

2016 Global Consumer Card Fraud: Where Card Fraud Is Coming From

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Ben Knieff

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IMPACT POINTS

- This Impact Report, based on a Q2 2016 ACI Worldwide study of 6,035 consumers in 20 countries, provides an overview of respondents' attitudes toward various types of card fraud and discusses the actions they may take subsequent to a fraud experience. Where applicable, it also compares these results with those from similar ACI surveys in 2012 and 2014.
- Of all cardholders—debit, credit, and prepaid—30% have experienced card fraud in the past five years, a significant portion of cardholders.
- After experiencing fraud, 40% of consumers use the replacement card less, at least in some situations, than they used that card previously. This back-of-wallet behavior is lost revenue for the financial institution.
- In 2016, 17% of debit and credit card holders cite having experienced fraud multiple times during the past five years, compared to 13% in 2014.
- Consumers who are dissatisfied with how they are treated by their financial institution after experiencing fraud sometimes change providers, resulting in a global attrition rate of 20%. This highlights the importance of aftercare following a fraud experience.
- Fourteen percent of global consumers lack confidence that their financial institution can protect them against fraud. While this varies from region to region, it demonstrates some level of misunderstanding about what steps institutions take.
- Fifty-four percent of global consumers exhibit at least one risky behavior, which puts them at higher risk of financial fraud. Education about risky behaviors and what consumers can do can help reduce fraud rates is sorely needed—banks must learn how to help consumers help themselves.

INTRODUCTION

With 2,260 confirmed data breaches¹ in 2015 alone and over 4 billion data records stolen since 2013,² the security of the financial services value chain is a critical topic within the industry and among consumers. At this point in time, the assumption should be that almost all users' credentials and/or card information has been compromised. The underground economy for user information has matured so much that it is indistinguishable from a legitimate economy. There are various service providers, service-level agreements, and very efficient supply-demand-based pricing. It no longer requires sophisticated computer science skills to perpetrate fraud, as most everything required can be acquired off the shelf from the underground market.

This Impact Report, the first in a two-part series on how financial fraud affects consumers, will look at consumer fraud experiences, perceptions of trust in financial institutions, and risky consumer behaviors.³ The report looks at 20 different countries from the Americas; Europe, the Middle East, and Africa (EMEA); and the Asia-Pacific. There are some broad trends among these regions and the countries within them, and there are also some interesting outliers.

METHODOLOGY

ACI Worldwide, a global leader in electronic payments for financial institutions, retailers, and processors, conducted online quantitative market research in March 2016 and surveyed 6,035 consumers. The study was conducted in a total of 20 countries in the following regions:

- **The Americas (North and South America):** Brazil, Canada, Mexico, and the United States
- **EMEA:** France, Germany, Hungary, Italy, the Netherlands, South Africa, Spain, Sweden, the United Arab Emirates (UAE), and the United Kingdom
- **The Asia-Pacific:** Australia, India, Indonesia, New Zealand, Singapore, and Thailand

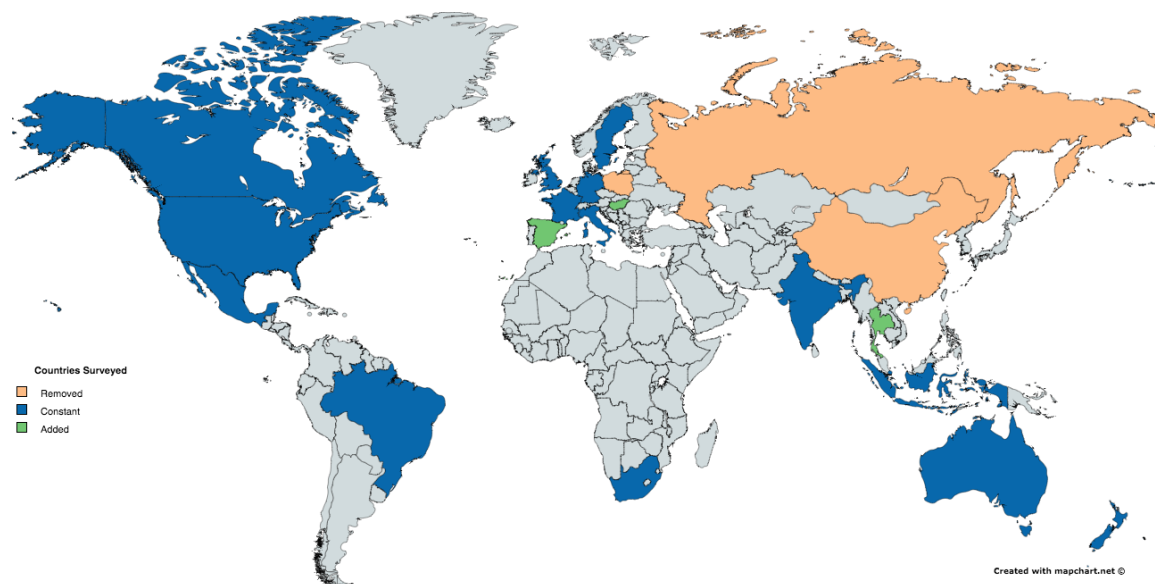
China, Russia, and Poland were removed compared to 2014, and Spain, Thailand, and Hungary were added for 2016 (Figure 1).

There were some changes in methodology compared to the 2014 report that leads to some differences when comparing the two reports. The 2014 data was reanalyzed in 2016 to match the same methodology, so comparisons are apples-to-apples within the 2016 report, but not between the 2014 and 2016 reports.

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1. Verizon, "2016 Data Breach Investigations Report," http://www.verizonenterprise.com/resources/reports/rp_DBIR_2016_Report_en_xg.pdf, accessed May 22, 2016.
 2. "Breach Level Index," <http://breachlevelindex.com/#sthash.UU29yuUP.dpbs>, accessed June 24, 2016.
 3. See Aite Group's report *Global Consumers: Losing Confidence in the Battle Against Fraud*, June 2014.

Specifically, in 2016 the incidence of fraud was calculated based the population that actually owned a type of card (credit, debit, prepaid), whereas in 2014 the calculation was based on the entire population, irrespective of whether all individuals owned the particular type of card.

Figure 1: Countries Surveyed



Source: Aite Group research

In total, 6,159 consumers were included in the research: approximately 300 consumers, divided equally between men and women, participated in each of the 20 countries. Of the total, 6,035 own one or more type of payment card—credit card, debit card, prepaid card. This is the fourth time that ACI has fielded this type of survey, and comparative results are included from 2012 and 2014.

In each country, the data have a margin of error of approximately 5 points. Statistical tests of significance, where shown, were conducted at the 95% level of confidence.

GLOBAL CARD FRAUD SNAPSHOT

Card fraud includes unauthorized activity on the three main types of payment cards—debit, credit, and prepaid. Card fraud can come from many different angles, including data breaches, lost/stolen cards, social engineering, phishing attacks, and often a combination of these. Fraud rates around the world vary greatly in different regions and countries.

Compared to the study fielded in Q1 2014, the rates of fraud among various countries have moved, and fraud rates are increasing in many countries (Figure 2). In the 2016 study, Mexico has the highest rate of credit card fraud at 51%, followed by the United States at 46%, and Brazil at 46% (Figure 3).

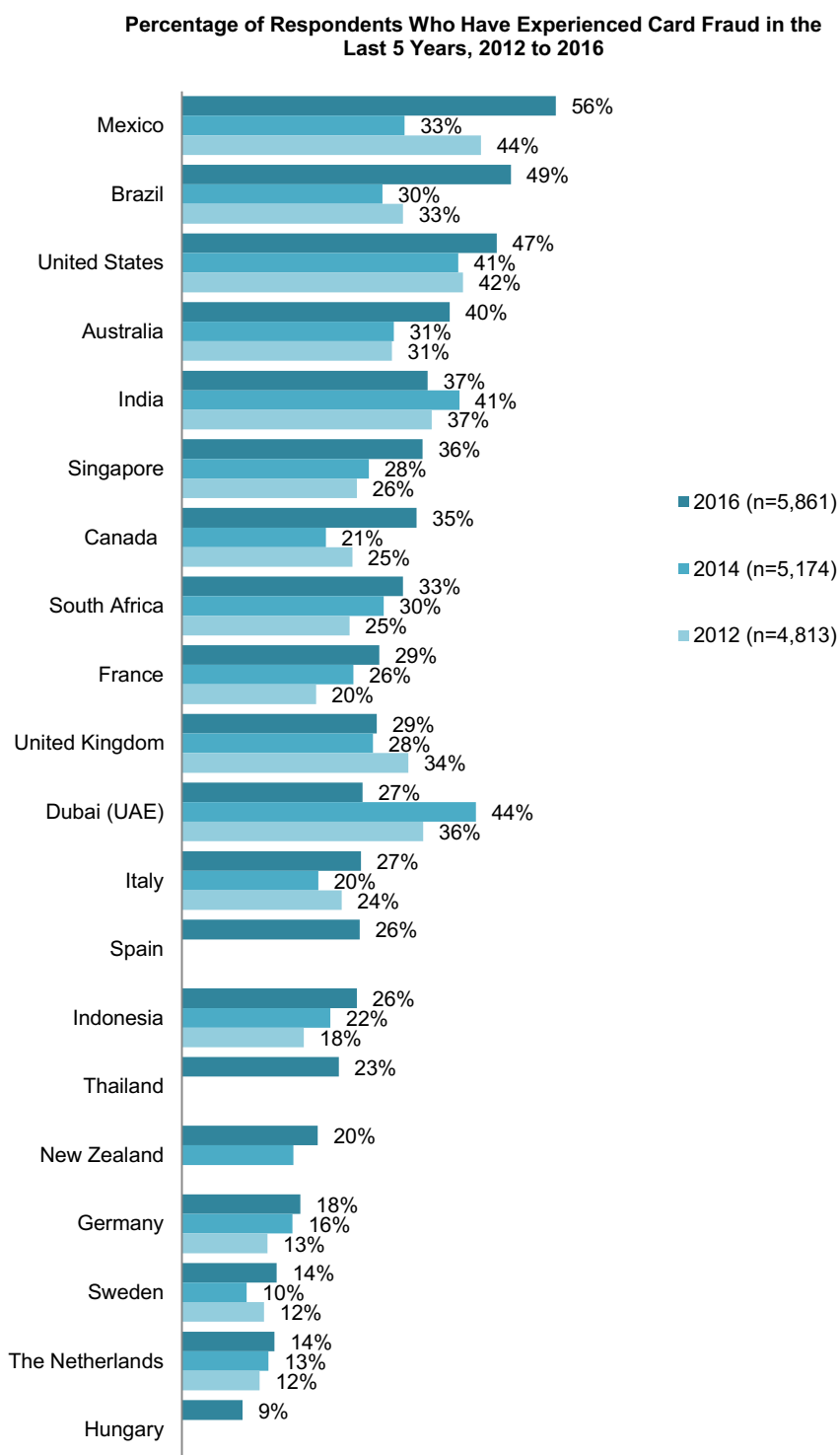
Mexico has experienced a rocky road in implementing EMV, with challenges both on the issuer and merchant sides of the equation. Bad actors take advantage of confusion and implementation weaknesses, which drives this high fraud rate.

In the U.S., fraud rates are driven by the fact that it is a wealthy economy and that card payments are the go-to payment method for most consumers. Combined with the prevalence of online shopping and slow adoption of EMV, the U.S. is still a gold mine for criminals. Based on other countries' experience with EMV adoption, it is expected that card-not-present (CNP) fraud will increase as the U.S. continues to migrate to EMV.

Brazil has its own challenges; with a faltering economy and a fragmented card payments environment, it is an attractive market for criminals. Brazil is also a large market for online shopping, but many e-commerce firms do not have strong controls for fraud prevention. There are many opportunities to improve online security, such as 3-D Secure 2.0 and active real-time transaction monitoring that could help reduce fraud rates in Brazil's market.

Looking toward the future, mobile wallets, new payments types that closely resemble card payments or even use the card network rails, and mobile payment schemes outside the networks (such as M-Pesa in Kenya) will be a higher priority. While there are numerous new payment types, particularly in developing economies, cards and card-like payments will continue to dominate consumer payments in most geographies for quite some time.

