

# LATEST RESEARCH INDICATES A SIGNIFICANT INCREASE IN LEVEL OF U.S. CONSUMER AWARENESS OF CHIP CARDS

## Consumers Want the Enhanced Security of a Chip Card as Soon as Possible

As part of our commitment to help our customers get to market rapidly with the right chip solution for their businesses, MasterCard conducted research in June 2013 and again in March 2014 to gain further understanding of consumer awareness of, and attitudes toward, chip. The following report provides the current insight into consumer awareness, and their needs and preferences toward chip in the U.S.

In the wake of the recent data breaches, and the resulting media coverage, we expected that consumer awareness would be increased. MasterCard committed to conduct this research again in order to monitor consumer attitudes toward chip and will provide updates to this report to help guide our customers in the development of their chip migration strategy.

MasterCard feels strongly that the time for chip in the U.S. is now. We're committed to providing our customers with resources and information to make your implementation simple, fast and efficient.

**63%** OF CONSUMERS SAY THAT THEY WOULD LIKE TO RECEIVE A CHIP CARD FROM THEIR ISSUER IMMEDIATELY OR WITHIN THE NEXT 6 MONTHS.

## ALL CONSUMER SEGMENTS DESIRE A CHIP CARD

Our ongoing research confirms that consumer awareness of chip cards continues to grow.<sup>1</sup> We now see that owning a card itself would positively alter the feelings towards one's financial institution. As financial institutions and merchants consider their strategies around chip cards, several takeaways from the study can help inform the decision-making: One key learning is that issuers must expand their issuance strategy to include all customer segments as soon as possible

**Security is a draw for all consumers.** Whether shopping locally or in another state, region, or country, every consumer wants a safer shopping experience. The enhanced security offered by EMV technology is attractive to consumers who want to reduce the risk that their cards will be used for unauthorized purchases. Emphasizing the safeguards, control, and peace of mind gained through chip card usage will be key to helping consumers accept this new technology.

**International travelers.** International travelers are ahead of the curve in chip awareness, interest, and current ownership and acceptance, and remain a prime candidate for issuers' marketing efforts. In addition to security, messaging to these cardholders might emphasize global acceptance, to counter past difficulties they may have experienced trying to use non-chip cards when traveling. Issuers with a large segment of international travelers should move quickly, as failure to provide access to a chip card is cause for defection for many affluent, well-traveled cardholders.

1. Unless otherwise indicated, all data on consumer attitudes toward chip cards is drawn from Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

### WHAT CONSUMERS FIND MOST INTERESTING ABOUT CHIP CARD TECHNOLOGY

"The sooner I get a card like this the less opportunity there would be to have my identity stolen"

"The huge data breach at Target terrified me.... I read several articles and heard news reports stating that the chip card technology would have essentially prevented this from happening. Why doesn't our country have this?"

"The ability to pay for items without giving the card to someone is appealing"

**Education is needed at multiple contact points.** This latest research continues to confirm that information on EMV technology should be included in a welcome kit from the issuer when a new card is issued. This support should cover everything from telling users how to set up a PIN to how to physically use a chip card at the point of sale. Because chip adoption involves changing behaviors, educational support should be readily available throughout the financial institution's customer contact points—from branch employees, on the website, at ATMs, and elsewhere.

**PIN is the preferred authentication method.** Consumers indicate a preference for PIN because they see it as being more secure. The security of a contactless transaction is less understood or relevant when convenience and speed is what they are focused on. What this highlights for financial institutions is to make this point in the communication of the benefits and features of chip cards that various cardholder verification methods (signature, PIN and No CVM) will be used in a variety of ways as they are today, but a chip card will deliver additional security regardless of the verification method used.

