in series of reports on mobile wallets by Mobey Forum. The following topic in part two of this mobile wallet series will be around control points in mobile wallets. Other parts may cover topics such as industry stakeholder analysis, security aspects of mobile wallets and compelling value propositions to users. All new reports will be available free of charge at www.mobeyforum.org.