

# Consumer Intelligence Series:

## Opening the Mobile Wallet

### I. Series overview

Through PwC's ongoing *Consumer Intelligence Series*, we gain directional insights on consumer attitudes and behaviors in the rapidly changing media and technology landscape. This report summarizes key findings from an online survey and follow-up focus groups, exploring the topic of the "mobile wallet." The goal of this research was to explore consumer awareness, perceptions and willingness to engage in using a smart phone to replace the contents of their wallet or purse. Specifically, the research explored awareness, usage, benefits/drawbacks and likelihood of using a mobile phone to make purchases, transfer funds, conduct financial transactions and carry identification such as a driver's license, insurance card, social security card, etc. Further, the research explored which types of companies/institutions consumers would trust most and consider most capable of managing a mobile wallet.

In November 2012 through January 2013, PwC initiated a two-phase program to capture this learning. In Phase 1, we surveyed a geographically dispersed sample of 1,000 adult men and women between the ages of 18-74. In Phase 2, we conducted focus groups in Dallas, Texas to gain a deeper understanding of some of the underlying reasons driving perceptions and behavior reported in the survey.



### II. Executive Summary

Imagine running errands with nothing but your smartphone. Stop for a coffee, and pay with your phone. At the pharmacy, your prescription plan appears on your screen for the pharmacist to scan. While grocery shopping, coupons pop up for products you like and use. At the bookstore, you flash your membership card simply by holding up your phone.

That day is already here. Mobile wallets let consumers store everything from their credit and loyalty cards to their personal information in one organized, accessible place – their smartphone.

But while consumers are highly aware of mobile applications like PayPal Mobile, Google Wallet, Starbucks, and Square, and find the convenience and money-saving incentives appealing, many are holding back from using mobile wallets because of security and privacy concerns. Consumers worry about their liability if the phone is lost, stolen or otherwise compromised, and express significant concern that their smartphone will become a greater target for theft if it evolves into a mobile wallet. While consumers love the idea of using mobile wallets for low-risk, easily replaceable items like loyalty and membership cards, coupons, and paperless tickets, they are less comfortable with storing cash on their mobile phones, or using them for highly personal items like social security cards or electronic keys to their car or home.

Companies could address these security concerns by offering significant defensive measures to protect mobile wallets. Consumers are particularly eager for the ability to wipe smart phones clean and replace their mobile wallets easily and instantly. They're also interested in more high-tech protection measures, such as requiring fingerprint identification technology in order to gain access to the mobile wallet. Not only will such preventative and restorative security measures offer customers peace of mind, but many report that they'd be far more willing to use all the capabilities of a mobile wallet – provided that mobile wallets will be accepted where they want to use them. Many consumers say they want widespread acceptance of mobile wallets at places like retail stores, gas stations, doctor's offices and restaurants, and by law enforcement agencies, before they will leave their traditional wallets at home.

When it comes to managing mobile wallets, consumers place their trust in banks and credit card companies, believing that financial institutions are the most experienced and trustworthy at handling personal and financial information. Other entities, including phone service providers and retailers, are not viewed by consumers as sources to manage the mobile wallet. This echoes a recent PwC survey about customer privacy, in which large financial and utility institutions were also afforded more consumer trust.

For companies, the mobile wallet is a rich opportunity to connect with consumers on the move. Companies that can ease security fears, offer money-saving incentives, and promote widespread acceptance may see more consumers embrace the mobile wallet.