### ENHANCED SECURITY CONTINUES TO BE THE GREATEST APPEAL OF CHIP

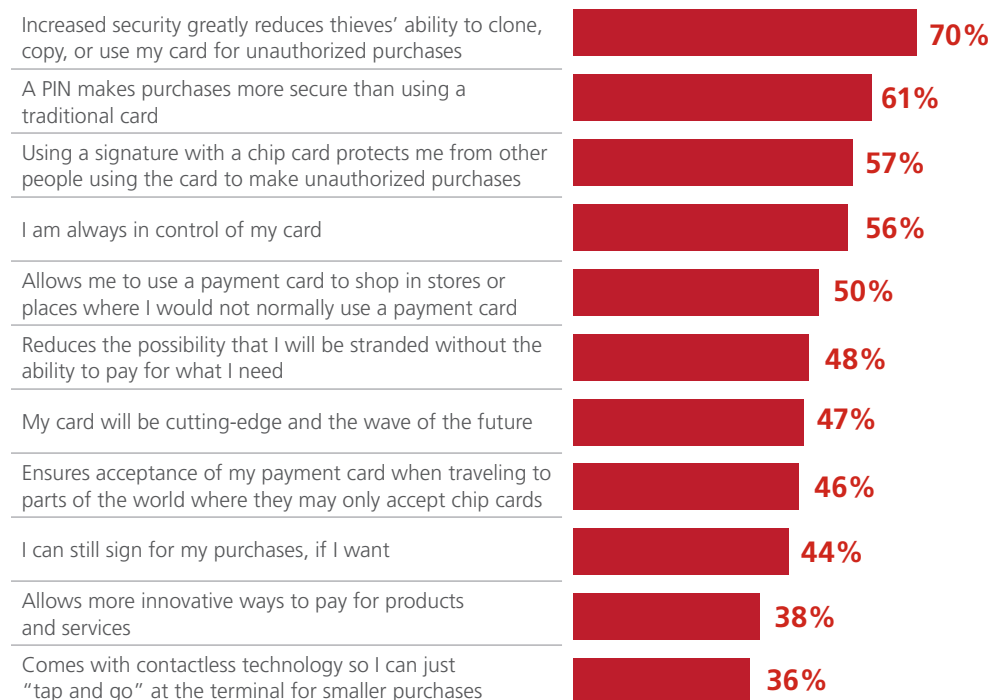
Now more than half of the population (60 percent) in the U.S. is aware of chip card technology, and about the same proportion has some understanding of its benefits (58 percent). But without knowing more about EMV chip cards, consumers are focused on the basic features rather than the innovative new capabilities a chip card might offer. Consumers view the biggest benefits to be:

- Safety and security
- Prevention of potential for fraud
- Having control over the card at all times

Of these, enhanced security—preventing someone from being able to use the card—is the most compelling benefit. But the use of PIN to secure the transaction is also highly rated. Overall, though, consumers find nothing to dislike about chip cards.

### CONSUMERS ARE DRAWN TO THE ENHANCED SECURITY OF CHIP

#### FEATURES AND BENEFITS OFFERED BY CHIP CARDS OF INTEREST TO ALL CONSUMERS



**VERY / EXTREMELY INTERESTING**

Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

On the other hand, when consumers were prompted to identify their potential areas of concern about chip cards, they listed these below, although their level of concern has diminished from our previous research:

- Access to personal data if the card were lost or stolen
- The ability of someone to use the chip fraudulently for online shopping
- Acceptance of the card
- Potential for technology failure
- Security of the PIN

CONSUMERS DO HAVE SOME CONCERNS ABOUT SECURITY

AREAS OF CONCERN ABOUT CHIP CARDS BY ALL CONSUMERS



VERY / EXTREMELY CONCERNED

Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

It's understandable how consumers can have concerns about a new technology. After reading a short description of chip cards and their potential benefits and features, 85 percent of all consumers say they are interested in the technology. For successful implementation of chip, issuers need to address consumers' potential concerns and explain that chip enhances the level of security over the magnetic stripe technology they use today.

