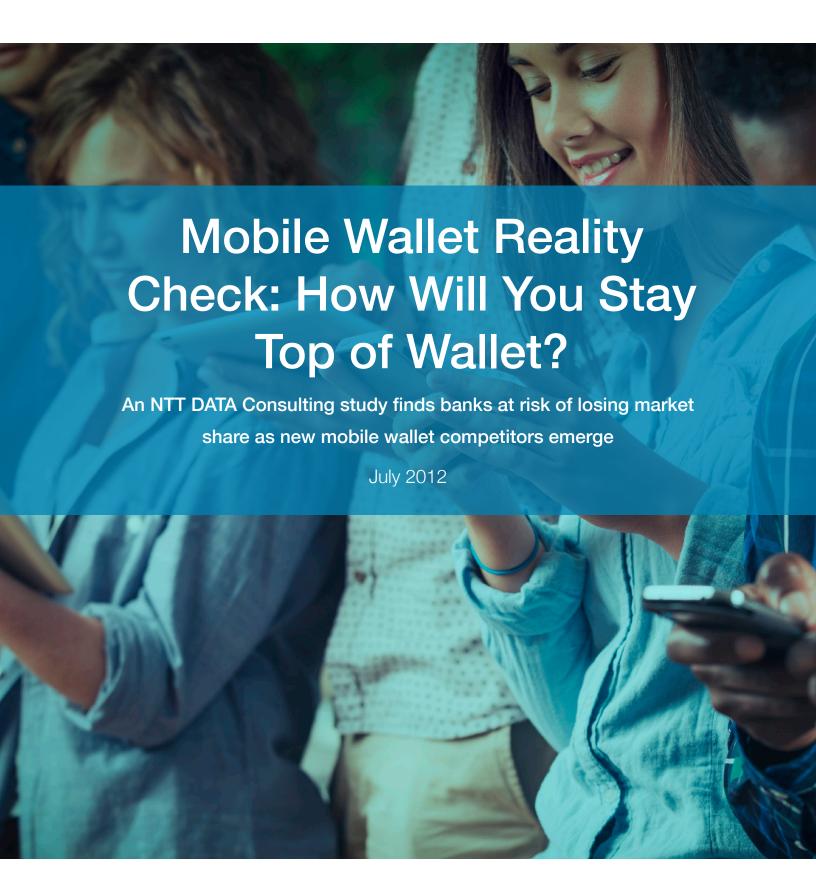
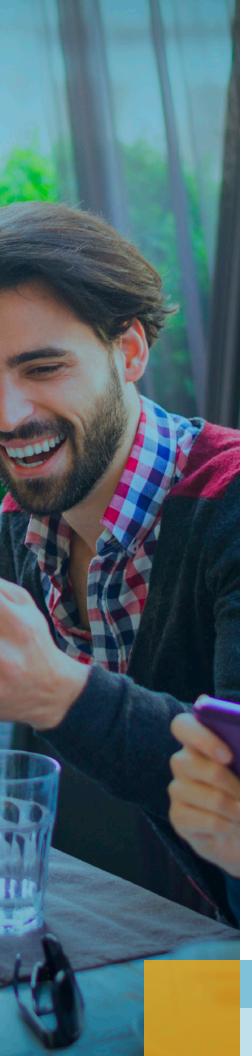
FINANCIAL SERVICES | CARD AND PAYMENTS PRACTICE







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## **Executive Summary**

Banks are at risk of losing market share to a new group of competitors in the mobile wallet arena. That is the key finding of the "Mobile Wallet Reality Check: How Will You Stay Top of Wallet?" study, conducted by NTT DATA Consulting (www.nttdata.com/usconsulting), the business and technology consulting practice of NTT DATA.