### III. Key findings

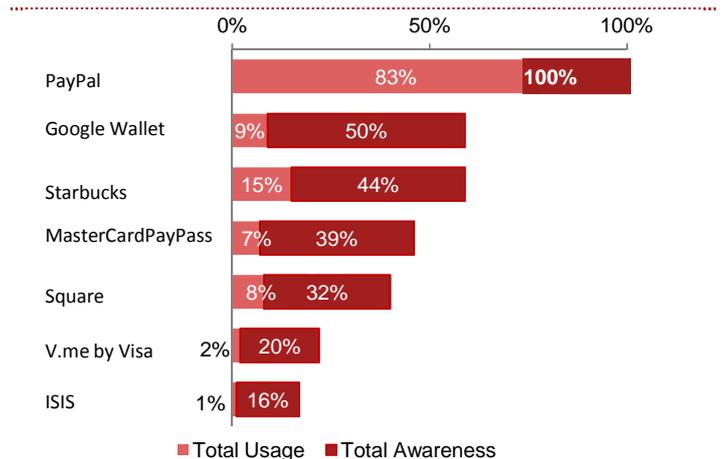
#### 1. Consumer awareness of key mobile wallet applications is relatively high, though significantly fewer people are using them

- PayPal leads the pack** with 100% aided awareness and 83% usage, which is fairly evenly represented across age groups (skewing younger for usage) and phone operating systems—although there may have been some confusion in offerings between PayPal and PayPal mobile. Some consumers were unable to differentiate between the online and mobile version of the service. The focus groups also supported familiarity with the brand and common usage as drivers for the recognition— especially among the younger group.
- Google Wallet and Starbuck’s mobile applications are tied for a distant second**, but still have a high (59%) awareness level. Although Starbuck’s has only 15% usage, it is higher than Google Wallet (9%).
  - Google Wallet’s** awareness is fairly even across age groups and driven primarily by Google Android operating system (OS) users (66%).
  - Starbuck’s** awareness is driven by 18-29 (65%) and 30-44 age groups (62%) with lower awareness among the 60+ group (49%). Apple OS users (63%) and Microsoft Windows/Blackberry OS users (64%) are driving awareness.
- MasterCard Pay Pass (46%) and Square (40%) have significant awareness levels but low reported usage.**
  - Mastercard** skews to younger age groups (52% among 18-29’s). No differences were reported by OS users.
  - Square** skews to younger age groups (45% among 18-29’s; 46% among 30-44’s) with no distinction by OS users.

- Satisfied so far:** Consumers currently using mobile wallet programs generally seem pleased with their performance:

– *“I love it! You load up your profile on the computer at home and then you get the app on your phone and it’s loaded with all your credit cards onto it. You select which is your credit card they’re going to use and you’re done. Good to go.” (Consumer, age 35-59)*

**Usage/Awareness of Mobile Wallet Applications  
Percent of Total Respondents**



#### 2. Consumers are wary of conducting financial transactions via a mobile wallet. Fewer than half are comfortable with doing so, with older (60+) consumers least likely to use a mobile wallet. Consumers express more concern about mobile hacking and theft than with using the Internet at home.

- Transferring money via mobile wallet (45%):** Nearly half are likely to transfer money to another individual, driven by younger 18-29’s (58%) with no key differences by OS.

- **\$500 is ceiling for most:** 70% are comfortable with transferring between \$100 to more than \$500, **driven by the 45-59 age group (75%).**

- **\$100 is ceiling for many:** 37% are comfortable with a cap of \$100.

- **Use phones as electronic credit/debit card (43%):** Nearly half are also likely to pay for physical goods and services in a store with electronic credit/debit card (43%). For some, this is similar to using a credit card online, a practice to which they have become comfortable.

- Willingness is driven by 30-44 year olds (49%) and has a slight skew to Apple OS users.

- o *“I carry a lot of different credit cards. I have business cards and I use different cards for purchasing different things and get points. So instead of carrying six different cards, it would be easier to have it all on my phone.” (Consumer, age 21-34)*

- **Not as comfortable swapping out cash:** Consumers are less comfortable with the idea of using their mobile device to store cash. Consumers were concerned about how they would recoup lost cash if their mobile wallet was lost or stolen.

- **Only 24% would withdraw** cash using stored funds on mobile device.

- **Only 23% would pay** with cash being stored.