Consumer attitudes toward other capabilities offered by chip cards are focused, again, on security, as well as speed and convenience. Consumers surveyed said:

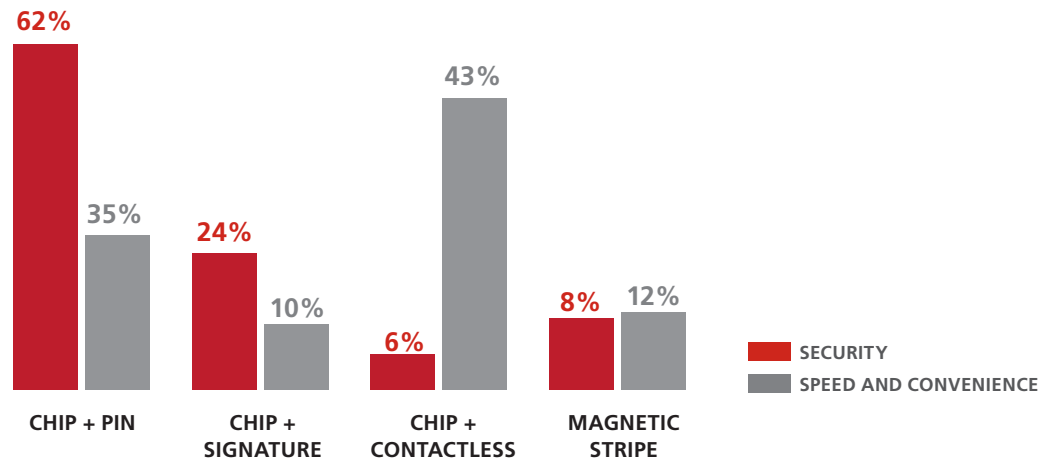
- They need to hear how an EMV card differs from a traditional card and how the security works
- A chip card with a signature is considered to be the least speedy
- A chip card with a PIN is considered to be the most secure
- Where can this card be used and are there any fees associated with the card

OVERALL, 15 PERCENT OF CONSUMERS INDICATED THAT THEY WOULD CHANGE ISSUERS IF THEY WERE NOT OFFERED A CHIP CARD BY THEIR CURRENT ISSUER.

**“The added layers of security for improved identity protection” is one of the most appealing aspects of chip.**

## CONSUMERS VIEW CHIP AND PIN AS MOST SECURE, CHIP AND CONTACTLESS AS FASTEST AND MOST CONVENIENT

PERCENT OF ALL CONSUMERS' PERCEPTIONS OF SECURITY, SPEED, AND CONVENIENCE OF CARD TYPES



Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

This research confirms that cardholders understand PIN provides another layer of security compared to signature and that they would be willing to use PIN in conjunction with their credit cards for additional security.

Overall, 15 percent of consumers indicated that they would change issuers if they were not offered a chip card by their current issuer. This is a significant increase on last year's 9 percent.

Further, when consumers understand the speed and convenience of “tapping” to make purchases, and they understand that doing so is as secure as any other method, they may come to prefer contactless at the point of sale for most everyday purchases.

Using MasterCard insights, data, and tools, issuers can build their own customized business case for each segment of their business. The card value proposition, as expected, varies with different consumer segments. International travelers and technophiles, for example, are likely to be early adopters of chip cards, and among debit cardholders, the mass affluent and high affluent likewise are much more interested in chip cards. But beyond that, other consumer needs and preferences should be considered as you implement chip. For example, MasterCard cardholders who own either credit or debit cards with contactless technology are among the most valuable consumer segments in the U.S.<sup>3</sup> Issuers can rely on the expert consulting services of MasterCard Advisors to help them develop more detailed and specific segmentation strategies.

2. Javelin Strategy & Research, Battle for Control of the Mobile Wallet, September 2012.

3. MasterCard used several rigorous analytical approaches to examine the influence of MasterCard contactless on MasterCard consumer accounts in FY2012 and FY2011.