The study confirms what banks may have feared: the mobile wallet market is up for grabs. Over the next decade, major technology players, retail providers, mobile carriers, startups, and financial institutions will fight to make the mobile wallet a reality, allowing people to pay for almost everything with their smartphones. NTT DATA Consulting surveyed 605 U.S. consumers online in April 2012 to find out which features people want in a mobile wallet, who the trusted key players will be, and what banks must do to maintain market share in the new mobile ecosystem.

According to the study, 48% of survey participants are interested in a mobile wallet. Mobile wallet interest is strongly correlated with age and income level – skewed toward younger age groups (ages 18-50) and more

affluent consumers (household income greater than \$50,000).

Notably, the study reveals that consumers who are interested in mobile wallets would consider using alternative players to their primary bank for mobile wallets and for banking services. Additionally, these consumers were more interested in a single wallet that allowed payment options from multiple financial institutions, rather than multiple wallets from single institutions or retailers.

These consumers also expressed strong interest in using a wide variety of services in their mobile wallet. The most valued service is the ability to make better payment choices – helping to pick the card which will maximize loyalty programs or minimize interest payments. Other valued services – receipt capture, search and shop, real-time incentives, and social networking.

So how can banks stay top of wallet? This paper concludes by recommending actions for banks to take now. NTT DATA Consulting believes that a fast follower strategy for adopting mobile wallets is a dangerous approach to maintain top of wallet. Rather, NTT DATA Consulting advises banks to act now to deliver the services required to ease the

consumer pain points and to build the flexible foundation needed to support new mobile wallet features.

#### Survey Results at a Glance

- Nearly half, 48 %, of survey participants are interested in a mobile wallet.
- Eight in ten consumers interested in mobile wallets responded that they would use PayPal as their mobile wallet provider. Six in ten would use Google. Six in ten would use Apple.
- Consumers interested in mobile wallets said they would consider using alternatives to their primary bank for banking. Eight in ten would consider using PayPal if it offered banking. Six in ten would consider using Google. Six in ten would consider using Apple.
- Sixty-five percent of respondents rated the ability to make better payment choices –such as maximizing loyalty programs or minimizing interest payments – the most valued mobile wallet service.



Mobile Wallet Defined

A mobile wallet stores your major credit cards, debit cards, prepaid cards, gift cards or vouchers (including coupon and loyalty programs) in your smartphone or tablet and can be organized using a payment application. Through this application you would be able to view and choose the method of payment for a transaction.

# Status Report on Mobile Wallets

The days of sifting through an overstuffed wallet – a la Seinfeld's George Costanza – are coming to an end. The mobile payments era is here to stay. The mobile payments market is potentially enormous and has been capturing an increasing share of the overall non-cash payments market.

CEB TowerGroup estimates the value of the U.S. non-cash payments market (comprised of credit card, debit card, check, and ACH) at over \$73 trillion for 2012. The market has been aflame with interest and activity over the last 18 months as banks, network operators, and handset manufacturers seek to define their roles.

As a result, mobile payment technology and infrastructure are becoming a reality. NTT DATA Consulting expects that within five years 50% of smartphone users will be using their phones and mobile wallets as their preferred method for payments. Cash, checks, and plastic use will continue to decline. As we have seen with the trend in mobile technology, from smartphones to tablets, once the technology is accepted the adoption curve spikes.

The mobile wallet frenzy is being driven by a number of new players who are entering the game and challenging the traditional bank network. Merchants such as Wal-Mart Stores Inc., Target Corp., and Starbucks are developing their own mobile payments systems to compete with similar platforms from Google Inc. (Google Wallet), PayPal, U.S. cell phone companies (Isis®), and Apple's Passport.

Financial institutions are fighting back. Three of the major players in the credit card industry launched online digital wallet services — Visa's V.me, MasterCard's PayPass®, and American Express's Serve® enables each to compete head-to-head in the online payments space and offer additional features like peer-to-peer payments. Additionally, several banks have partnered with others (e.g., Citi with Google, JPMorgan Chase & Co. (JPMC)/Capital One/American Express with Isis) as well as introducing their own proprietary wallets.