Figure 2: Current Total Card Fraud Rates by Country



Source: Aite Group, ACI Worldwide studies of consumers in 20 countries, Q2 2016 and Q1 2014, and in 17 countries, Q3 2012

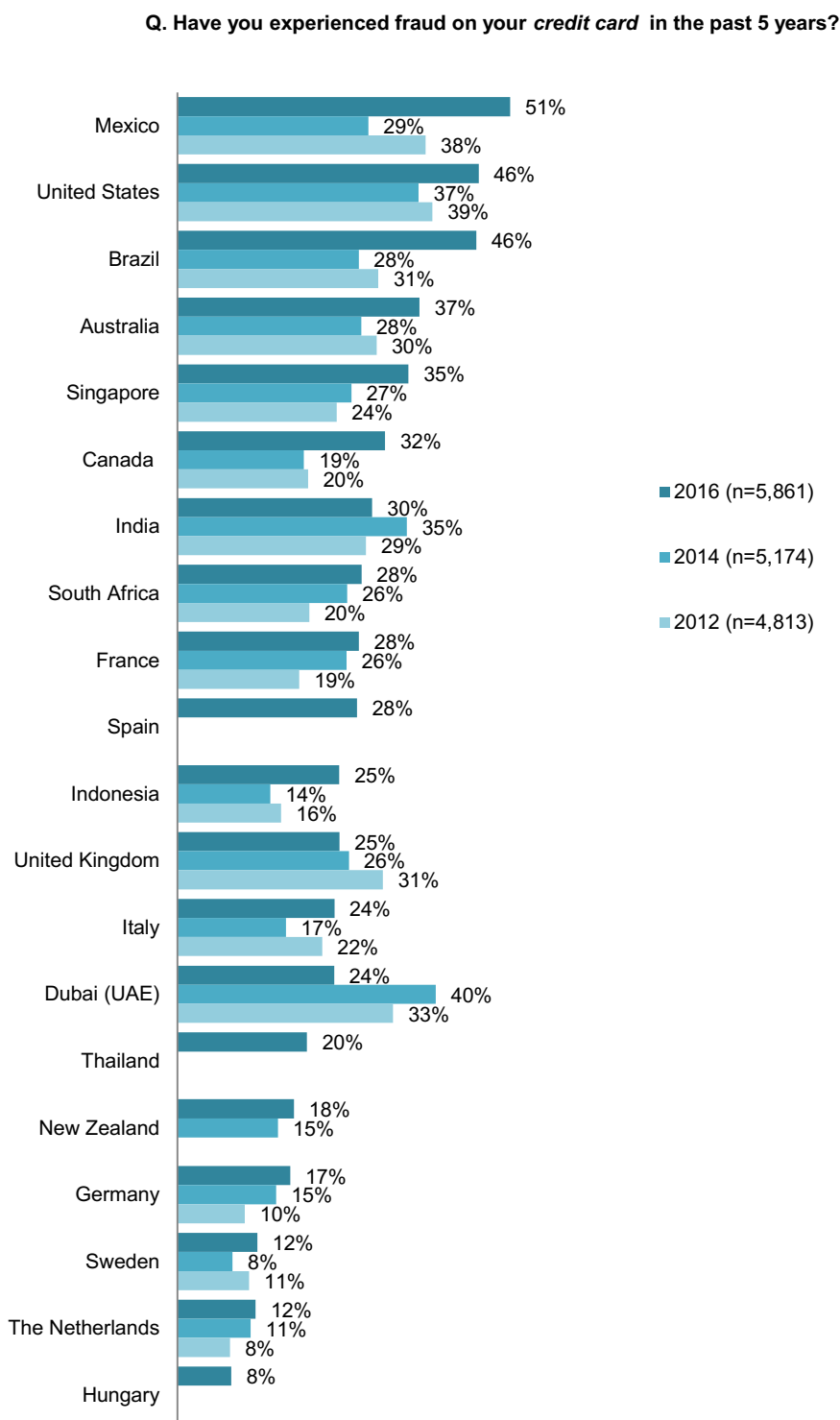
Credit card fraud rates in the 2016 study show that consumers around the world still experience card fraud, despite the implementation of fraud analytics solutions and EMV in many countries. There is no shortage of ways criminals can take advantage of card data to perpetrate fraud.

The U.S. lags in EMV implementation compared to most of the rest of the world, though there is some progress.⁴ So long as there are countries that do not accept chip cards fully, there will still be cards with magnetic stripes, for travelers if for nothing else. This means skimming and data breaches will continue to be a challenge, and CNP fraud will continue to be a challenge irrespective of EMV migrations, barring some unforeseen innovations.

In some countries, there are indicators that not only does CNP fraud increase following EMV rollout but also application fraud. While application fraud has existed since banks began opening accounts, it is even easier now due to the breadth of personal information available from breaches as well as the huge amounts of information published by consumers on sites like Facebook, LinkedIn, Instagram, and many others. This wealth of data has effectively rendered knowledge-based authentication (KBA) useless for authentication and makes application fraud so much easier.

4. See Aite Group's report *EMV: Issuance Trajectory and Impact on Account Takeover and CNP*, May 2016.

Figure 3: Current Credit Card Fraud Rates



Source: Aite Group, ACI Worldwide studies of consumers in 20 countries, Q2 2016 and Q1 2014, and in 17 countries, Q3 2012

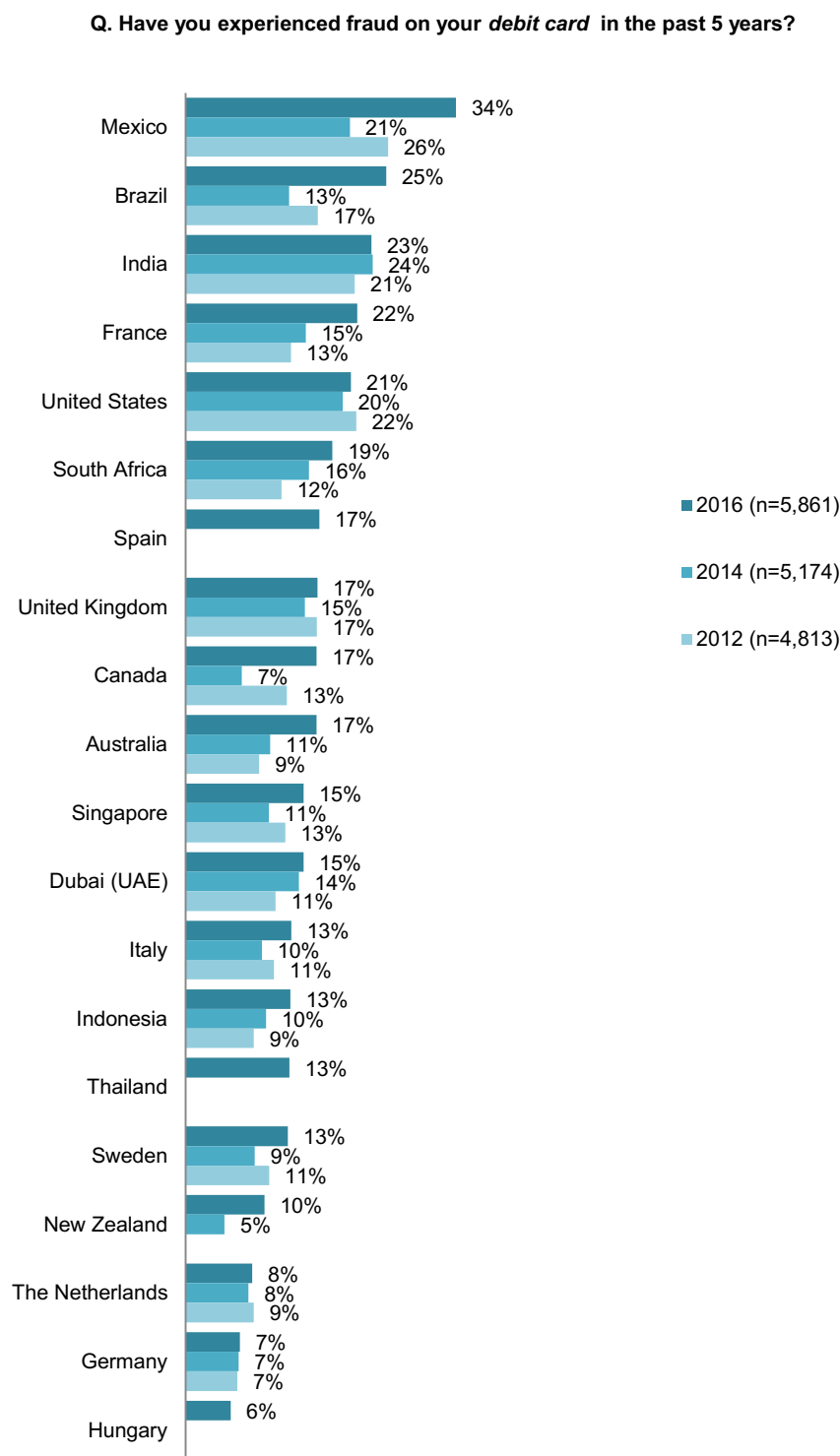
The implementation of EMV will also curtail counterfeit fraud on debit cards. Issuers are generally focused on issuing chip cards to their most active users as well as on regular expiry.

Smaller institutions often need to get in a queue with their card processors to issue chip cards. Some institutions got in this queue early, but for those toward the back of the queue, it may take some time, and the institution will have to carry the liability when cards are used at chip-enabled point-of-sale (POS) terminals.

While some of the countries surveyed have changed, it is clear that Mexico, India, Brazil, and the U.S. generally have some of the highest card fraud rates. In the 2016 study, cardholders in Mexico experience the highest rate of debit card fraud at 34%, followed by Brazil (25%), India (23%), and France (22%). The U.S. closely trails France at 21%. In the 2014 study, cardholders in China experienced the highest rate of debit card fraud at 30%, followed by India (24%), Mexico (21%), and the United States (20%; Figure 4). Mexico, Brazil, and France experienced rather dramatic increases in debit card fraud in 2016 compared to 2014.

It is notable that the countries with higher debit card usage rates relative to credit card usage rates (e.g., Sweden, the Netherlands, Germany) also have relatively low debit card fraud rates, in part because of the extensive and effective implementation of EMV, and alternative payment options (e.g., ELV in Germany, Proton, and other electronic purse options).

Figure 4: Current Debit Card Fraud Rates

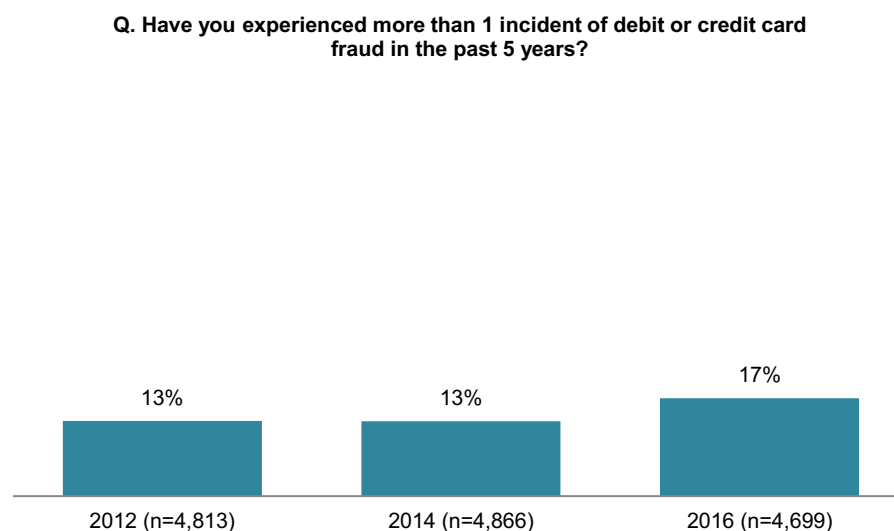


Source: Aite Group, ACI Worldwide studies of consumers in 20 countries, Q2 2016 and Q1 2014; and in 17 countries, Q3 2012

A rather large number of consumers experienced debit and/or credit card fraud on more than one occasion in the last five years. Seventeen percent of global consumers experienced debit or

credit card fraud more than once in the past five years, a statistically significant increase from 2014 and 2012 surveys (Figure 5). The wealth of stolen payment details available through data breaches and phishing scams means everyone is a target and can experience multiple incidences of fraud with different cards. As criminals try to maximize their take from a single card, fraud can also occur multiple times for a single card.

Figure 5: Multiple Fraud Incidents

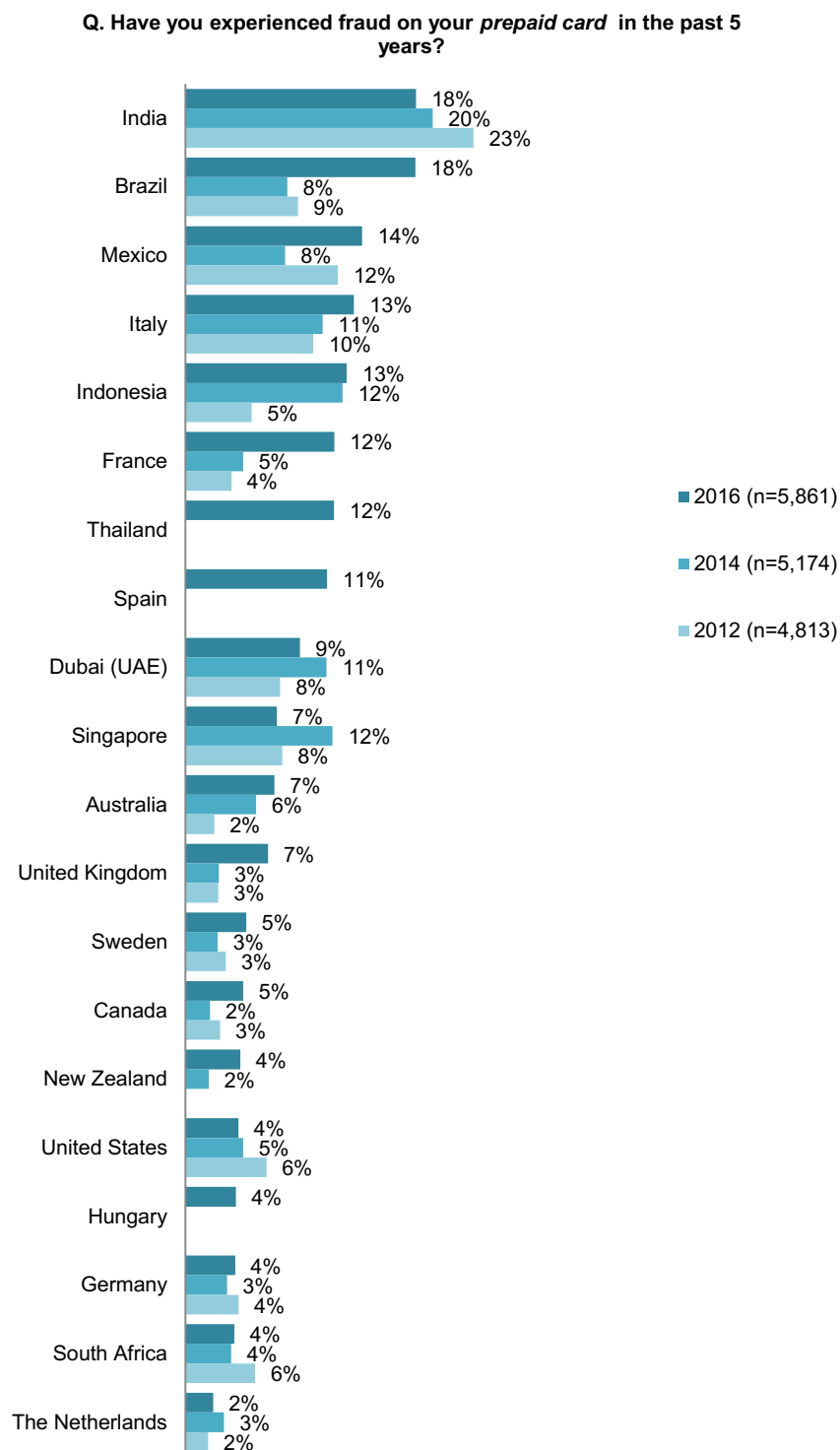


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Prepaid cards are relatively new compared to credit and debit but are increasingly being used for public benefits, payroll, and as an alternative to a traditional checking or current account. Prepaid card usage and fraud rates vary widely across the countries represented. The highest rate of fraud on prepaid cards is experienced by consumers in India and Brazil at 18%, followed by Mexico at 14%, then Italy and Indonesia at 13%. France, Thailand, and Spain are equally close and within the margin for error. Consumers in many other countries experience low fraud rates (Figure 6).