## CONSUMERS EXPECT CHIP CARDS TO BE WIDELY ACCEPTED

The vast majority of consumers we surveyed still expect all types of stores to accept cards using chip technology. Overall far more consumers now say that their impressions of businesses accepting chip cards would be more favorable—42 percent in 2014, up significantly from 30 percent a year ago.

### CONSUMERS EXPECT THEIR CHIP CARDS WILL BE WIDELY ACCEPTED

#### CONSUMERS EXPECT TO USE THEIR CHIP CARDS TO SHOP AT STORES IN THESE RETAIL CATEGORIES

##### TYPES OF STORES

Supermarkets/Grocery Stores	84%
Mass Merchandising Stores	83%
Gas Stations	82%
Drug Stores	82%
Department Stores	79%
Food and Beverage Establishments	79%
Accommodation Establishments	76%
Specialty Electronics Stores	75%

Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

## DEBIT CARDHOLDERS SIGNAL POTENTIAL FOR INCREASED UTILIZATION

Research by MasterCard on debit cardholders in 2013<sup>4</sup> and again in 2014 continues to reveal favorable attitudes toward chip cards, with a majority being very receptive to receiving such a card. Our 2013 research found that 77 percent of highly affluent debit cardholders (annual household income greater than \$125K) were the most receptive, compared to 67 percent of mass affluent debit cardholders (HHI \$75K–\$125K) and 59 percent of mass market debit cardholders (HHI less than \$75K). Among debit cardholders surveyed in 2014 who favor a chip-enabled card:

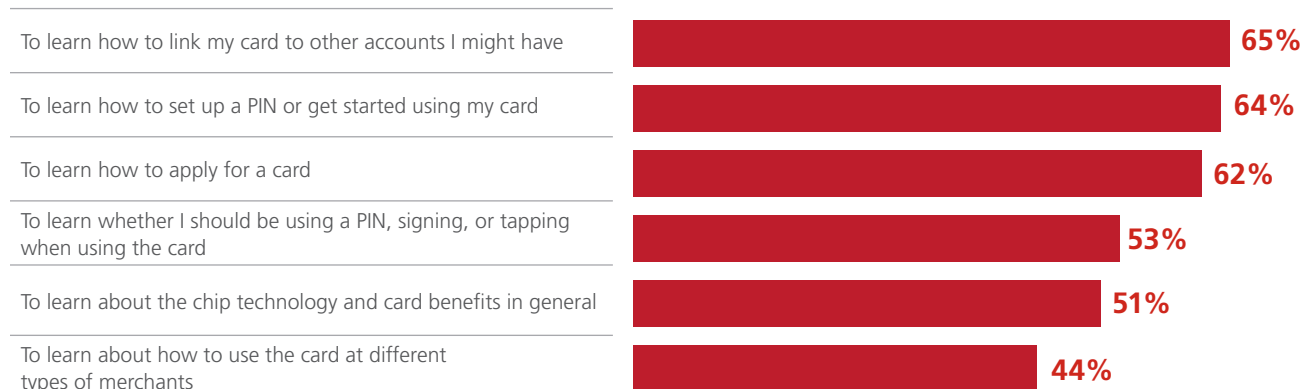
- 55% of debit cardholders are already aware of EMV
- 40% indicated they would like to receive a chip card immediately and another 17% within the next 6 months
- There was strong interest (80 percent) in seeing debit and credit functionality on one chip card among those who like the concept of a combo card

### CONSUMERS CONTINUE TO LOOK TO THEIR FINANCIAL INSTITUTION FOR GUIDANCE

Consumers look to their financial institution for education about the features and use of a chip card. Nearly two-thirds of all consumers surveyed (64 percent) want their financial institution to help them get started using their chip card and its features.