At NTT DATA Consulting, we are in constant conversation with the financial institutions that are facing the challenges of the new mobile payment space. In our work with the top credit card issuers, we recognized a need to have specific consumer insights around several key questions:

- What are the current pain points for the consumer?
- What are the services necessary to win in the mobile wallet market?
- Who do consumers believe would provide the best mobile wallet (e.g., primary bank or alternative providers)?
- Would consumers be open to using alternative providers for banking services?
- Who are the emerging competitors?

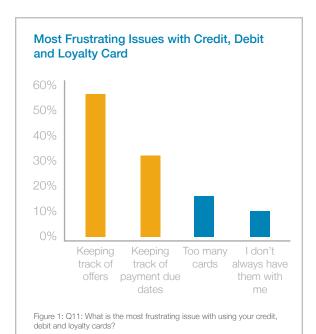
#### Did You Know?

- Mobile payments can provide the banked and unbanked equal access to payments infrastructure.
- In the U.S., there are more mobile devices than there are people.
- The U.S. has passed the smartphone tipping point as smartphones now account for more than 50% of new mobile phones sales.
- The use of mobile banking services is expected to approach 50% by 2016 versus 15% today.

Source: CEB TowerGroup, Alix Partner

# Consumer Card Pain Points

Consumers today enjoy a wide variety of offers related to the payment experience. Although the number of physical card solicitations may have decreased recently, there are plenty of payment card options available (especially to those with higher credit scores). Our survey indicated that the number one frustration for consumers is the inability to manage these offers. Respondents also cited other organizational challenges such as struggling to keep track of payment due dates, having too many cards, and not always having their cards with them (see Figure 1).



# Consumer Card Payment Strategies

Ten years ago, the average consumer carried seven cards. But times have changed, and consumers have begun balancing their payment needs differently – they're moving away from using a wallet full of credit cards. Today's consumers are aware of the choices available for managing their payments and they are changing their payment strategies depending on their financial situation. However, the expanding number of payment options and offers are overwhelming, and consumers are seeking a way to simplify.

#### When to use which card?

When it comes to how consumers use their credit cards, debit cards, and loyalty programs, our study shows that only 26% of consumers use many different cards due to loyalty programs. In fact, the majority of consumers, 74%, use a primary card and own a second card as back-up in case the primary card does not work (see Figure 2).

However, the rise of debit card and loyalty programs puts pressure on consumers to use them and complicates the consumer card strategy. As Figure 3 points out, almost half of consumers, 47%, are motivated to change the way they use their cards based on offers or their current financial situation. On the other hand, 53% of consumers always use their same card(s) the same way.

## Who Would You Trust to Provide Services in Your Mobile Wallet?

Trust continues to be a critical theme in the banking and IT worlds. Consumers are still reeling from the demise of Wall Street and are making note of recent security glitches with product mobile wallets. In our survey, NTT DATA Consulting asked, "Who would you trust to provide services in your mobile wallet?" Nearly half, 46%, of respondents trust their primary banks to provide services in their mobile wallets. PayPal takes second place with 30% of respondents' trust. Credit card companies finish third with 14%.





#### LevelUp in Action

# Free Lunch Today at Viva Burrito Courtesy of LevelUp

LevelUp is buying your lunch today, up to \$10, at Viva Burrito (66 Staniford St, Boston). You should even be able to order online, select cash as the payment method, and pay with LevelUp!

# Overwhelmed by options, seeking simplification

According to CEB TowerGroup, U.S. direct mail credit card offers totaled 3.8 billion items over the last 12 months, the equivalent of 12.3 offers per person, or 33.2 offers per household. In addition to direct mail offers, the growth of social media, mobile phones, texting, and online marketing makes getting offers a snap.

Consumers have a love/hate relationship with these offers. On one hand, consumers place significant value on the benefits of various offers and incentives, from lower interest rates and cash back rewards to discounts and sales coordinated with loyalty programs. On the other hand, they feel overwhelmed by the volume of these offers and are frustrated by their attempts to keep track.