It is likely that overall usage rates correlate to these numbers. For example, in India many government employees are paid via reloadable prepaid cards, and many government benefits are distributed through government prepaid cards. Another potential factor in the lower fraud rates is that few prepaid cards are used for a very long time or carry high balances; thus, they are not only a moving target for fraudsters but also a lower-value one. Consumers may also not differentiate between open- and closed-loop cards, which have varying levels of value to criminals.

Figure 6: Current Prepaid Card Fraud Rates



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016 and Q1 2014; and 17 countries in Q3 2012

FRAUD IN THE AMERICAS

This section of the report examines consumer behaviors related to financial fraud in the Americas. There is a lot of variety in the Americas; the U.S. and Canada have quite mature card payments environments, while markets in countries such as Mexico and Brazil are more nascent. This is reflected in the fraud rates: The U.S. and Canada have mature controls, but other geographies, despite leveraging EMV, face high rates of fraud.

RISKY BEHAVIOR

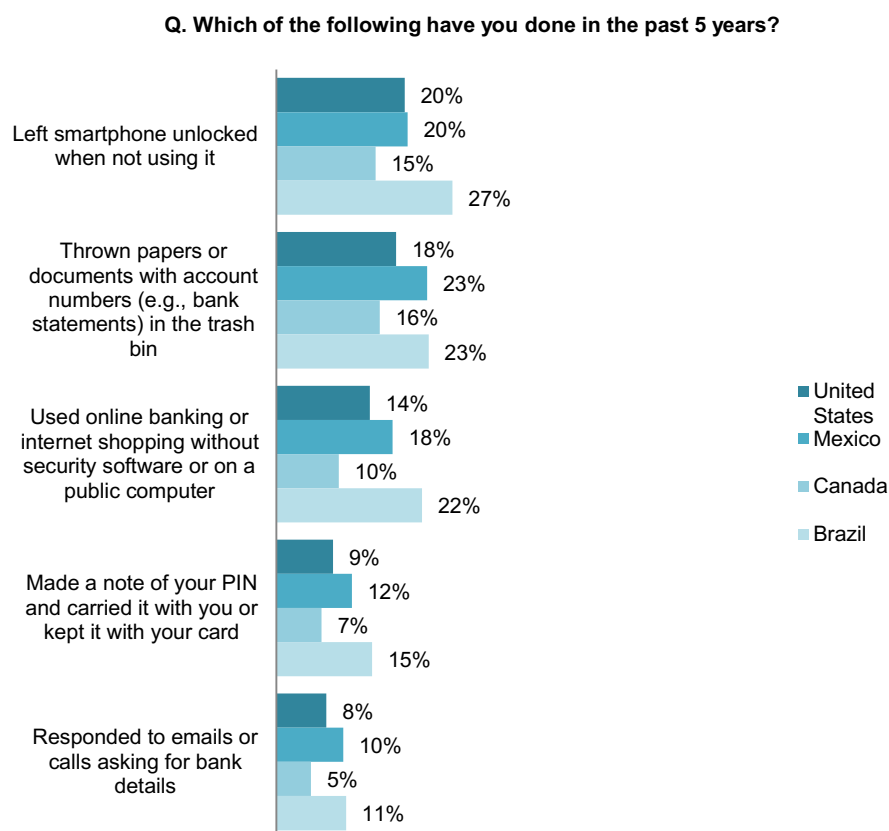
Consumer behavior has some impact on whether someone becomes a victim. In cases such as a data breach or skimming, the consumer has little control, but consumers can help to prevent phishing, lost/stolen cards, and friendly fraud. Risky behaviors such as keeping one's PIN with the card have a direct correlation to experiencing fraud. It is important to educate customers, but financial institutions need to avoid causing mental fatigue that will lead to users ignoring those messages.

There is always a balance between usability and security, and if security becomes too onerous for the users, they find a way around it (such as writing down PINs or passwords). Too high of a barrier actually motivates users to engage in risky behaviors. More firms are looking for ways to improve customer experience and security at the same time. Passive biometrics and more intelligent monitoring tools are two examples of techniques used to improve security while avoiding negative user impact. As mobile banking and card payments grow in adoption, there are new risks with users securing, or failing to secure, their devices.

The survey questioned consumers on whether they had engaged in five different risky behaviors in the last five years (Figure 7). There are certainly additional risky behaviors, and there will be new ones as technology evolves.

Consumers in Brazil exhibit the most risky behaviors. Over a quarter (27%) state they leave smartphones unlocked when not in use, and 23% leave personal information in the trash bin. Mexico is not far behind in the range of risky behaviors. There is a strong contrast between the fraud rates and behaviors in the U.S. and Canada compared to Brazil and Mexico; U.S. and Canadian consumers exhibit more caution than their southern counterparts (Figure 7).

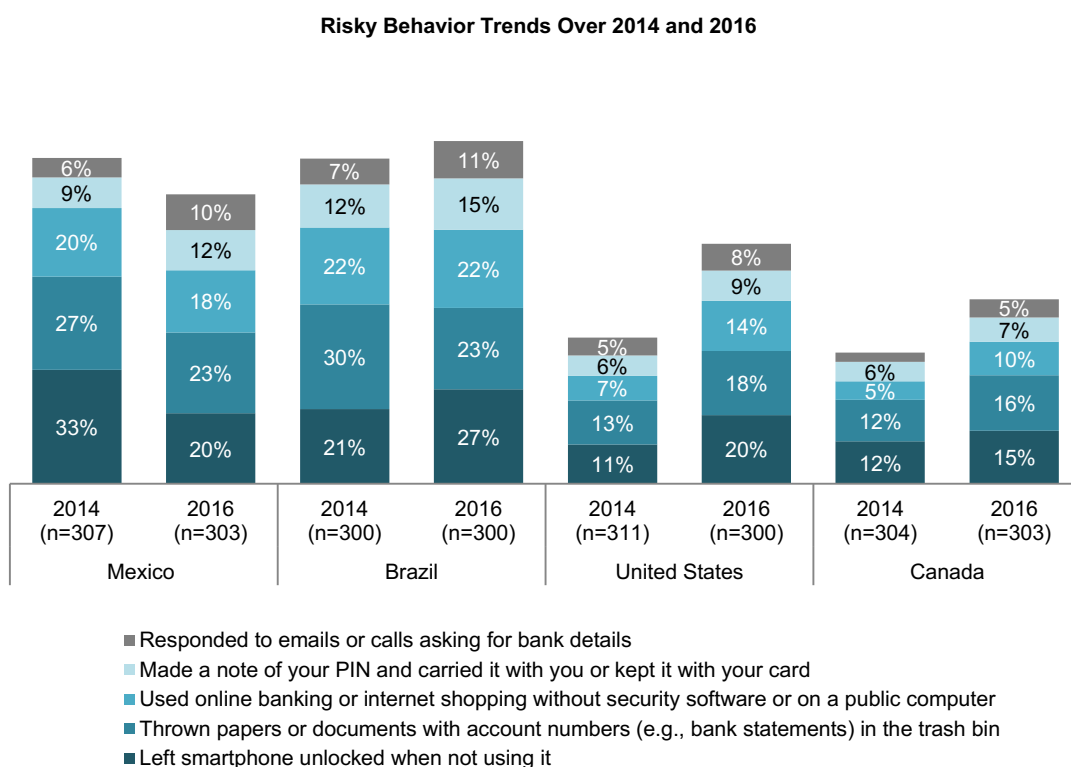
Figure 7: Risky Behavior in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

For card fraud to decrease, consumers must play a role, and limiting risky behavior is one way consumers can help protect themselves. Risky behaviors are generally rising, much of which can be attributed to the increase in unsafe smartphone usage (Figure 8). Financial institutions can benefit by further educating customers on best practices to keep them secure. Additional education can be a valuable customer touchpoint and can support a financial institution's brand as a trustworthy partner.

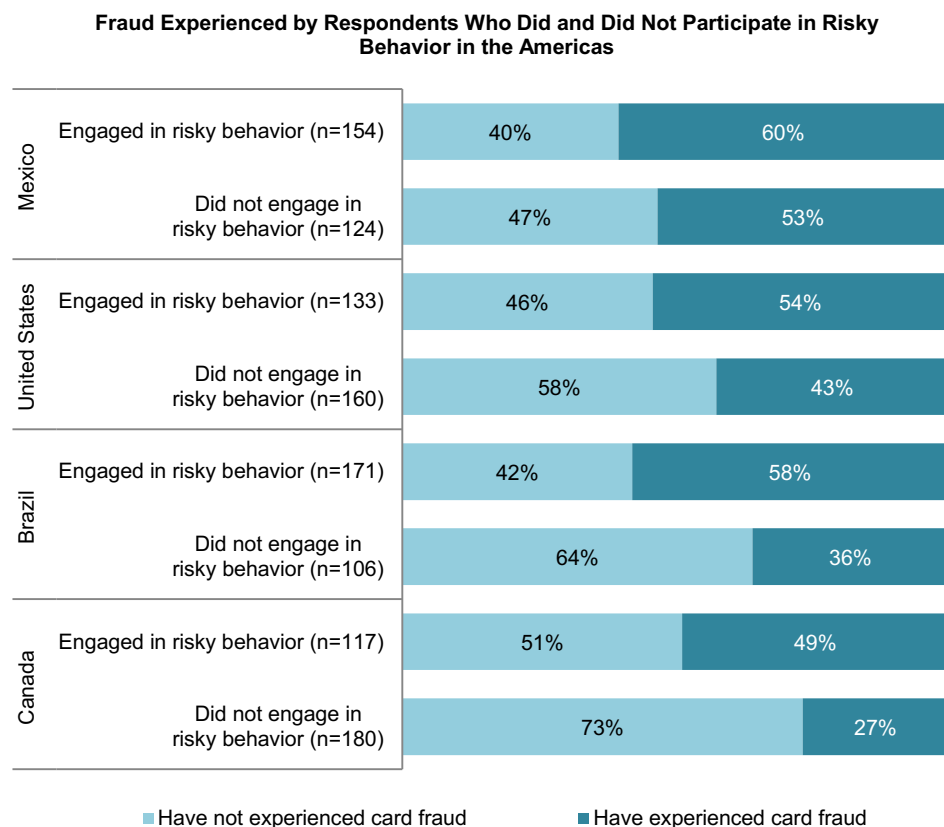
Figure 8: Risky Behavior Trends in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016 and Q1 2014

It is clear that, in general, consumers who avoid risky behaviors are less likely to experience fraud (Figure 9). This points to education as a key component to preventing fraud at the user-behavior level. The more educated consumers are about risky behaviors, the more likely they are to avoid those behaviors.

Figure 9: Risky Behavior and Fraud Experienced in the Americas



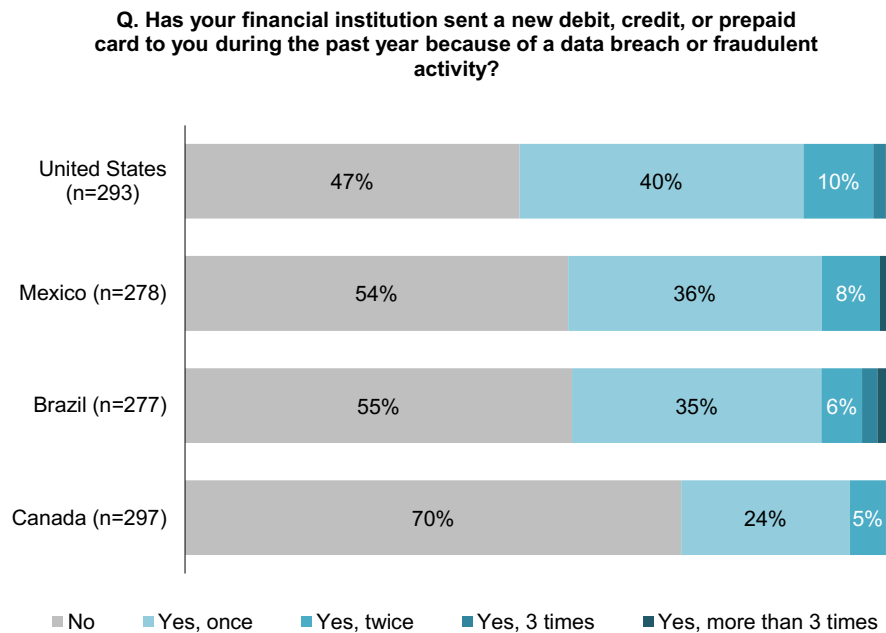
Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

REPLACEMENT CARDS

Data breaches have become de rigueur, and issuers and merchants can safely assume that payment card details as well as other information, such as PINs, emails, and addresses, for any given customer have been breached. As a result of some breaches, some card issuers mail replacement cards to their cardholders even if there has not yet been fraud on the account, though many issuers try to limit card reissuance and prefer enhanced monitoring. This reduces costs for the issuers and inconvenience for consumers.