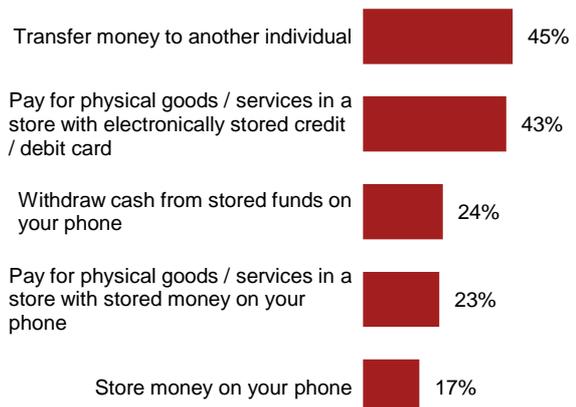
- **Only 17% would store it at all** – indicating the above numbers could be even lower.

- o *“What happens if everybody has money on their phone and somebody steals my phone or I lose it and they steal my money? Can I get my money back?” (Consumer, age 21-35)*

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### Most Likely to Use Mobile Wallet to Percent of Total Respondents (Very Likely/ Likely)

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- 3. **Consumers are most willing to use a mobile wallet in place of a paper ticket – as many are already doing. They also are willing to use it as a substitute for insurance and loyalty cards, which are easily replaced and don’t carry monetary value.**

- **Use mobile wallets instead of tickets (66%):** Most would use it in place of a paper ticket to an event or to pay for transportation, a trend driven by 18-29’s and 30-44 age groups (73%) and Apple OS users (72%). They see it as convenient, as it eliminates the time and hassle of printing and carrying paper tickets, as well as the possibility of losing or forgetting them.

- *“Then you’re not carrying paper and you’re not having to print it with your ink. You don’t have to turn your printer on and go through all those steps. It’s automatically emailed or downloaded to your phone. You pop it up, show it and they scan it and you’re on your way.” (Consumer, age 35-59)*

- **Replacing insurance cards (58%):** A majority also would use it to show proof of auto and/or medical insurance, driven by 30-44 (63%) and 45-59 age groups (61%) and skewing to Apple OS users (62%).

- *"I think it would be nice to have all of your insurance cards on there. You've got insurance cards and then co-pay. Instead of fiddling through my wallet looking for the insurance card, you just have everything on the mobile wallet and pay the co-pay at the same time with a credit card."* (Consumer, age 35-59)

- **As a substitute for loyalty cards (57%) or to get coupons at checkout (56%):** This is skewed to 30-44 (60%) and 45-59 age groups (59%). It is also skewed to both Apple OS (60%) and for coupons, as well as MS Windows/Blackberry OS users (60%).

- *"For travel it would be great to have everything on there (mobile wallet). Your Marriott, American Airlines, your Southwest, Hertz cards — to have them all in one place where they're electronically stored."* (Consumer, age 35-59)

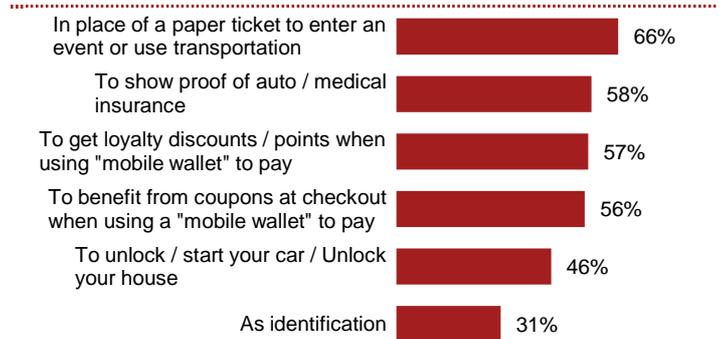
- **Less likely to be used as a key (46%):** Less than half of consumers would use their mobile wallet to unlock/start their car or house, fearing a security breach of something "so personal" that could affect their safety.

- *"That's (a key) way too much access to your life ... What if someone gets hold of your phone and is able to get into your house because your driver's license with your address on there?"* (Consumer, age 21-34)

- **Even less for ID (31%):** Fewer respondents would replace government-issued ID's, such as a driver's license or social security card. There are concerns here with both identity theft and acceptance of the technology.