For example, let's take LevelUp, the free mobile app that lets you pay with your phone to save time and money (see sidebar LevelUp in Action below). What's in it for consumers? Free money. That's right, the first time you go to any place that accepts LevelUp there's a credit (\$5, \$10, \$20) waiting for you. To use it, just pay with LevelUp. There are no deals to buy, no coupons to print. Even better, credit never expires and there is zero fine print.

#### **Did You Know?**

Smartphones have changed the way consumers shop. Smartphones are critical shopping tools with 96% having researched a product or service on their device. Smartphone research influences buyer decisions and purchases across channels. 35% of smartphone users have made a purchase on their phone. Implication: Having a mobile optimized site is critical and a cross-channel strategy is needed to engage consumers across the multiple paths to purchase.

Source: Google

# Security Will Act as the Gatekeeper

Almost half of the survey participants (48%) indicated they are interested in a mobile wallet. Overall, mobile wallet interest is strongly correlated with age and income level – skewed toward younger age groups (ages 18-50) and more affluent consumers (household income greater than \$50,000). However, mobile wallet interest is also driven by two behavioral groups – Techno Shoppers and Payment Optimizers (see "Identifying the Mobile Wallet Customer Sweet Spot" on page 9).

While security of mobile wallets was a concern across all the survey responders, the group that said they were not interested in a mobile wallet had the most concerns over security. Moving forward, NTT DATA Consulting believes it will be important for providers of mobile wallets to mitigate security concerns in order to attract more interest. We predict that security will act as the gatekeeper to mobile wallet adoption by consumers, and expect multiple providers to diminish any and all security concerns enabling them to compete purely on functionality and usability.

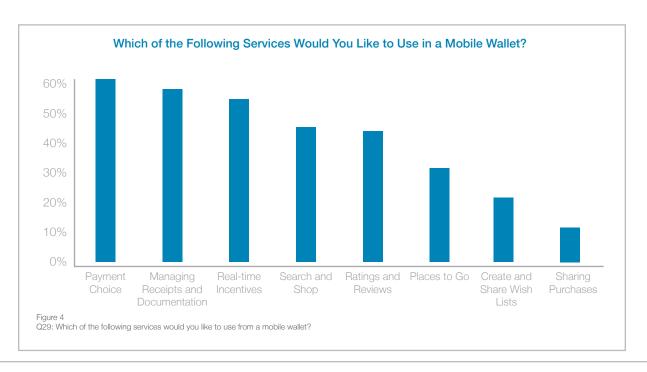
## **Mobile Wallet Services**

So what did the study tell us about which mobile wallet services were most important?

We found that consumers place the most value on services that enhance their ability to conduct the actual transaction. In fact, 65% of respondents rated the ability to make better payment choices – such as maximizing loyalty programs or minimizing interest payments as the most valued mobile wallet service. Fifty-seven percent said managing receipts and other documentation was important (see Figure 4).

Other services that deal more with the shopping experience include:

- Real-time Incentives, 55%
- Search and Shop, 47%
- Ratings and Reviews, 45%
- Places to Go, 30%
- Create and Share Wish Lists, 21%
- Sharing purchases, 10%



# Identifying the Mobile Wallet Customer Sweet Spot

The NTT DATA Consulting study discovered that targeting customers by behavioral market segments rather than traditional segments of age or income level is critical for banks to be successful in the mobile wallet marketplace.

Our research and analysis found three distinct types of behavioral segments for mobile wallet value propositions: Techno Shoppers, Payment Optimizers, and Traditionalists (see Figure 5).