#### CONSUMERS EXPECT FINANCIAL INSTITUTION TO EDUCATE THEM

PERCENT OF ALL CONSUMERS WHO THINK FINANCIAL INSTITUTION SHOULD TAKE RESPONSIBILITY FOR EDUCATING CARD USERS ABOUT CHIP CARDS/SMART CARDS

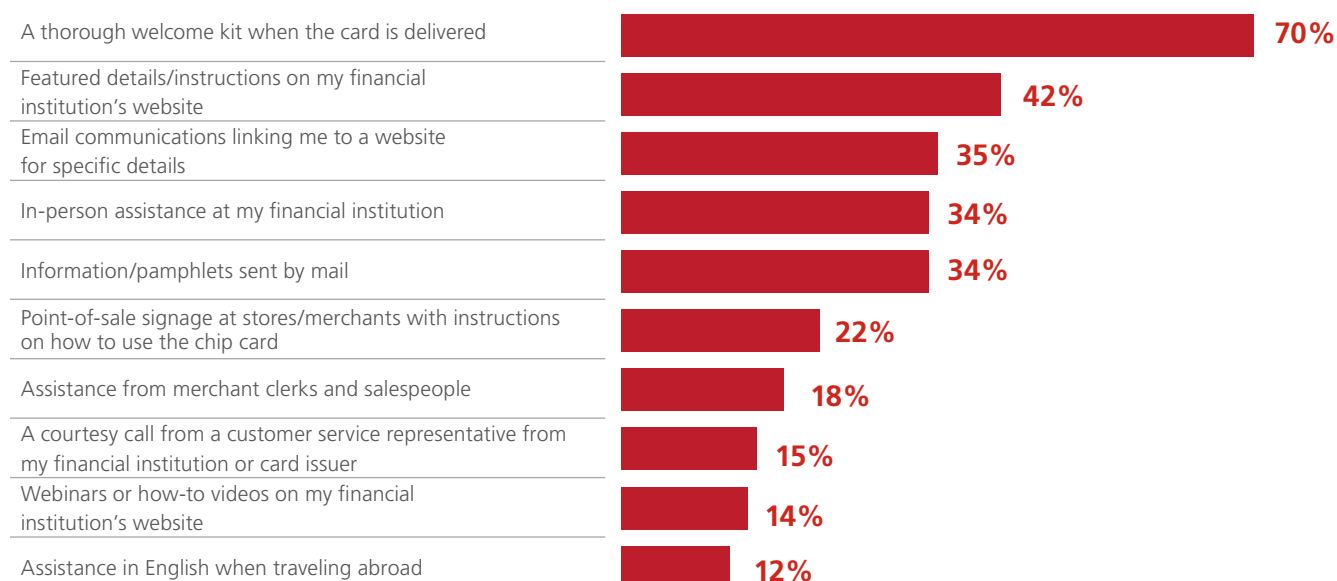


Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

Even when it comes to learning how to use their card at other types of merchants, nearly half (44 percent) of consumers see their financial institution as their primary source of information, compared to only 31 percent who expect such education to come from merchants. They prefer to learn about these new cards in a “welcome kit” provided by their financial institution. Nevertheless, it is essential that merchants train their employees and reinforce the message at the point of sale.

#### A WELCOME KIT WOULD BE MOST HELPFUL FOR CONSUMERS

PERCENT OF ALL CONSUMERS WHO WOULD FIND THE FOLLOWING TYPES OF COMMUNICATIONS MOST HELPFUL



Source: Harris Interactive, EMV Chip Card Research, June 2013, commissioned by MasterCard.

## TRAVELERS HAVE BEEN THE PRIMARY TARGET SEGMENT FOR IMMEDIATE CHIP CARD ISSUANCE

MasterCard research showed that international travelers far outpaced other groups in awareness, understanding, and acceptance of chip technology.

- 86 percent of international travelers were aware of EMV technology, compared with 60 percent across all groups and 61 percent among young professionals
- 71 percent understood the benefits associated with a chip card, compared with 52 percent of the overall population
- 20 percent of international travelers already own a chip card—compared with 3 percent of consumers overall—up from 15 percent last year

The enhanced security features of chip information is important to 42 percent of international travelers—up considerably since last year (25 percent)—compared with 33 percent of nontravelers. 74 percent agree that chip ensures acceptance of their card when traveling to parts of the world where they may only accept chip cards, up from 66 percent last year.