- *"I think when you start talking about security and you put that kind of information on your phone, you're putting yourself at risk."* (Consumer, age 35-59)

#### Use Mobile Wallet as Replacement Percent of Total Respondents (Very Likely/ Likely)



4. **Key benefits of using a mobile wallet: Save money (via coupons and discounts offered), be more convenient, save time, and enhance organization. There is considerably less interest in using a mobile wallet as a geo-locator and as a venue for sharing information with friends.**

- **Saving money:** Most consumers (78%) thought that monetary incentives, such as discounts and coupons for using the mobile wallet, was a highly motivating benefit. Some are already using their mobile phones for this purpose. Even so, they want control over when and where they receive these offers and want them to be personalized to their needs – not irrelevant clutter.

- *"I think it would be kind of cool if it was something that could be toggled on and off. Say you're at a food court in the mall and you're not sure what to eat. Turn it on and see what kinds of offers come your way."* (Consumer, age 35-59)

- *"Before I buy anything I go to Geo Coupons and see if there is a coupon on there. Then I give them my phone and they scan it."* (Consumer, age 21-34)

- *I worry they'll send you stuff you don't buy, that you've never bought. It's got to be pretty targeted."* (Consumer, age 21-34)

- **Convenient to store cards/coupons:** A majority (67%) also felt a mobile wallet would be a convenient place to store the myriad of ID loyalty cards and coupons that are typically carried in a traditional wallet.

- *“It happens to me sometimes: I’ll switch out my wallet or I’ll forget to put something back in and then I’m looking for my insurance card or my credit card or bank card. It would pop up on your phone and you could see it right there instead of having to go through your whole wallet or paperwork at home.” (Consumer, age 35-59)*

- **Convenience and time savings:** Both were viewed (both at 57%) as an advantage of a mobile wallet – which could provide speedier transactions and better organization as well as the ability to eliminate carrying a wallet or purse.

- *“Less to misplace, less to lose. Quicker to find than in my purse.” (Consumer, age 35-59)*

- *“If I have everything on my phone I wouldn’t have to carry my wristlet with me so it would be less hassle.” (Consumer, age 21-34)*

- **Tracking money is less interesting.** Just 41% felt this was a key benefit, as consumers are concerned about the security of having all of their bank information in their mobile wallet. This was especially true of the older (60+) age group.

- **Don’t want to be located:** Only 36% felt that a retailer's ability to pinpoint their location in order to send them coupons and promote events was a positive. Focus group learning echoed this concern, with consumers expressing concerns about being “stalked” and “inundated” with advertising messaging on their mobile devices.

- *“I don’t want that information in my phone. I don’t need more people tracking me. It’s like putting a microchip in my arm.” (Consumer, age 35-59)*

- *“Any time my phone asks me my location, I decline it. I don’t want anything or anyone knowing where I am ... I believe in privacy to the utmost.” (Consumer, age 35-59)*

- *“I don’t like the idea of geo location because anyone can find out where you are. So someone could know you’re at Applebee’s and stalk you ... I want to be able to turn off the notifications.” (Consumer, age 21-34)*

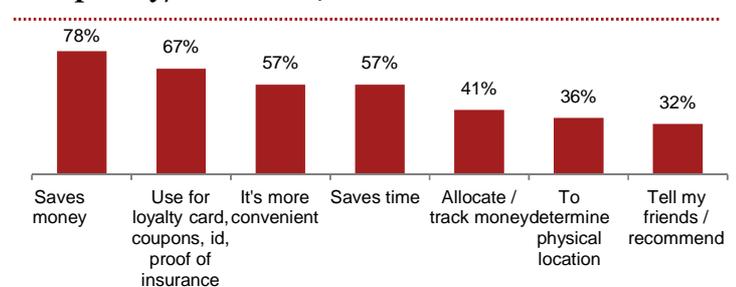
- **Don’t care to share:** Despite the prevalent use of social media, only 32% wanted to share information/recommendations via a mobile wallet. Many consumers reported that they neither felt the need to “bother” their friends by sharing their thoughts nor the desire to know what their friends think. They also wanted to have control over what they share and are afraid of their information being shared automatically.