- Techno Shoppers (27%) are consumers who are interested in mobile wallets, attracted to shopping and social features of mobile wallets, and want to effectively use their cards to make the best possible payment decisions.
- Payment Optimizers (21%) are consumers who are interested in mobile wallets, and are mainly concerned with effectively using their cards to make the best payment decision based on their financial situation, loyalty benefits, and administrative account management.
- Traditionalists (52%) are consumers who are not interested in mobile wallets, place a limited value on mobile wallet services, and are concerned about security.

	Techno Shoppers	Payment Optimizers	Traditionalists
Value of Mobile Wallet Services	Shopping experience and payment optimization decisions	Payment optimization decisions and administration	Limited value, more concerned about security
% of Survey Respondents	27%	21%	52%
	Interested in	Not interested in mobile wallet	
Description	Open to banki	Prefer to keep mobile wallet with primary bank	
	Comfortable with mobile banking		A simplified card and payment strategy
% of Currently/Intend to Use Mobile Banking	86%	64%	23%
Believe mobile wallet will make shopping more fun	62%	38%	15%
Prefer 'open' mobile wallet with accounts and loyalty programs across multiple institutions	58%	66%	36%
Change the way cards are used based on financial institution	60%	62%	25%

Figure 5

Q6: Which of the following describes your current approach to mobile banking? / Q23: Please rate the following mobile wallet features on a scale of 1 to 5 where 1 is not very valuable to you and 5 is very valuable. / Q31: Which of the following mobile wallet solutions would be most attractive to you? / Q9: How often does your use of credit/debit cards and other payment options change?

## Preferences of Techno Shoppers and Payment Optimizers

The study reveals that Techno Shoppers and Payment Optimizers are the biggest concern for banks as well as the biggest opportunity. They are at risk of fleeing to new providers for both mobile wallets and banking. Let's dive more deeply into what these key groups want:

#### They want alternatives to banks

More than half (53%) of Techno Shoppers and Payment Optimizers would choose an alternative player over their primary bank for a mobile wallet. Techno Shoppers and Payment Optimizers are very open to choosing PayPal, Google, or Apple as their mobile wallet provider (see Figures 7 & 8). More study highlights include:

- Eight in ten consumers interested in mobile wallets responded that they would use PayPal as their mobile wallet provider. Six in ten would use Google. Six in ten would use Apple.
- Five in ten Techno Shoppers would prefer to use

- PayPal over their primary bank as their mobile wallet provider. Three in ten would prefer to use Google. Two in ten would prefer to use Apple.
- Consumers interested in mobile wallets would consider alternative players for banking services.
   Eight in ten would consider using PayPal if it offered banking. Six in ten would consider using Google. Six in ten would consider using Apple.

#### They want a single platform

Additionally, Techno Shoppers and Payment Optimizers prefer an open mobile wallet offering. By incorporating all accounts and loyalty programs across multiple financial institutions into a single platform, consumers can more easily consider alternatives to their banks. Consumers seem less interested in having multiple mobile wallets for each financial institution or retailer. This difference is important to Techno Shoppers and Payment Optimizers, as they are more likely to use many different cards and modify their card strategies to fit their financial situation or respond to offers. On the other hand, Traditionalists prefer to keep the existing relationship with their primary bank, and therefore an open wallet would have less value.

#### Preferred Provider of Mobile Wallet Service

Service Ranking	Preferred Provider of Mobile Wallet Services	Primary Bank	Tech Titans (Google, Apple, Amazon, Facebook)	Other Competitors (PayPal, Private Label, Cell Phone Carrier)
1	Payment Choices	49%	12%	39%
2	Management of Receipts and Documentation	63%	13%	24%
3	Real-time Incentives	36%	25%	39%
4	Search and Shop	35%	40%	25%
5	Ratings and Reviews	26%	53%	21%
6	Places to go	31%	46%	24%
7	Create and Share Wish Lists	28%	53%	19%
8	Sharing Purchases	31%	53%	16%