## TRAVELERS KNOW FROM EXPERIENCE

U.S.-based international travelers have seen firsthand the benefits of owning a chip card for use in markets where EMV technology is mature.

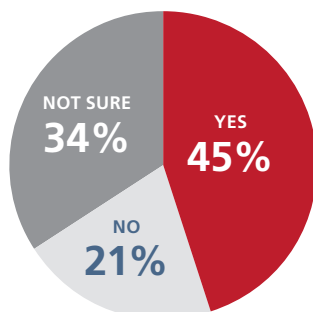
- 81 percent of international travelers attempted to use a payment card when traveling outside the U.S.
- International travelers actually experienced fewer difficulties using their card in 2014 (18 percent vs. 26 percent in 2013), presumably because a higher proportion now own chip cards
- When difficulties occurred, nearly half (43 percent) were because the payment card did not have a chip
- As a result of such problems, 44 percent of cardholders said they would use the card less often, use an alternate card, or cancel their card altogether

The message is clear: if travelers are not given access to chip cards, they are likely to lose confidence in their financial institution. Worse, they may take action: 27 percent of international travelers said they would switch financial institutions due to lack of access, compared with 15 percent of the general population.

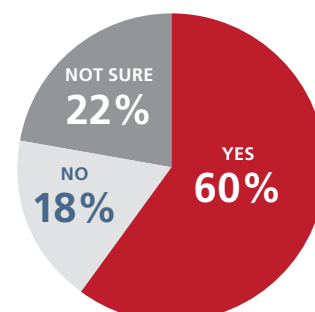
## AFFLUENT INTERNATIONAL TRAVELERS MORE WILLING TO WITHDRAW CASH OVERSEAS IF DEBIT CARD IS CHIP ENABLED

PERCENT OF INTERNATIONAL TRAVELERS WHO WOULD USE THEIR CARD MORE TO GET CASH WHILE TRAVELING INTERNATIONALLY IF THEIR DEBIT CARD WAS ENHANCED WITH A CHIP

**MASS AFFLUENT**  
(HH ANNUAL INCOME \$70K–\$125K)



**HIGHLY AFFLUENT**  
(HH ANNUAL INCOME >\$125K)



## GAP IN EMV KNOWLEDGE AMONG DEBIT CARDHOLDERS COULD HURT ISSUERS

MasterCard research on debit cardholders found that one-third of debit cardholders have traveled or are making plans to travel outside the U.S. Among affluent debit cardholders, the percentage is much higher: 51 percent of mass affluent and 75 percent of high affluent debit cardholders travel or plan to travel outside the U.S. Lack of EMV awareness among these cardholders could spell trouble for the financial institutions that issue their cards.

- More than two-thirds of respondents were unaware of the need to notify their debit card issuers prior to traveling outside the U.S.
- Fewer than one in five debit cardholders were aware of the potential for merchants outside the U.S. to decline non-chip-enabled cards

It's not surprising then that more than, one-quarter of debit cardholders reported encountering difficulties when using their cards outside the U.S., with half having chip-related issues. Such problems may lead to a loss of confidence with their issuer and its services.

### DEBIT CARDHOLDERS WHO HAVE EXPERIENCED PROBLEMS WITH THEIR CARDS ABROAD MAY LOSE CONFIDENCE IN THEIR ISSUER

**PERCENT OF DEBIT CARDHOLDERS WHO HAD THE FOLLOWING FEELINGS ABOUT THEIR FINANCIAL INSTITUTION IF EXPERIENCING DIFFICULTY WITH THEIR DEBIT CARD WHEN TRAVELING INTERNATIONALLY**

	All Debit Users	Heavy Debit Users*
I was very disappointed with my financial institutions	42%	53%
It would make me use my debit card less often during the trip	42%	43%
It would make me use my debit card less often when I returned home	32%	57%
It would make me less inclined to buy additional services from that financial institution	31%	43%
I was surprised that my financial institutions didn't provide me with the best payment technology available	23%	33%
All of the above	3%	3%

\*Heavy Debit User = monthly debit purchases of \$801+.  
Source: MasterCard, Debit EMV Study, Q1 2013.