- *“I don’t want to know what my friends are purchasing. That’s their private business. I don’t need them recommending stuff to me and I don’t want it to automatically update me and send me texts or emails.” (Consumer, age 35-59)*

- *“On Facebook you can share stories ... If you find something you like in a store you could connect it and hit share and then your friends can see it. That way, you have control over when it’s being sent and if it’s worthy of being put on social networking.” (Consumer, age 35-59)*

- *“I don’t really care what you bought at Kroger ... If I want somebody’s feedback on a product, I’ll look it up.” (Consumer, age 21-34)*

**Mobile Wallet Benefits**  
Percent of Total Respondents (Agree Completely/Somewhat)



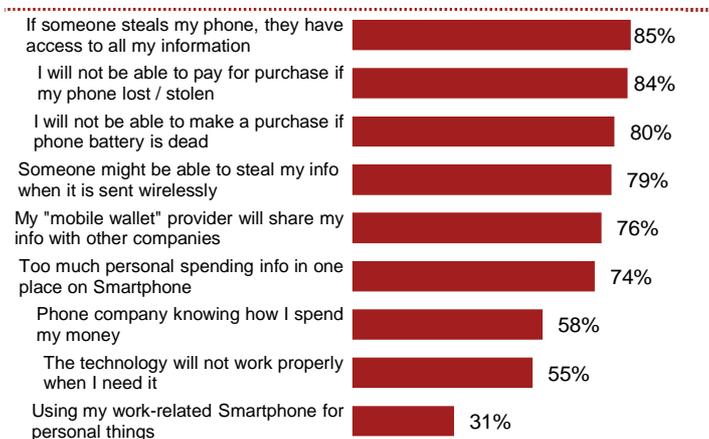
## 5. Key areas of concern: loss of privacy, security and ability to use

- **Theft concerns:** Consumers expressed concern that if using smart phones as mobile wallets becomes widespread and universal, their phone would inherently become a more appealing target to steal – and that the loss of their mobile wallet would be compounded by the fact that it not only contains more information than a typical wallet, but also doubles as a phone.
  - *“It makes your phone more than just a piece of equipment. It makes it a valuable target.” (Consumer, age 35-59)*
  - *“I’d be more worried that someone would be likely to try to snatch your phone knowing that all of your information is in there ... Losing your wallet is one thing, but lose your phone and they can easily just tap into it and see everything.” (Consumer, age 21-34)*
  - **Access anxiety (85%):** The possibility that private information could be stolen if their mobile wallet is stolen is consumers’ leading concern.
    - *“It’s got to be secure. I’ve got to know that it’s safe. If someone steals your phone, you’re (in trouble). It’s not that hard to break into someone’s phone.” (Consumer, age 35-59)*
  - **Wireless worry (79%):** The possibility that information can be stolen when transmitted wirelessly also is a prominent fear.
  - **Too much in one place? (74%)** There is considerable unease about putting so much personal information on a device that consumers believe has a high possibility of loss or theft.
- *“You’ve got all the information in one place, which makes it even easier for them to hack in and take your identity. My insurance card, social security card, driver’s license ... I think it makes it a little easier for someone to steal your identity.” (Consumer, age 35-59)*
- **Loss of use is also a big concern.** Specifically, that the mobile wallet’s functionality – especially its ability to make purchases – would be rendered useless if the phone was missing or lost battery power.
  - **No purchasing power (84%):** There was significant concern that the mobile wallet could not make monetary transactions if it was lost or stolen.
  - **Battery (80%) and technology failures (55%)** were also considered potential pitfalls of reliance on a mobile wallet.
    - *“I would be afraid. I’m still very fearful with technology issues. How many times do you forget to charge your phone and you’re stuck there with no charger? Maybe I’m not confident enough in me being able to manage the technology and keep it going. And what would happen if I lost my phone?” (Consumer, age 35-59)*
    - *“It should save time, but my phone locks up half the time, so I may have to reset it right in the middle of a transaction. That wouldn’t save much time, so it’s kind of a Catch-22.” (Consumer, age 35-49)*
- **Phone company knowing too much? (58%):** More than half of consumers were concerned that their service provider might learn too much about their spending habits – suggesting an underlying mistrust of carriers.
  - *“I don’t trust (cell phone companies) with my money and knowing too much. They’re not FDIC insured. If they lose my money, they’re not going to give it back.” (Consumer, age 21-34)*