In the Americas, approximately 53% of Americans received a replacement card during the past year, along with 46% of Mexicans, 30% of Canadians, and 45% of Brazilians. Given the huge number of data breaches impacting many retailers, it can be difficult to identify the source of the data breach and trace the fraud to any given entity (Figure 10). It should be noted that consumers may not realize exactly *why* they have received a new card. So there is a possibility that a card was reissued for fraud or potential fraud that the consumer wasn't aware of; it is also possible that cards were reissued in general rotation or for EMV implementation, but the consumer could have thought it was fraud.

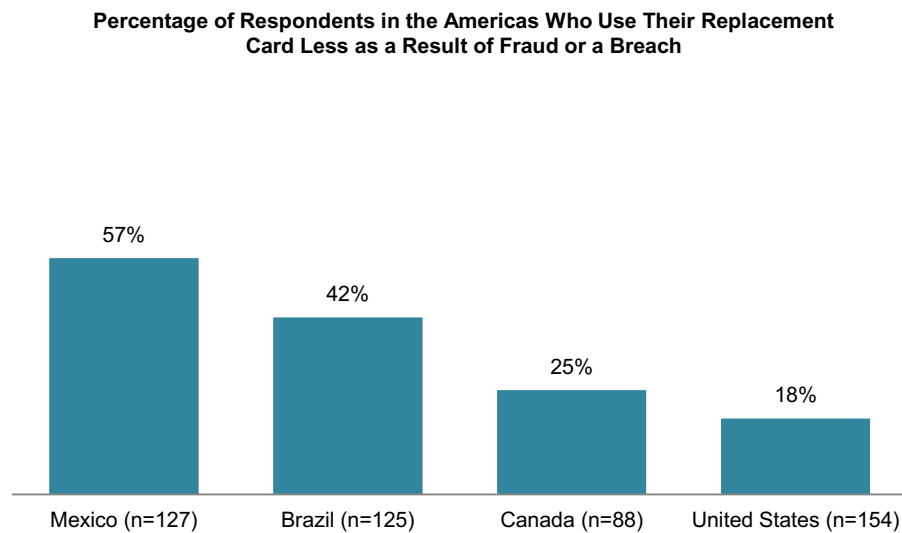
Figure 10: Replacement Cards in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

In Mexico, replacement cards are far more likely to go to back of wallet (get used less often), with 57% of respondents moving the card backward in the wallet. There is a clear difference in wallet-position behavior between the U.S. and Canada, which show lower numbers changing cards, and Mexico and Brazil, which show much higher rates of downgrading a card. This may be due to greater stickiness associated with customer loyalty programs and multiple product relationships (Figure 11).

Figure 11: Use of Replacement Cards in the Americas

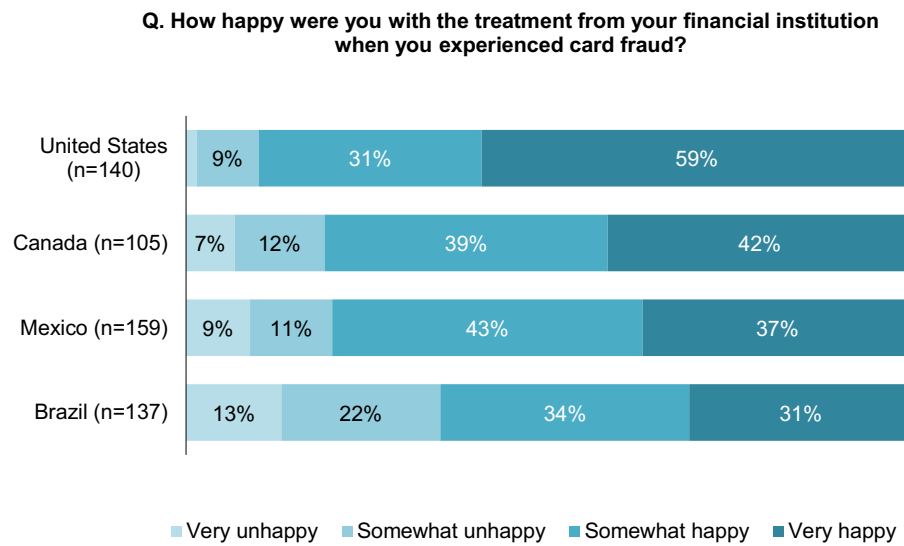


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Becoming a victim of fraud can feel just as violating as a home burglary, understandably leaving consumers emotional, confused, and asking “why did this happen to me?” Considering this emotional state, financial institutions must focus on customer service to calm customers and help them through the required post-fraud “aftercare” process. A positive aftercare experience is a huge customer-retention opportunity and helps rebuild confidence with consumers. This is especially critical since it is easy for fraud specialists to become rather jaded, and it should be reinforced as a part of regular training—those agents might have to act as much like counselors as customer service agents.

In the Americas, consumers in the U.S. are the most pleased with treatment from their institution after experiencing fraud; 90% of consumers are somewhat happy or very happy with the treatment they experienced. Second is Canada, where 81% of consumers are at least somewhat happy with their treatment. There have been some improvements compared to 2014 with consumers in Mexico and Brazil; 80% in Mexico are at least somewhat happy with the institution, and 65% are the same in Brazil (Figure 12). There is plenty of opportunity to improve, especially in Latin America, where consumer experience marks are not very strong.

Figure 12: Satisfaction With Financial Institution After Fraud in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Consumers who experience fraud and are dissatisfied with the aftercare experience sometimes change providers. Customer dissatisfaction rates in Mexico and Brazil are relatively high, so it is not surprising that 23% and 18% of consumers in those respective countries change providers after a fraud experience. This is an improvement over 2014, when 33% of consumers in Brazil and 21% of consumers in Mexico were dissatisfied.

In the United States, 6% of consumers switch providers, and in Canada, 11% do so (Figure 13). This is a shift from 2014, when the U.S. switching rate was 9% and the Canada switching rate was 6%. The rather low U.S. and Canadian consumer switching rates could be due to particularly sticky relationships with financial institutions. Consumers may have multiple products, such as a home mortgage, 401(k), or auto loan, with the same institution, and card loyalty programs incent them to remain with the institution even if they were not particularly happy with the aftercare experience.

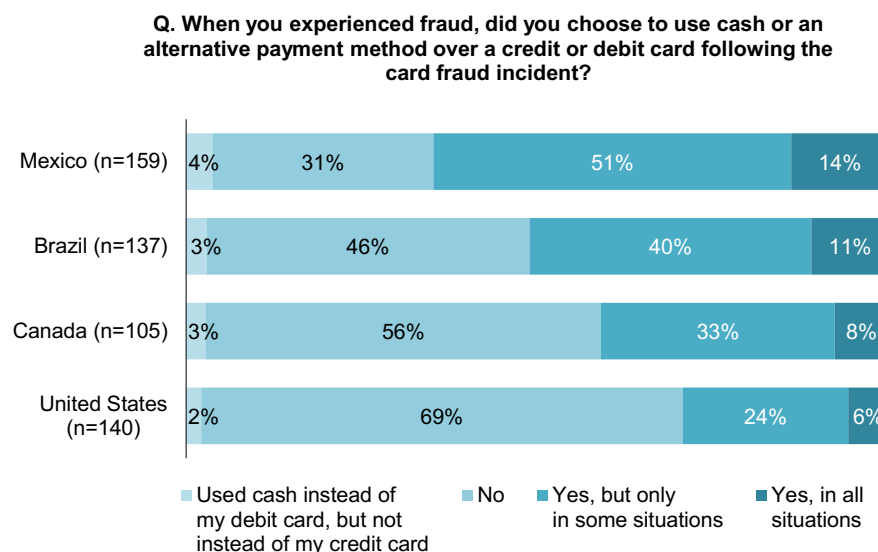
Figure 13: Switching Behavior in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Switching institutions has a significant cost for consumers, and some may choose to use a different card (i.e., front-of-wallet card) or use cash if their trust diminishes after a fraud event rather than change financial institutions outright. Broadly, in the U.S. and Canada, consumers do not exhibit a strong preference for using an alternate payment method following a fraud event (Figure 14). In Brazil and Mexico, over half of consumers report at least some back-of-wallet behavior.

Figure 14: Back-of-Wallet Behavior in the Americas



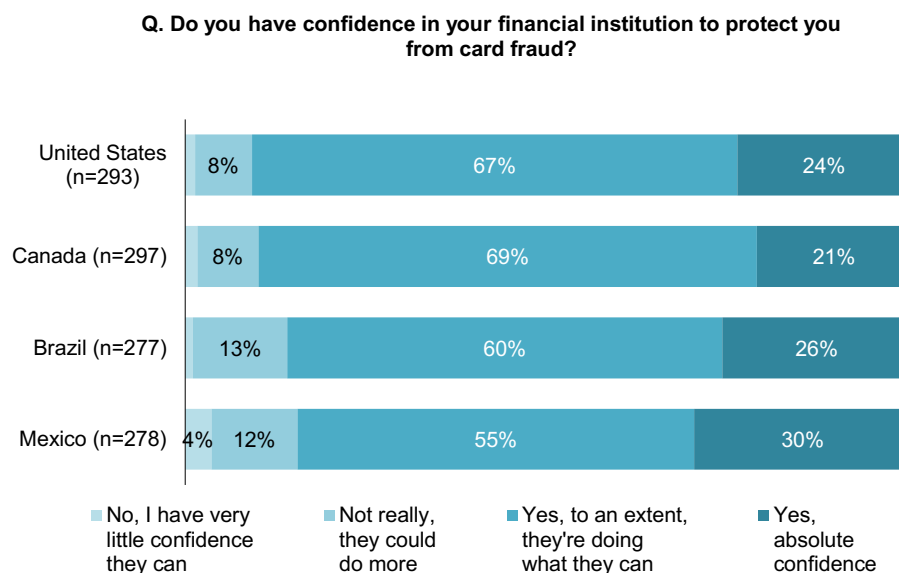
Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

CONSUMER ATTITUDES TOWARD FRAUD

Fraud and security have become a mass-market topic—stories of computer hackers, malware, data breaches, fraud rings, and victims of identity theft are constantly in local and national news media. It is understandable that consumers might be concerned, especially as institutions don't want to share all the countermeasures and controls they are using to avoid providing the criminals a nice playbook from which to work.

In the Americas, consumers do not have absolute confidence that their financial institutions can protect them, but the majority believe financial institutions are at least doing the best they can (Figure 15). Some institutions in the Americas have highlighted security in marketing and branding materials, and appear to see a positive effect by communicating to customers their commitment to security.

Figure 15: Consumer Trust in Financial Institutions in the Americas



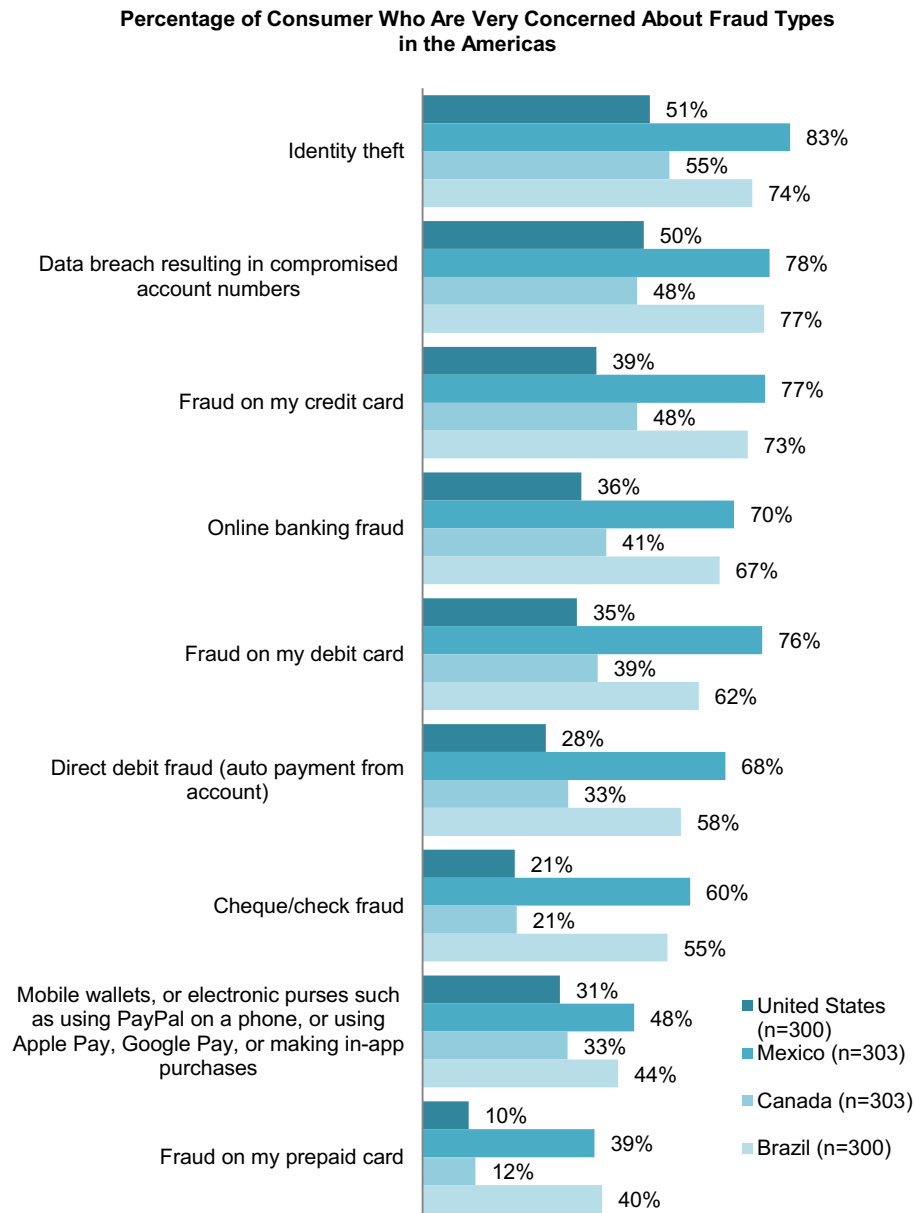
Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

In the countries where fraud rates are highest, consumers express higher degrees of concern. This is only logical given that fraud experiences, especially multiple experiences, generally lead to diminished trust.