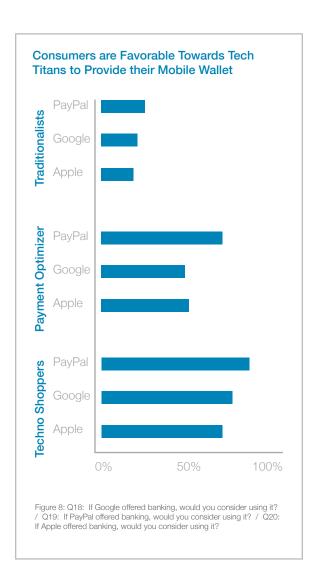
Figure 6: Q29: Which of the following services would you like to use from a mobile wallet? / Q32: For each of the following services in your mobile wallet, which firm would you prefer to offer the service?

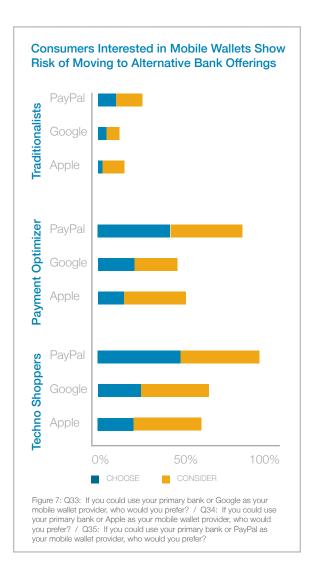
# They want a shopping and social experience

At first glance, our study seems to indicate that shopping and social experience features are not that valuable. However, further analysis reveals that Techno Shoppers place a higher value on features that enhance the shopping experience. Eighty-two percent of Techno Shoppers responded that making shopping easier was very valuable and 62% of Techno Shoppers responded that making shopping more fun was very valuable.

Taking an even deeper look into the shopping and social experience categories exposes banks' weaknesses when competing against Tech Titans (Google, Apple, Amazon, Facebook). Respondents were asked to select their top choice of providers for various mobile wallet services. Not surprisingly, Tech Titans are the preferred provider in shopping and social experience categories: search and shop, ratings and reviews, places to go, create and share wish lists, and sharing purchases and sharing purchases (see Figure 6).

In the eye of the consumer, banks hold a strong position with the highest priority mobile wallet services in the payment choices and management of receipts and documentation categories. However, in the shopping, social experience, and managing incentives categories, banks have a much weaker position.





# Key Steps to Stay Top of Wallet

NTT DATA Consulting's research validates much of what we have seen in our work with clients. Let there be no doubt that mobile payment technology and infrastructure are quickly becoming a reality and that a new crop of entrants is invading the banking competitive landscape. So what should banks do come Monday morning? Here are four NTT DATA Consulting recommendations for banks to avoid losing market share:

- Build Flexibility Now to React to Future Change.
  Core transaction processing systems are at the
  heart of every financial institution's operations and
  are key in a bank's quest to flourish in the new and
  intensely competitive mobile wallet world. Yet for
  the most part, they are still running on older systems with workarounds developed over the years
  to meet the changing needs of the market.
  - Banks require a significant review of their existing systems and a plan for core systems renewal to keep ahead of competition and be operationally efficient. NTT DATA Consulting advises banks to update their core transaction processing capabilities today to be ready to provide improved transaction and shopping experiences in their mobile wallets tomorrow.
- 2. Build, Buy or Partner to Have the Shopping Features that Techno Shoppers Want. The mobile wallet of the future must connect value propositions between consumers and service providers such as retailers. Enhanced shopping features and experiences for mobile wallet users, particularly Techno Shoppers, will create strong growth in this segment as security concerns are addressed. The inability to offer these features could result in weaknesses within an important segment, as Techno Shoppers will consider alternative mobile wallet options if these features are not offered.
- Recognize the Tools Available to the Consumer and Proactively Think How to Stay Top of Wallet. Mobile wallets will provide consumers with the tools to take advantage of all the available infor-