- **Mixing business and pleasure (31%):** For those who have a work phone, mixing it with personal use/information was an issue.
  - *“In our company they have access to everything on our work phone, so I would not want my credit card information on the phone.” (Consumer, age 21-34)*

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### Mobile Wallet Areas of Concern Percent of Total Respondents (Agree Completely/Somewhat)



### 6. How to address concerns: Consumers want comprehensive and immediate measures to ensure security and if necessary, replacement of mobile wallet device.

- **Wipe it remotely (90%):** The ability to erase a stolen/lost phone is paramount, given security and privacy concerns. Consumers want to have one trusted source that can both erase their phone and restore it.
  - *“I need my phone to be able to cancel all that stuff. If your phone is stolen and it has all that information on there, you’re kind of screwed on being able to cancel that information right away.” (Consumer, age 35-59)*

- *“I would want to put all of my stuff on hold rather than having to call a lot of different places. Like one overall place where they could stop all your different accounts.” (Consumer, age 21-34)*

- **Sophisticated, high-tech security (89%)** was highly appealing and reassuring – with the idea of a fingerprint scanner being particularly compelling.

- *“I’d go along with a fingerprint scanner. I think that would be a little safer because if they steal your phone, they don’t have your fingerprint. It’s your finger, so if I steal your mobile wallet, I can’t use it.” (Consumer, age 35-59)*

- *“I like a fingerprint. Then nobody could get into anything. It can’t be duplicated.” (Consumer, age 21-34)*

- **Replaced immediately (88%):** Consumers want a quick replacement for this critical piece of equipment. Focus group respondents generally felt that replacement should happen within a day.

- *“I’d be comfortable if you could re-create your whole wallet overnight with the click of a download button.” (Consumer, age 35-59)*

- **A PIN (85%) also was viewed as a valued security measure.**

- *“I would still want to sign in. There has to be a secondary stage of verification before I have access to your credit card. They can steal your phone but that doesn’t mean they should have access to your credit cards.” (Consumer, age 21-34)*

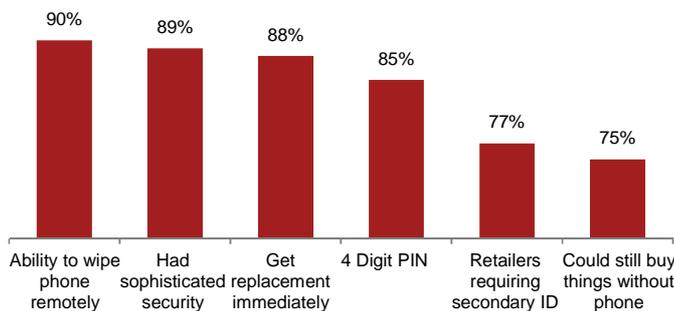
- **Secondary ID (77%) and the ability to still make purchases (75%)** also were highly desirable for a significant majority of consumers. However, some consumers felt the need to provide a secondary ID obviated the convenience of a mobile wallet.