The United States is a large target with relatively high rates of fraud, yet consumers express less concern, since U.S. consumers are protected by federal regulations (such as Regulation E) and payment network policies that require financial institutions to reimburse them when they are victimized by electronic fraud. Consumers in Mexico and Brazil, with higher fraud rates and less regulatory structure, are more concerned about every category of fraud compared to consumers in the United States and Canada. In Brazil and Mexico, consumers are most concerned about identity theft and fraud on their debit cards. In the United States and Canada, consumers are most concerned about identity theft, data breaches that result in compromised account numbers, and fraud on their credit cards (Figure 16).

In general, strong consumer protections in the U.S. and Canada appear to reduce consumers' concern over fraud events but certainly do not alleviate all concerns. These regulations and policies also create a moral hazard, since consumers have less of a reason to avoid risky behaviors.

Figure 16: Consumers' Fraud Concerns in the Americas



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

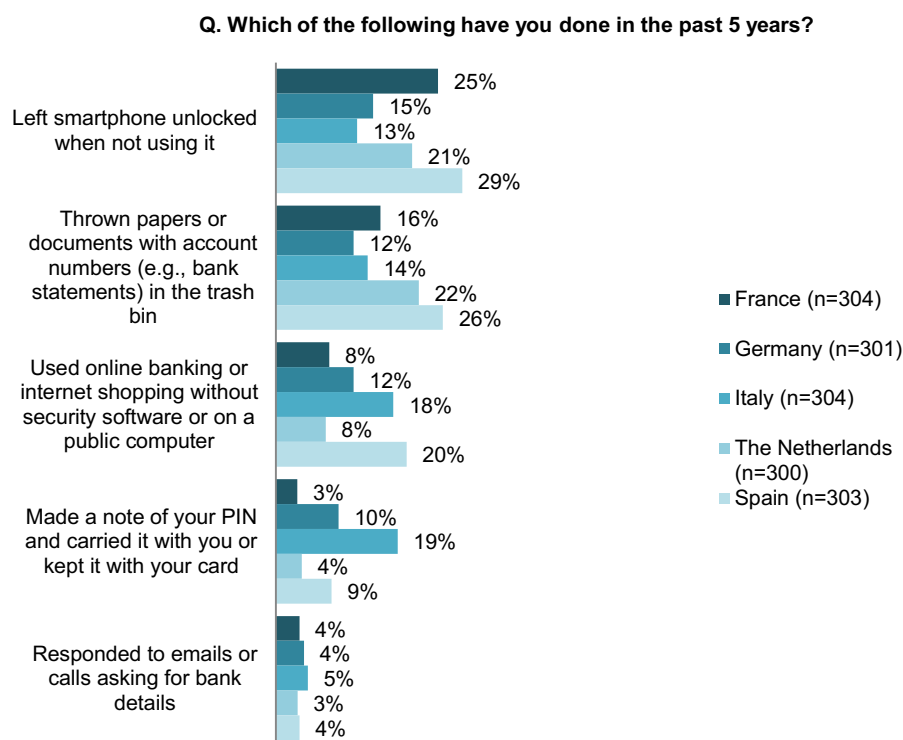
FRAUD IN EUROPE, THE MIDDLE EAST, AND AFRICA

Many countries in EMEA have well-developed banking systems. Some have emerging economies, with consumers gaining new access to many banking products in relatively recent years. Many of these economies are skipping cards for the most part (mostly used by the wealthy and tourists) and are leveraging alternative, frequently mobile-based payment options. It is somewhat difficult to compare financial fraud across such diverse economies, and this report breaks out eurozone members from the rest of EMEA to better compare the regions.

RISKY BEHAVIOR

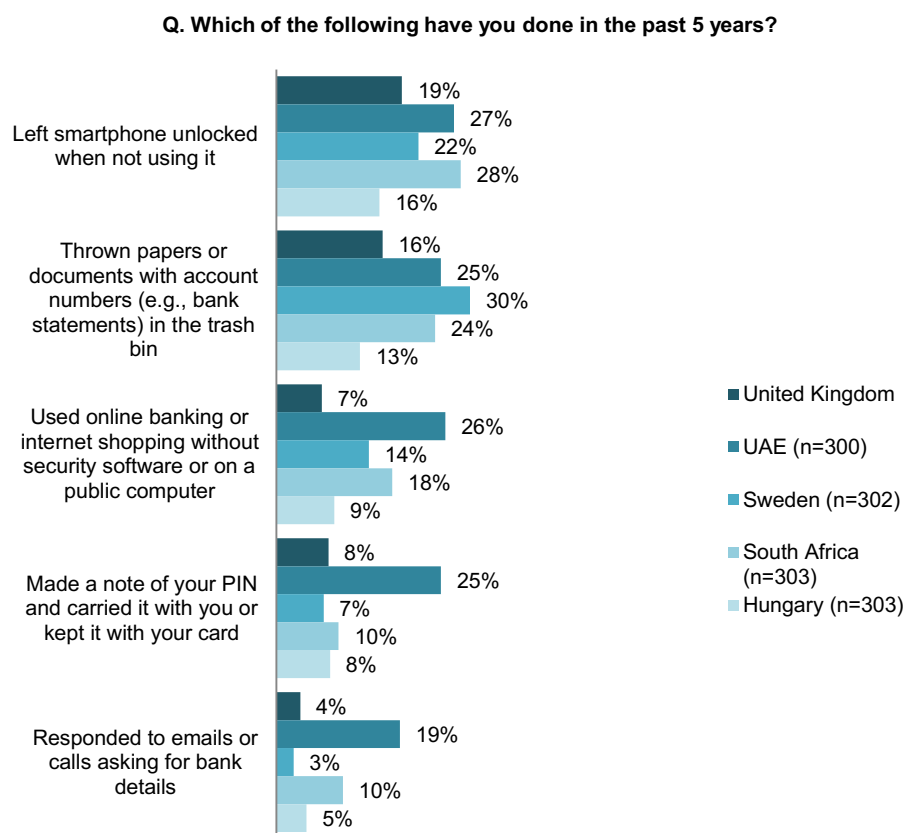
Similar to consumers in the Americas, consumers in surveyed EMEA countries are largely educated to ignore emails and calls requesting details about their bank accounts, although consumers in the UAE and South Africa respond more frequently (Figure 18). Likewise, consumers in most countries no longer make a note of their PIN and carry it with their cards; however, Italian and UAE consumers write down their PINs at 19% and 25%, respectively (Figure 17 and Figure 18). This is a serious flaw in consumer education and a practice that should be addressed. The UAE has particularly high figures of risky behaviors, which likely contribute to higher fraud rates.

Figure 17: Risky Behavior in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

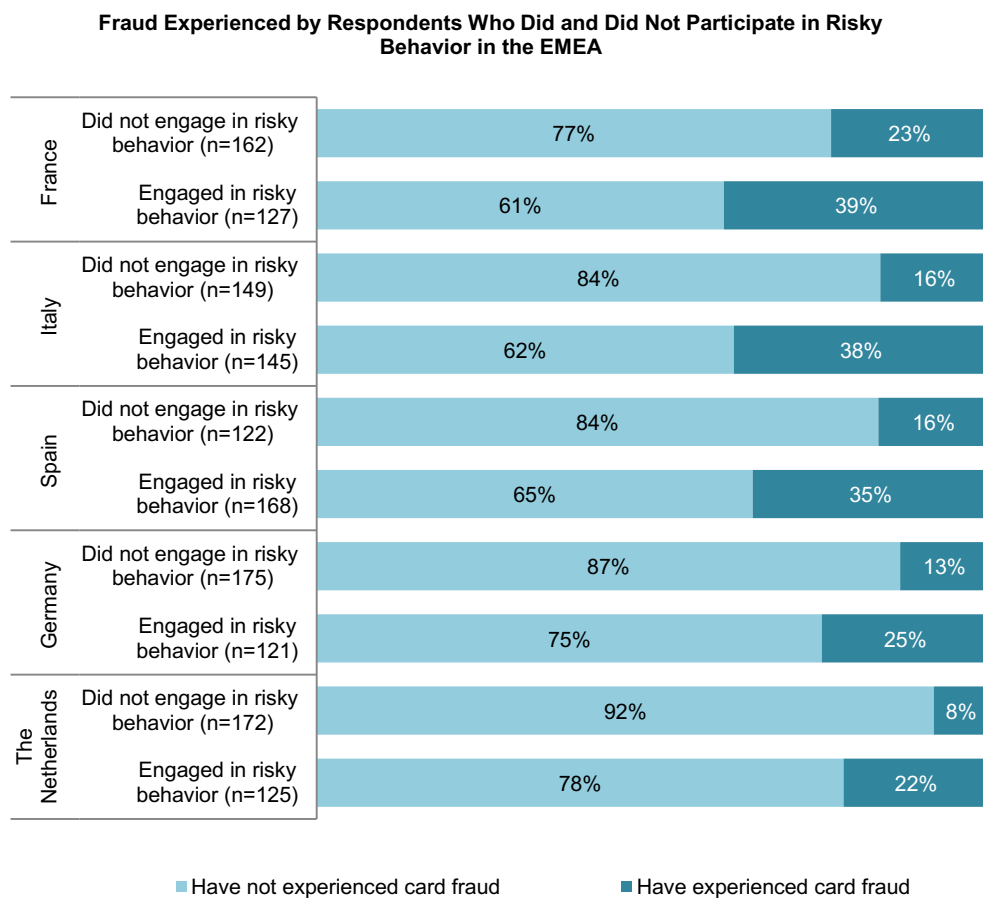
Figure 18: Risky Behavior in EMEA (Non-Eurozone)



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

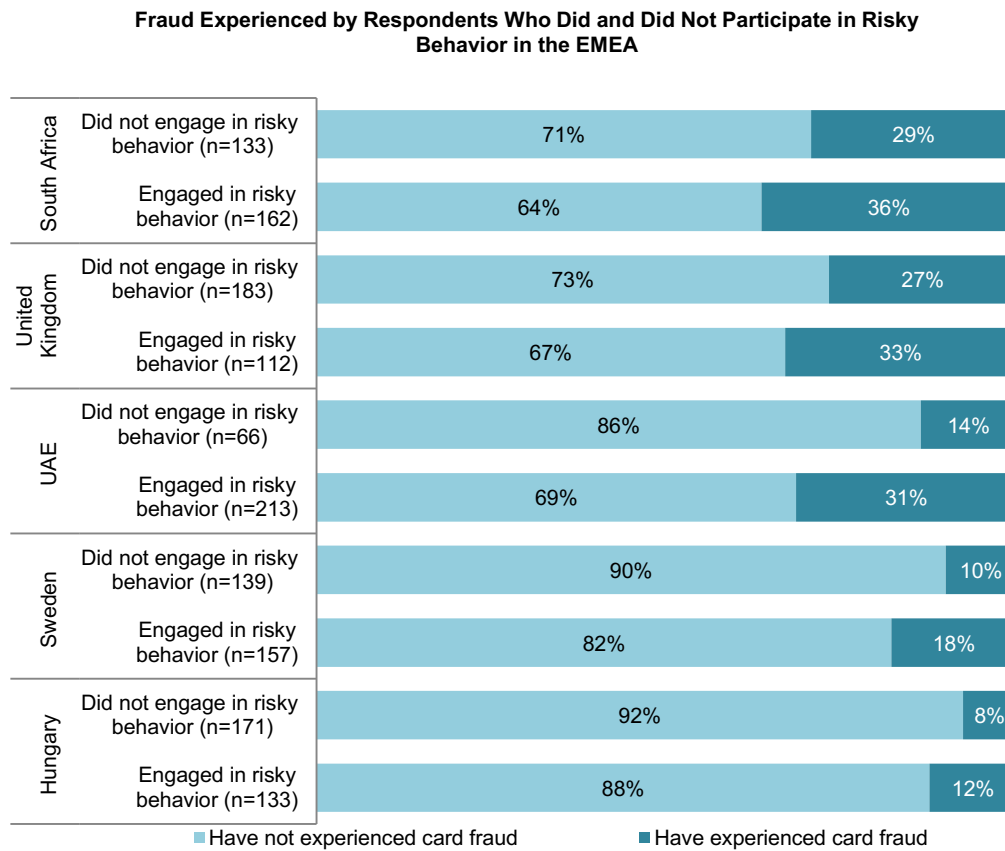
Overall, there is still plenty of risky behavior in all geographies, and these behaviors certainly have some impact on the level of fraud. In every country there are higher incidences of fraud when consumers participate in risky behavior (Figure 19 and Figure 20). The magnitude of difference between risky and nonrisky consumers is quite substantial, and changing those behaviors can have a real impact on fraud. Consumer education and well-timed reminders can slowly but surely reduce these risky behaviors.