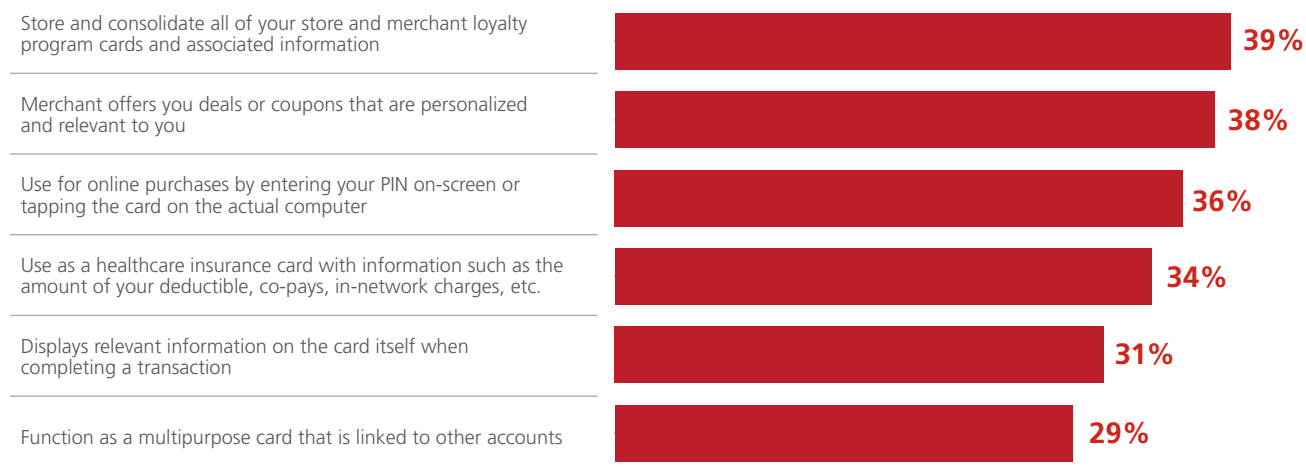
### BRIGHT FUTURE: CONSUMERS ARE DRAWN TO THE POSSIBILITIES OF CHIP CARDS

MasterCard research has found that consumers are interested in the capabilities of EMV technology and its ramifications for key aspects of their lives, from online purchases to health insurance.

As for future, innovative features that chip cards could deliver, consumers ranked these highest:

#### FUTURE CHIP CARD FEATURES OF INTEREST TO CONSUMERS

##### PERCENT OF ALL CONSUMERS WHO ARE VERY/EXTREMELY INTERESTED IN THESE CHIP CARD FEATURES



Source: Harris Interactive, EMV Chip Card Research, March 2014, commissioned by MasterCard.

Up to 51 percent of consumers surveyed see chip cards as “cutting-edge and the wave of the future,” and (38 percent) believe it will allow them more innovative ways to pay for products and services and 36 percent are interested in the speed and convenience of the “tap and go” features of a contactless chip card.

As issuers and merchants seek to further consumer adoption of chip technology, MasterCard stands ready to work with these institutions to help refine their chip strategies, determine the optimal construct to meet their needs and those of their customers, and develop communications to usher in the next generation of payments.

#### Your Partner for the Next Generation of Payments

To learn more about the benefits of implementing EMV chip technology with MasterCard as your partner, contact your MasterCard relationship manager. You can also learn more about EMV from our Website at [www.mastercard.us/mchip-emv.html](http://www.mastercard.us/mchip-emv.html)