- *“But then every time you’re buying something at Nordstrom’s and you wanted to use your mobile wallet it would be a hassle if they also want to see your ID.” (Consumer, age 21-34)*

- *“I think of credit cards the same way I think of a bank. They are used to these transactions.” (Consumer, age 21-34)*

## Mobile Wallet Ways to Address Areas of Concern

### Percent of Total Respondents (Agree Completely/Somewhat)



## 7. Managing the mobile wallet: Credit card companies are perceived as most capable and banks are considered most trustworthy by consumers. These opinions were fairly similar across age and mobile operating system type.

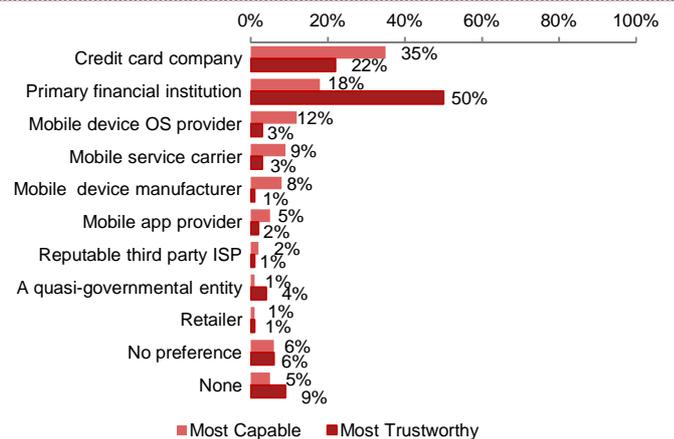
- **Consumers feel banks are safe and well established in handling money:** Consumers feel banks are highly trustworthy and also protected.
  - *“They’re pretty familiar with handling money and how to verify if that is the correct customer, etc. They’ve been in that business for quite some time.” (Consumer, age 35-59)*
  - *“A bank already holds your money. They’re very trustworthy and secure. They already have all your information.” (Consumer, age 21-34)*
- **Credit card expertise:** Credit card companies already manage critical and private financial information and transactions – similar to banks. Because a mobile wallet would function like a credit card, consumers associate credit card companies as competent to manage this function.

- **Other institutions or entities are not broadly viewed as trusted or capable.** Respondents did not have confidence in other types of companies (even those related to mobile operations) to manage the mobile wallet – even though it would function via mobile devices. Respondents felt this would not be their area of competency; further, some respondents had experienced service issues with service providers relative to financial transactions.

- *“I would rather deal with someone whose job it is to store stuff. Cellular companies ... that’s not their strong suit.” (Consumer, age 35-59)*
- *“Have you ever seen an invoice from a cell phone company? No one can figure it out. Imagine there’s a discrepancy somewhere.” (Consumer, age 21-34)*

## Mobile Wallet Most Capable of Providing/Most Trusted to Manage

### Percent of Total Respondents (Agree Completely/Somewhat)



## 8. The willingness to transition to a mobile wallet depends on strong institutional support – a majority of consumers in each case want to have at least 75% of relevant entities supporting the technology.

- **Health Insurance ID is most critical (83%):** This area had the highest level of concern, where a large majority of respondents wanted at least 75% or more of all doctors and hospitals to support the mobile wallet technology. Although there was a high level of concern about not having a physical insurance card, consumers could see the advantages of having all of their insurance information available instantly on a mobile wallet.

- **Credit Cards (77%):** A significant majority felt that they would only be willing to leave their credit cards at home if 75% or more of all retailers supported the technology. Still, 16% said they would never leave their physical credit cards at home, regardless.