Figure 19: Risky Behavior and Fraud Experienced in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Figure 20: Risky Behavior and Fraud Experienced in EMEA (Non-Eurozone)

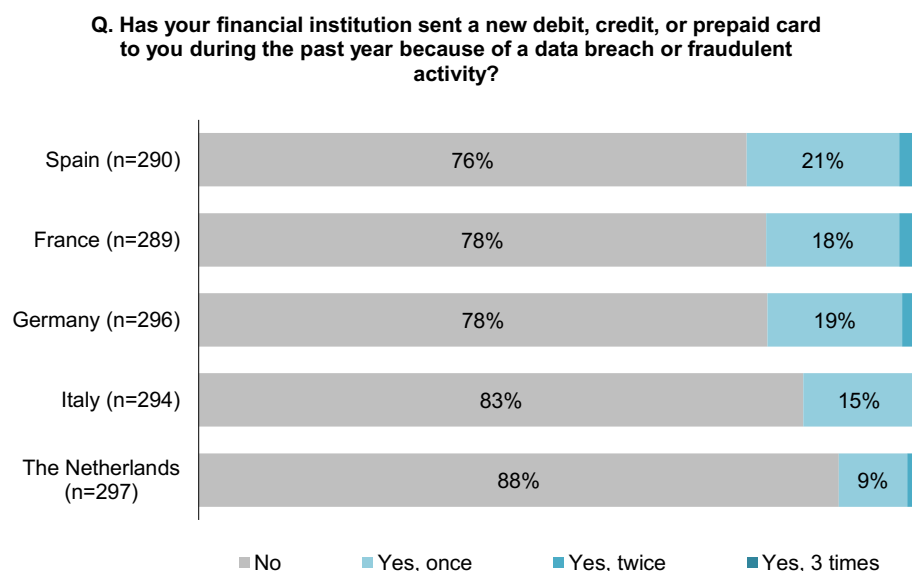


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

REPLACEMENT CARDS

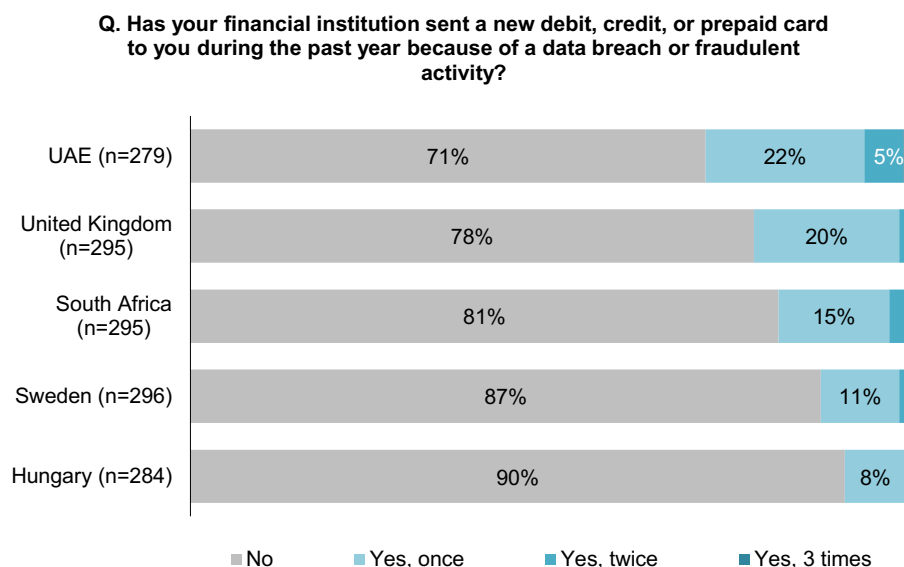
Across all the EMEA countries surveyed, the rate at which consumers received a replacement card due to fraud or data breaches during the past year ranges from 10% in Hungary (where fraud is low) to 29% in the UAE (one of the countries with the highest fraud rates in the study). A small but substantial number of consumers received more than one replacement card during the past year (Figure 21 and Figure 22).

Figure 21: Replacement Cards in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Figure 22: Replacement Cards in EMEA (Non-Eurozone)

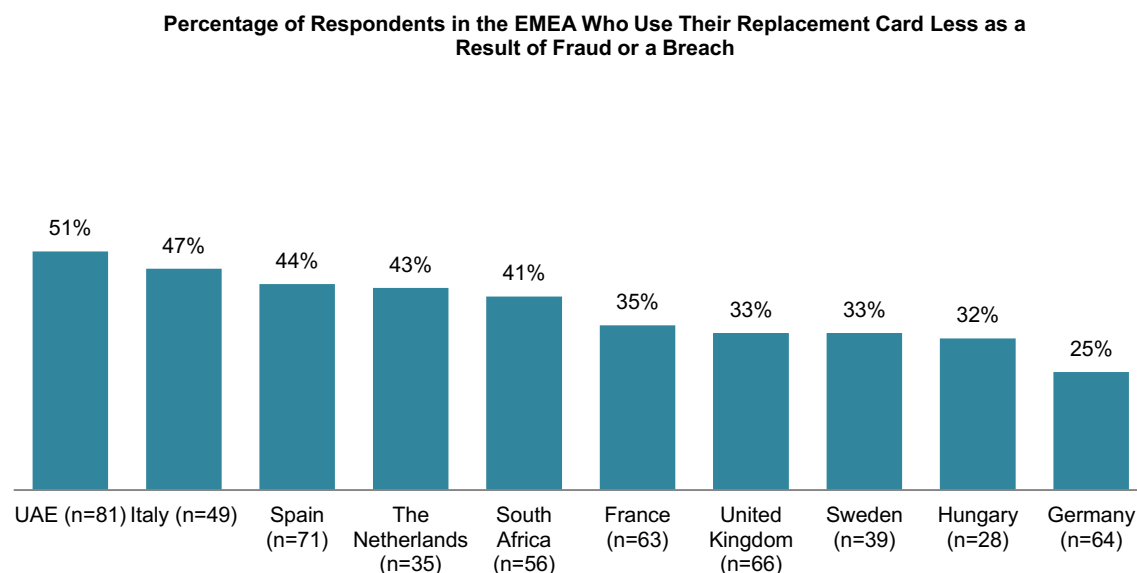


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Replacement cards are not a bad thing in and of themselves. Some consumers appreciate a proactive approach following a data breach or identified skimming incident. Others may find this annoying if they need to update recurring billing information. It is very critical that institutions provide very clear information in cases of breach or skimming events. Many issuers are opting to more closely monitor accounts that may be involved in a breach or skimming event rather than reissue cards. This can reduce costs for issuers and reduce inconvenience for consumers.

Across the EMEA countries, consumers use replacement cards less than the cards they replaced at rates ranging from 25% in Germany to 51% in the UAE. These high rates of back-of-wallet behavior reduce card issuers' revenue and demonstrate diminishing trust in the cards or financial institutions involved (Figure 23).

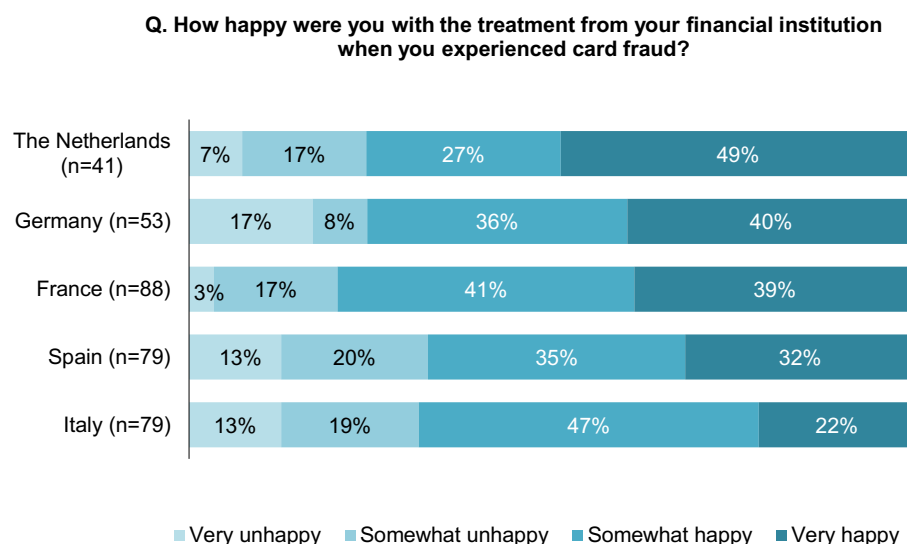
Figure 23: Use of Replacement Cards in EMEA



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

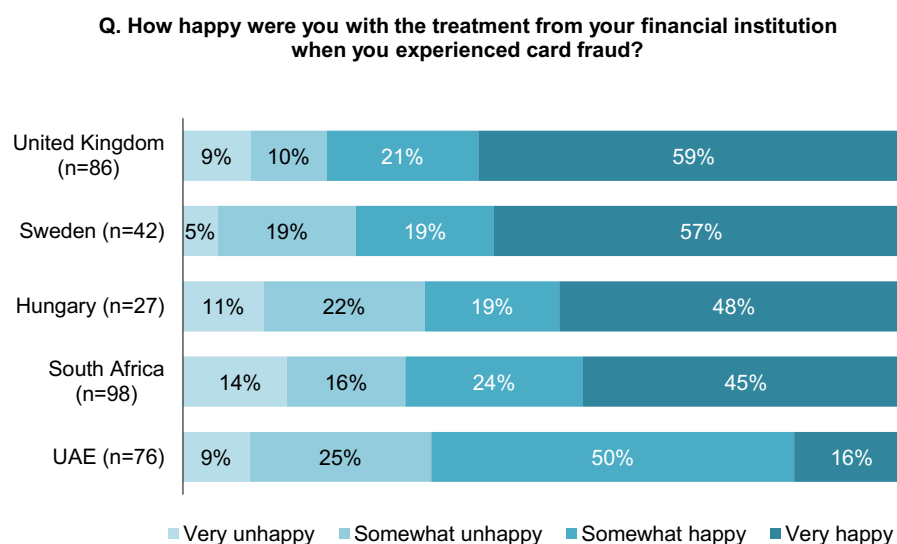
After experiencing fraud, at least 50% of consumers were at least somewhat happy across all eight countries surveyed. France and the U.K. saw some of the most satisfied consumers, with 80% at least somewhat satisfied in both countries. Others, such as Spain, Italy, Hungary, South Africa, and the UAE, had significant populations that were at least somewhat unhappy (Figure 24 and Figure 25).

Figure 24: Satisfaction With Financial Institution After Fraud in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

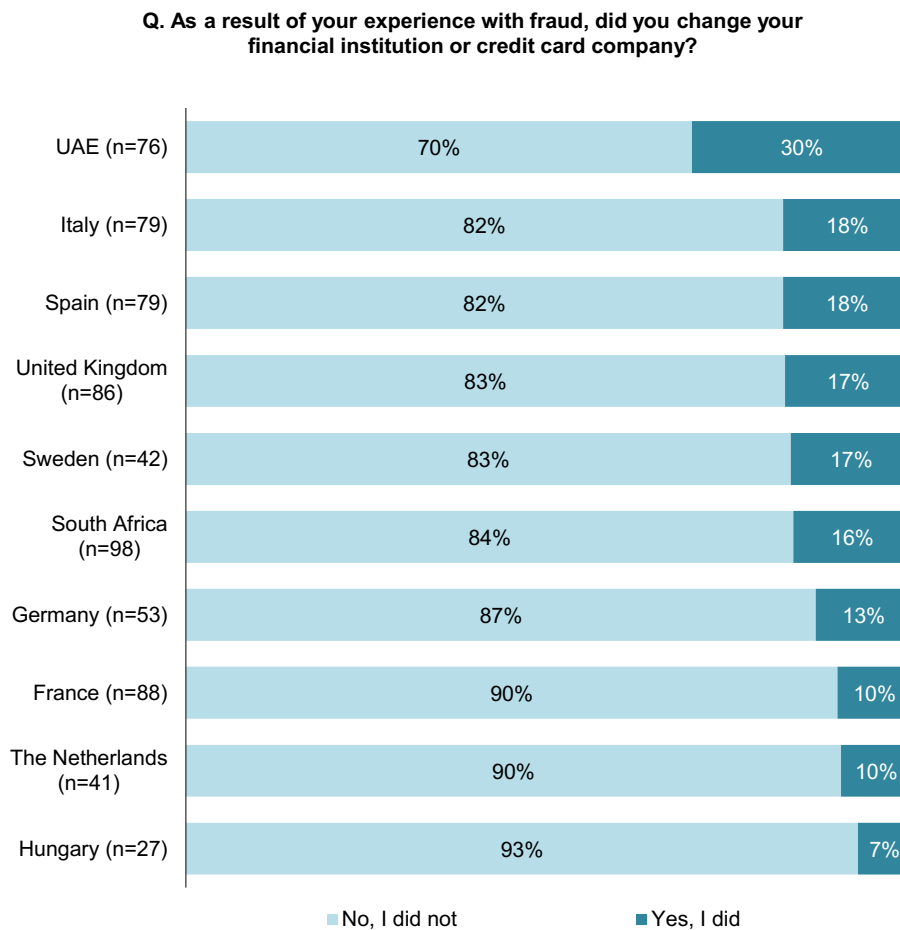
Figure 25: Satisfaction With Financial Institution After Fraud in EMEA (Non-Eurozone)



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Even though so many consumers are at least somewhat unhappy with their treatment subsequent to experiencing fraud, relatively few consumers report that they switched financial institutions. The UAE is a standout with a 30% switching rate (Figure 26). While these rates may seem relatively low, financial institutions are competing for customers, and it is more expensive to acquire a customer than it is to keep one; retaining customers results in both retaining revenue and decreasing costs. Hungary's relatively low satisfaction rates do not translate to higher switching numbers. It is not clear what reasons contribute to this high degree of loyalty.