- mation and make the best payment choice for this particular consumer, on this day, at this merchant, and for this purchase. Banks need to proactively think about how they will stay top of wallet as consumers are exposed to these better tools and the ability to optimize transaction choices. Step one is to clearly define product offerings to remain top of wallet in a mobile wallet environment. NTT DATA Consulting believes banks have the potential to lose direct relationships with customers and their role as the primary holder of banking.
- 4. Align Segmentation Strategies with Consumer Behaviors. Our survey identified strong behavioral differences between the Techno Shoppers and the Payment Optimizers. These two groups did not have substantial demographic variances. Banks need to consider how their customers want to use these products and target the marketing and servicing to fit the consumer's needs. NTT DATA Consulting advises banks to improve their focus on behavioral segmentations like shopping and social experience capabilities to enhance the consumer experience.

#### Consider the Mobile Wallet Scenario

Step 1: The customer decides to buy an item with his/her mobile wallet, which is loaded with several payment cards from multiple financial institutions.

Step 2: The customer scans a bar code on an item. The wallet recognizes the store location.

Step 3: The wallet application helps determine which payment card should be used for this particular transaction. Its "thought" process is as follows:

- Rules out any cards that might incur an extra fee due to the transaction (e.g., Overlimit, FX).
- Determines if the price is below "revolve" threshold, therefore not the card with the low APR.
- Checks for special coupons and discounts, then determines whether any would require a specific card.
- Checks for any bonus points (e.g., 2x, 3x) programs applicable to this particular purchase.
- Optimizes float by putting the transaction on the card that has most recently cycled.

## Summary

Ample evidence shows that the competitive threat for financial institutions from new entrants, ranging from merchants, startups, and mobile carriers to PayPal and Tech Titans such as Google, Apple, Facebook, and Amazon is real.

Two distinct consumer segments who are interested in mobile wallets and more likely to consider alternate mobile wallet providers other than their primary bank – Techno Shoppers and Payment Optimizers – are the ones to target. Both groups are placing more value on a broader set of mobile wallet services. Techno Shoppers in particular are attracted to an enhanced shopping and social experience.

Banks have a strong position with consumers for the top mobile service categories -- payment choices and management of receipts. Yet, the Tech Titans are currently the preferred service providers in shopping and social experience services.

As mobile wallets continue to integrate the shopping and payment experience, financial institutions will need to market to new and distinct consumer profiles. A new look at customer segmentation in light of valued mobile wallet services and features can help banks keep the competition at bay.

#### Banks Need to Make Four Investments

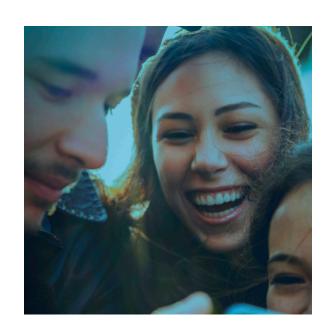
- Flexibility. Update core transaction processing capabilities to align with 21st Century requirements.
- 2. Shopping. Elevate features to appeal to consumer interest in both shopping and payment optimization.
- Tools. Define product offerings to remain top of mobile wallet. Consumers will be exposed to better tools and the ability to optimize transaction choices with future mobile wallet offerings.
- 4. Segmentation. Focus on behavioral market segments rather than traditional segments of age or income.

# How Will You Stay Top of Wallet?

# Can your organization answer these key questions?

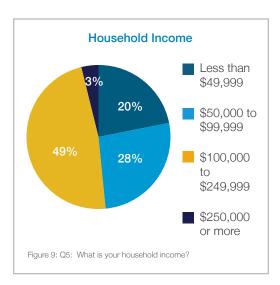
- Do you have a strategy in place to stay top of wallet?
- Have you updated your core transaction processes since the 1980s?
- Have you elevated your shopping features to meet consumer needs?
- Are you attracting customers through their behavioral segments rather than demographics?