- *“I could see where I could put my faith in it ... once it’s kind of global like MasterCard, Visa, then (physical cards) would be redundant. But not right now.” (Consumer, age 35-59)*

- *“I’m not keen on it. I’m a personal believer in I want my property on me and I don’t trust that it’s secure. And I sure don’t trust that everybody takes it, so you’re still going to need your wallet.” (Consumer, age 35-59)*

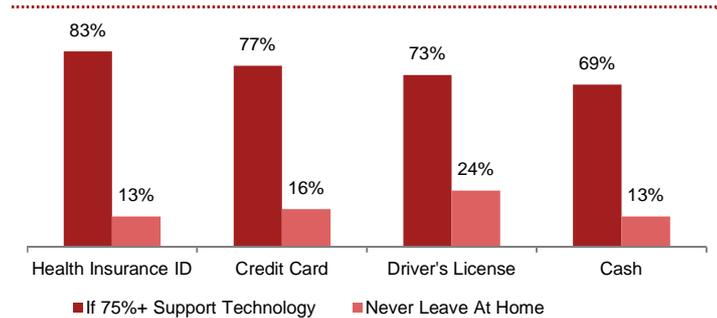
- **Driver’s License (73%):** In keeping with current habits, most respondents said they would not be comfortable substituting a mobile wallet for a driver’s license unless it was supported by at least 75% or more of law enforcement/police departments. The 25% of respondents who said they would never leave their physical driver’s license at home points to a discomfort in being without this critical form of identification.

- *“If you get pulled over and the police department in that city doesn’t accept (the mobile wallet) in that city, you’re (in trouble).” (Consumer, age 35-59)*

- **Cash (69%):** Although demand was lower than the other categories, a majority of respondents wanted at least 75% of retailers to support the ability of the mobile wallet to perform cash transactions, while just 13% said they would not leave cash at home. These lower numbers are consistent with the diminished use of cash in favor of credit cards.

## Mobile Wallet When Willing to Leave Wallet Contents at Home

### Percent of Total Respondents (Agree Completely/Somewhat)



## IV. What this means for your business

- 1. Capitalize on growing awareness and usage.** Consumer awareness of mobile wallet applications is high, paving the way for the evolution of the smart phone as a mobile wallet.
- 2. Offer incentives to use mobile wallets through money-saving opportunities.** Companies pursuing mobile wallet use/management should emphasize any money saving advantages and cost savings features. The key perceived benefit of using a mobile wallet is the possibility of gaining savings via provision of discounts, points and coupons.
- 3. Emphasize convenience.** The ability to have everything in one place and avoid carrying a physical wallet or purse is also a key benefit. This is especially true for things like tickets, coupons and loyalty cards, which can be easily forgotten or lost amidst the clutter of a wallet, pockets, purse, etc.
- 4. Respect personal space and privacy.** Consumers are reluctant to share their location and shopping behavior; this should be done at the consumer's discretion and with their permission. Consumers don't want to feel like they are being tracked and don't want to be bombarded with recommendations and offers that are not relevant to them – they feel they are already subject to too much advertising clutter and spam.
- 5. Develop and communicate strong and convincing security measures.** Consumers have some fears about this new technology replacing what is familiar to them. Even though carrying a physical wallet also presents an obvious risk of loss or theft, they seemed to have a greater concern about losing their wallet in a mobile format. This may be compounded by the fact that the mobile wallet doubles as their phone. Companies seeking to manage mobile wallets should build consumer confidence in both the mobile wallet concept and their perceived ability to manage it by putting persuasive loss prevention and safety measures in place. Convincing examples include the ability to quickly wipe the contents of the lost phone, and personal identification methods such as fingerprint scans.
- 6. Make replacement as painless as possible.** Given consumers' concerns about loss and theft, consumers want to replace their mobile wallets as quickly as possible. They already consider their mobile phone to be indispensable, so that perception is compounded by its use as a mobile wallet, too. The idea of a 24-hour replacement guaranty is very reassuring.
- 7. Broad institutional acceptance is critical.** Consumers express significant concern about whether there is widespread acceptance of mobile wallets by merchants (for mobile wallet cash and credit cards), healthcare providers (for insurance cards) and law enforcement (for ID cards – especially driver's licenses). Consumers will not feel comfortable about using a mobile wallet for these purposes unless at 75% or more of entities recognize and allow it.

For more information on this research, the PwC Consumer Intelligence Series, or how digital transformation is shaping the entertainment and media industries, please contact one of our specialists:

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