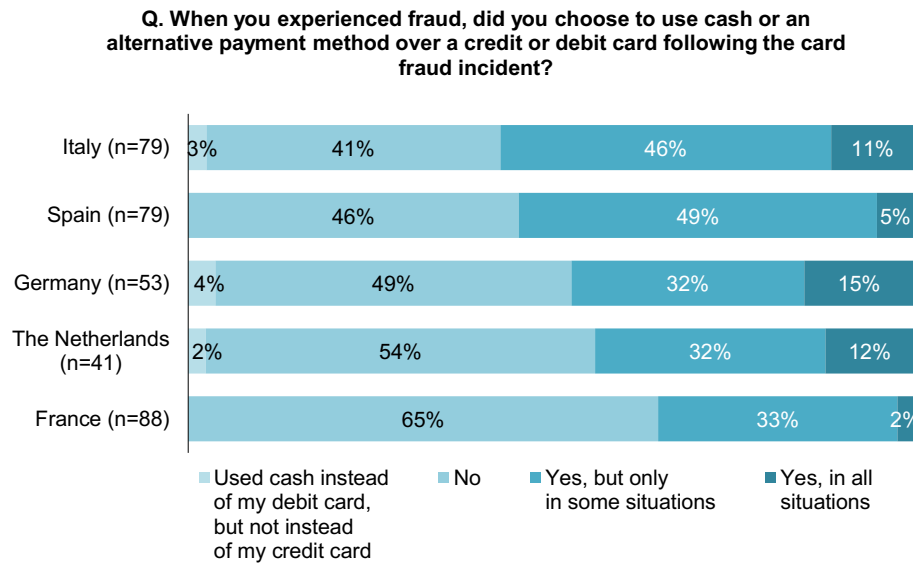
Figure 26: Switching Behavior in EMEA



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Not all unhappy consumers switch financial institutions after experiencing fraud, but they can still negatively impact their financial institution's revenue by using their card less often. It can become a "let's just be friends" type of relationship. In many cases, there is a change in wallet position only in certain situations (Figure 27 and Figure 28). While not included in the survey questions, anecdotal evidence suggests consumers will often choose an alternative card for online purchases and a separate one for POS ones. This quite rightly is presented to consumers as a best practice to segment for different types of risk in stores compared to online.

Figure 27: Back-of-Wallet Behavior in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Figure 28: Back-of-Wallet Behavior in EMEA (Non-Eurozone)

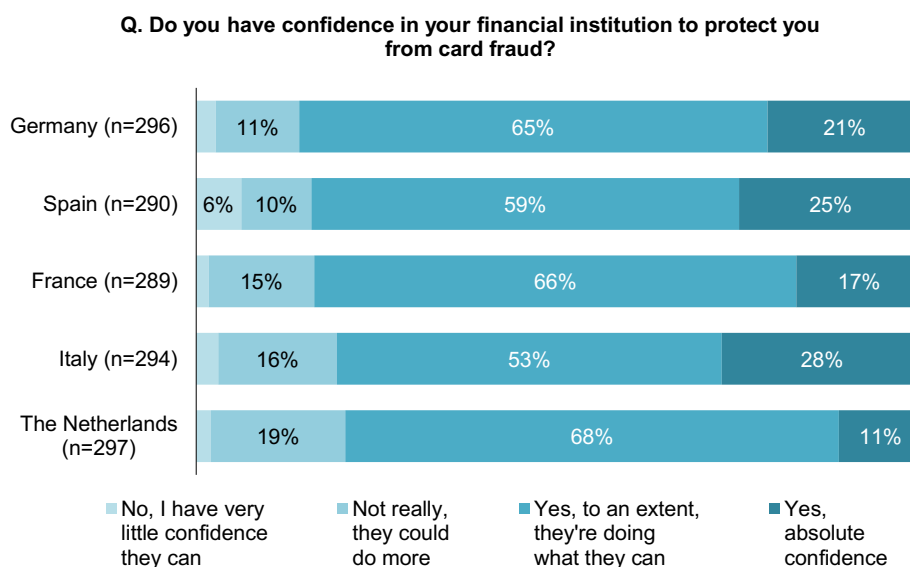


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

CONSUMER ATTITUDES TOWARD FRAUD

Less than one-third of consumers across EMEA have absolute confidence that their financial institution can protect them from fraud, though in all countries at least 60% believe the institutions are doing what they can to protect them. Sweden, South Africa, and the Netherlands have some of the lowest rates of confidence (Figure 29 and Figure 30).

Figure 29: Consumers' Trust in Financial Institutions in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

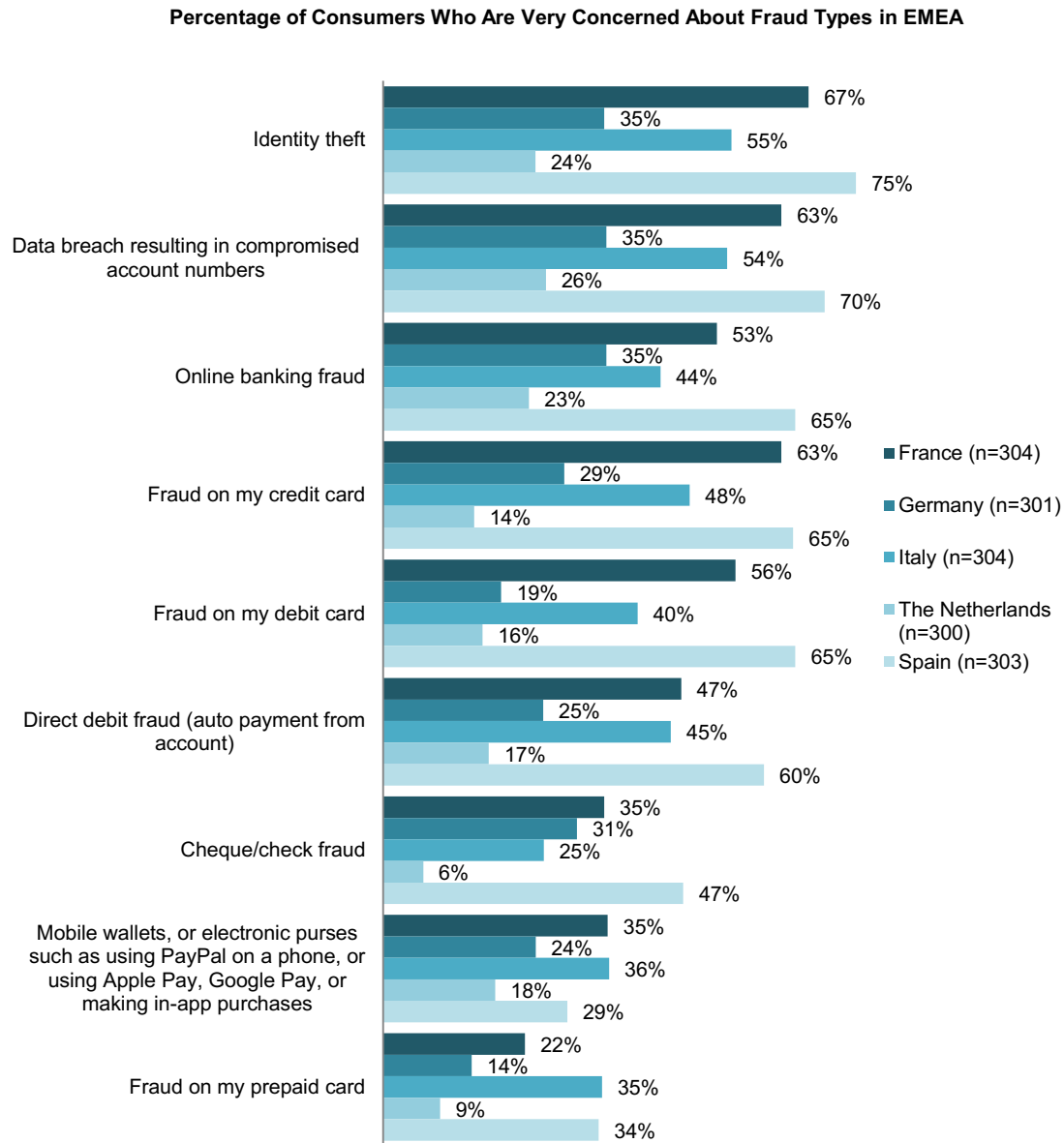
Figure 30: Consumers' Trust in Financial Institutions in EMEA (Non-Eurozone)



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

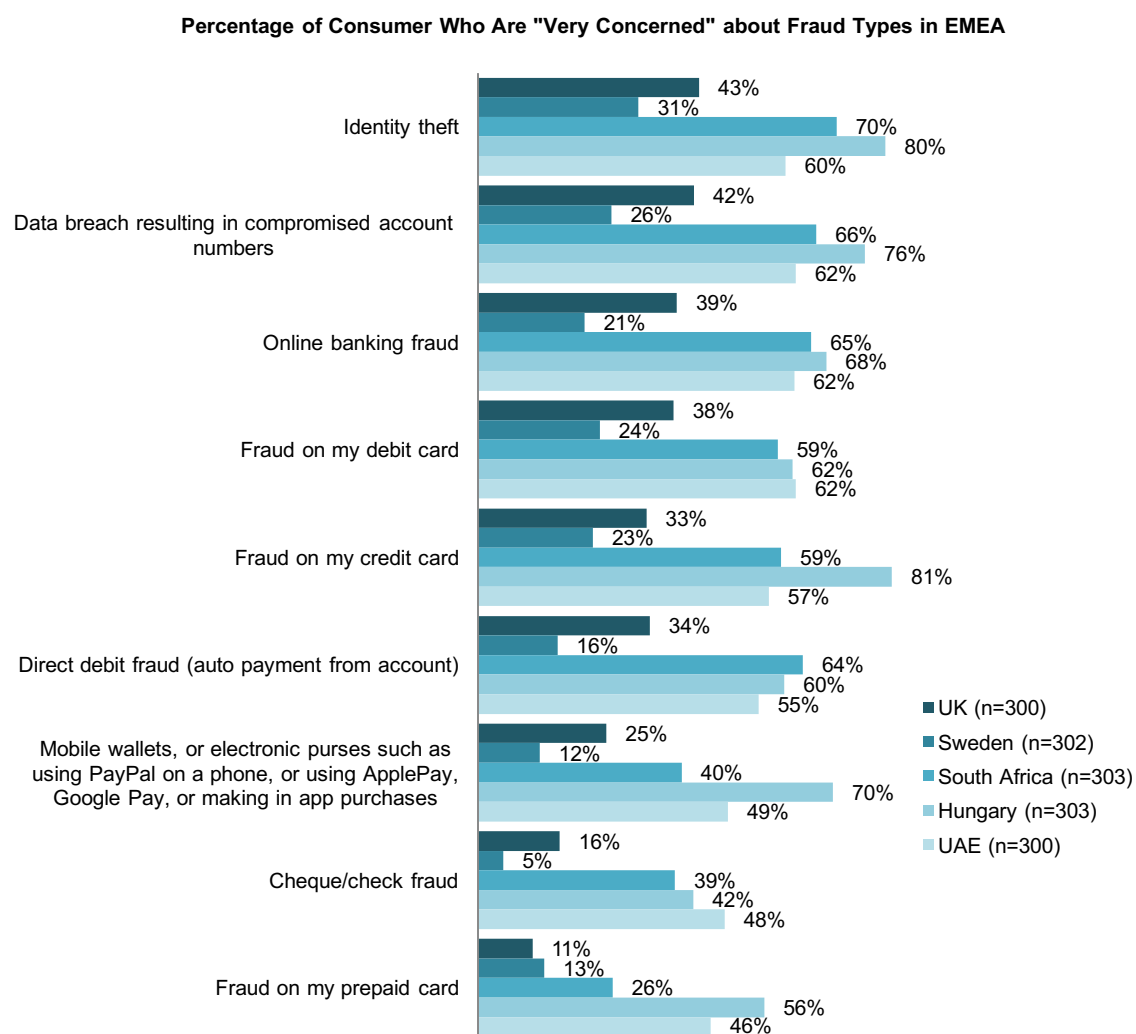
Consumers are understandably concerned about a wide range of financial fraud types. The majority of consumers are very concerned about identity theft, data breaches resulting in compromised account numbers, online banking fraud, and fraud on credit and debit cards. Many consumers in EMEA are not very concerned with check fraud, as checks are generally utilized less than in North America and some other countries. There is certainly a fair bit of concern about the mobile channel; as more options become available and more consumers use mobile payments, these numbers are likely to rise (Figure 31 and Figure 32).

Figure 31: Consumers' Fraud Concerns in Eurozone



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Figure 32: Consumers' Fraud Concerns in EMEA (Non-Eurozone)



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

FRAUD IN THE ASIA-PACIFIC

The final region covered by the consumer fraud study is the Asia-Pacific, with six countries included in 2016. Consumer behavior and attitudes in this region are somewhat different than in EMEA and the Americas.