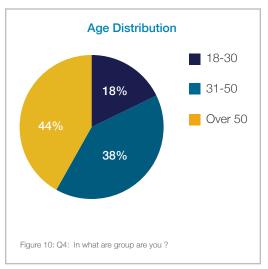
If you answered no to one or more of these questions, contact NTT DATA Consulting today.



## **Research Methodology and Demographics**

NTT DATA Consulting conducted a 36-question online survey with 605 consumers who reside in the United States. The survey was conducted in April 2012, and the responses were tabulated and analyzed shortly thereafter. Nearly half of the respondents have a household income of \$100,000 to \$249,999. The study targeted 50% of respondents to have household income over \$100,000 and no more than 25% below \$50,000. Participants were required to be over 18 years of age. The majority of respondents (44%) are over 50 years of age. That data was weighted to represent the gender composition of U.S. populations.





### Sources

- The Fight Is On To Turn Your Smartphone Into a Wallet. Who Will Win? Fast Company magazine, December 2011 / January 2012 issue, http://infographics.fastcompany.com/magazine/161/smart-phone-infographic.html
- 2. The New Banking Distribution Layer, Banking4Tomorrow.com, February 1, 2012, http://www.banking4tomorrow.com/2012/02/the-new-banking-distribution-layer/
- 3. Level Up, https://www.thelevelup.com/
- 4. Free Lunch Today at Viva Burrito Courtesy of LevelUp, Boston Food Deals, April 2, 2012, http://www.bostonfooddeals.com/2012/04/free-lunch-today-at-viva-burrito.html
- 5. Core Banking, Financial Services Technology, http://www.fsteurope.com/article/Core-banking/
- 6. Security Snafus Thin Google Wallet, American Banker, February 13, 2012, http://www.american-banker.com/issues/177\_30/google-wallet-security-flaws-mobile-payment-android-1046632-1.html
- Two words: Digital Wallet—Wal-Mart and Target Join Project Aiming to Make Plastic Obsolete, Wall Street Journal, March 2, 2012, http://professional.wsj.com/article/SB10001424052970204571404 577255261085314318.html
- Digital Wallet Battle Heats Up As Visa and MasterCard Enter the Game, TechCrunch, May 12, 2102, http://techcrunch.com/2012/05/12/digital-wallet-battle-heats-up-as-visa-and-mastercard-enter-the-game/
- 9. CEB TowerGroup, Andy Schmidt, June 2012
- 10. Smartphones Rapidly Transforming Mobile Banking From New Concept to 'Tablestakes,' According to AlixPartners Study | Mobile banking adoption extpected to approach 50% by 2016, Alix Partners, February 22, 2012, http://www.alixpartners.com/en/MediaCenter/PressReleaseArchive/tabid/821/articleType/ArticleView/articleId/203/Smartphones-Rapidly-Transforming-Mobile-Banking-From-New-Concept-to-Tablestakes-According-to-AlixPartners-Study.aspx
- 11. Our Mobile Planet: United States | Understanding the Mobile Consumer, Google, May 2012





## **About NTT DATA** Consulting

NTT DATA Consulting takes an industry-centric approach to business and technology consulting. We seamlessly integrate business strategies and enabling technology to help clients accelerate business-driven transformation and compete in the digital world. NTT DATA Consulting has the unique ability to create endto-end solutions by tapping the entirety of NTT DATA's global technology and business process capabilities. In financial services, our 1,000-plus business consultants and 4,000 technology experts work with 25 of the leading financial institutions in North America. Visit www.nttdata.com/USconsulting to learn more.

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NTT DATA is a leading business and IT services provider and global innovation partner with 80,000 professionals based in over 40 countries. NTT DATA emphasizes long-term commitment and combines global reach and local intimacy to provide premier professional services, including consulting, digital, managed services, and industry solutions. We're part of NTT Group, one of the world's largest technology services companies, generating more than \$100 billion in annual revenues and partner to 80% of the Fortune 100. Visit www.nttdata.com/americas to learn more.

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