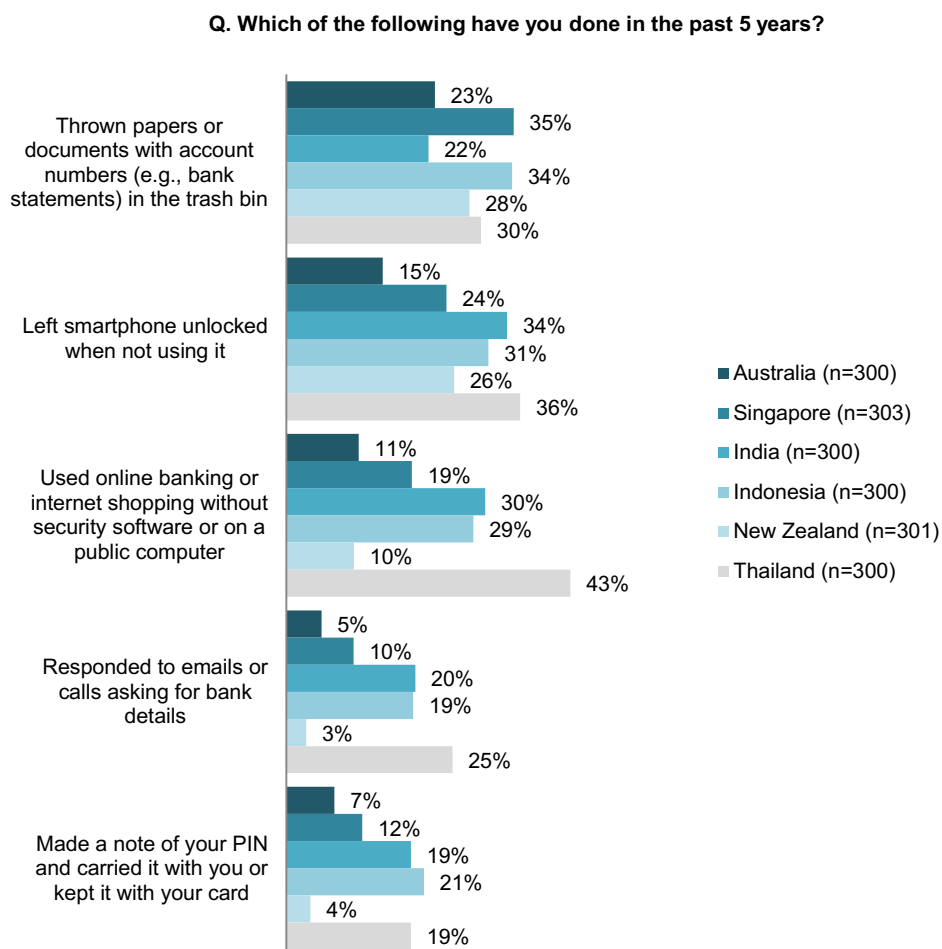
RISKY BEHAVIOR

Consumer behavior in Australia and New Zealand tends to be far less risky than in the rest of the Asia-Pacific. This may be attributable to relatively more mature card payments markets and fraud controls. The faster-growing and maturing markets, such as Thailand, Indonesia, and India, tend to show greater levels of risky behavior.

The very low percentages of Australian and New Zealand consumers who carry their PIN with a card or respond to emails and calls asking for bank account information more closely resemble consumers in the Americas and EMEA than in other Asia-Pacific countries. Large percentages of consumers in all countries leave smartphones unlocked when not in use and throw documents with bank account numbers in the bin.

The pattern tends to hold that fast-growing Thailand, India, and Indonesia exhibit some of the highest-risk behaviors. Much of this might be attributed to less consumer education and experience with payment cards. In all countries except Australia and New Zealand, over 20% of consumers bank or shop online on computers without security software or on public computers (Figure 33). In a number of countries—again, those growing quickly—consumers generally do not have strong broadband connections at home, and many consumers rely on internet cafes when activities cannot be completed on a mobile device. For example, internet cafes are very popular in Thailand among locals and tourists, and some neighborhoods seem to have one on every corner.

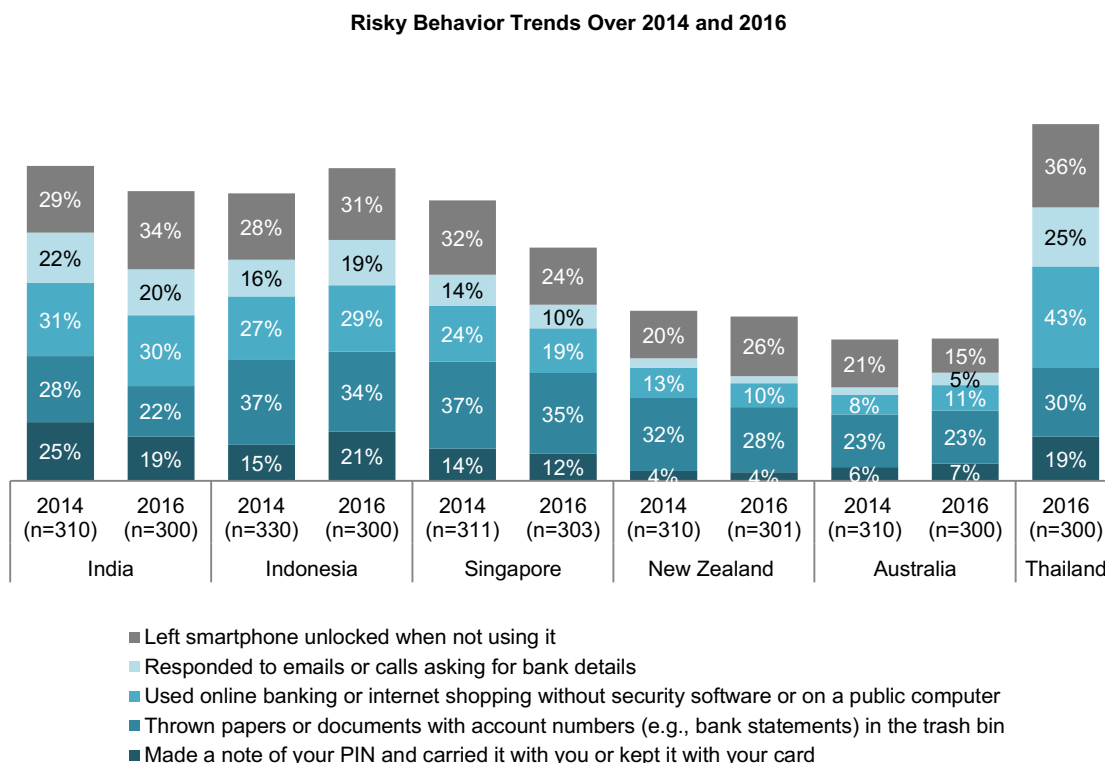
Figure 33: Risky Behavior in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

The Asia-Pacific does not show clear trends for growth or decline in risky behaviors. It is clear that more mature markets, such as New Zealand and Australia, demonstrate lower incidence of risky behavior. 2016 rates are relatively similar to 2014 ones, however. This implies an opportunity for consumer education specifically focused on how customers' behavior affects the potential for fraud (Figure 34).

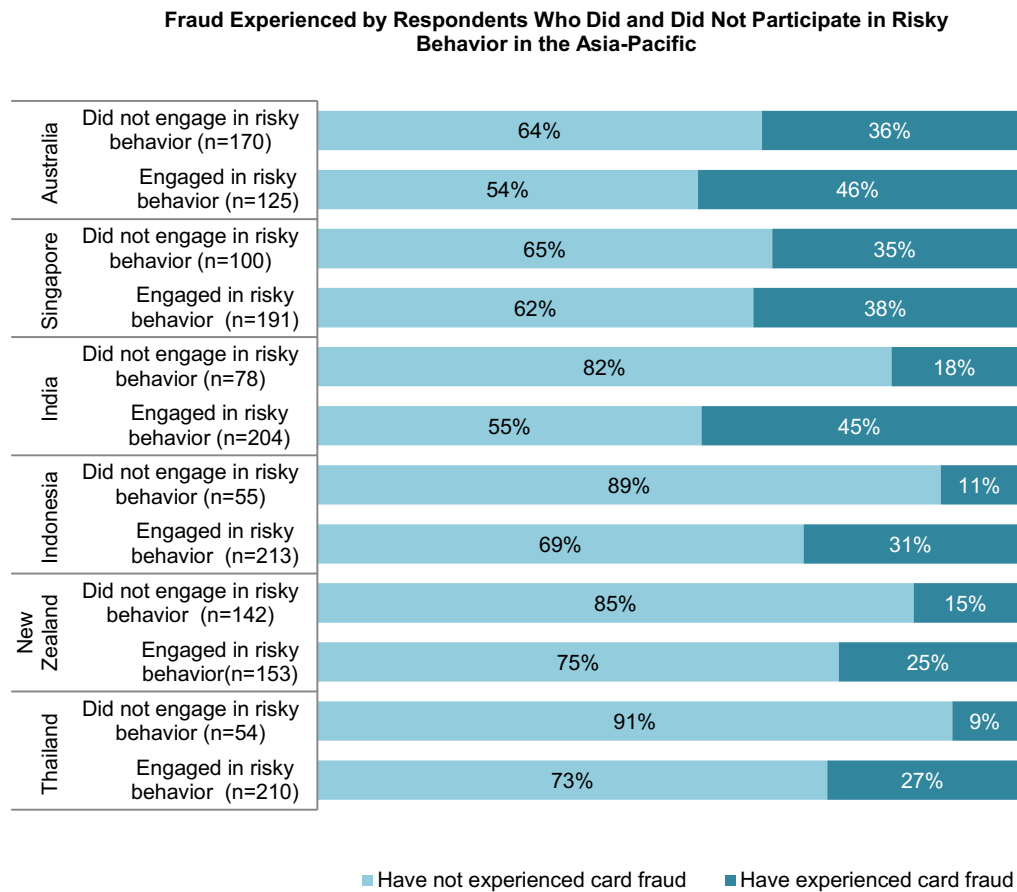
Figure 34: Risky Behavior Trends in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

In every country of the Asia-Pacific region, risky behavior and experiencing fraud clearly correlate. This is most clear in India, Thailand, and Indonesia. Again, educating consumers about risky behaviors and the need to avoid them as well as alternative behaviors (such as Linux installations that can run off a USB key) can help reduce fraud incidents and help consumers feel some element of confidence in their ability to protect themselves from fraud (Figure 35).

Figure 35: Risky Behavior and Fraud Experienced in the Asia-Pacific

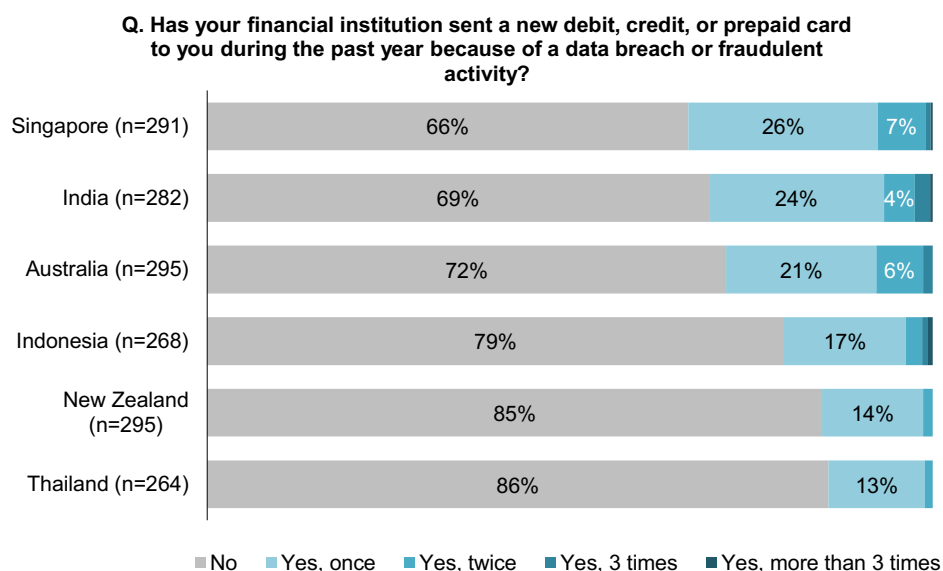


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

REPLACEMENT CARDS

In the Asia-Pacific region, consumers who received at least one replacement card range from a low of 14% in Thailand to almost 34% in Singapore. This may be a reflection of targeted fraud attacks and data breaches pointed to more affluent regions such as Singapore, India, Australia, and New Zealand. As in other regions, some consumers received multiple replacement cards during the past year (Figure 36).

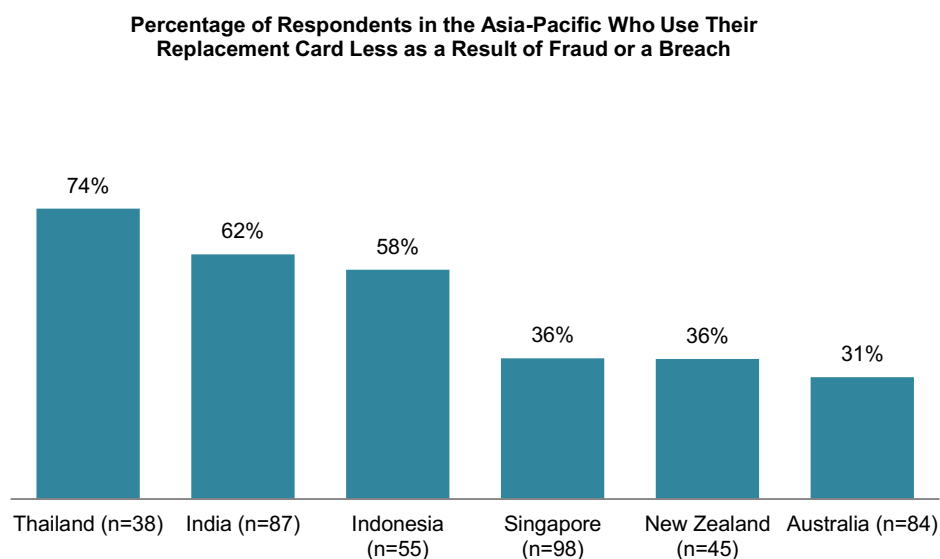
Figure 36: Replacement Cards in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Many consumers across the Asia-Pacific region used replacement cards less than the original cards. This back-of-wallet behavior occurred at very high rates compared to other regions—from 31% in Australia to 74% in Thailand. This behavior represents lost revenue for financial institutions and surely shows consumers' lack of confidence as well as an increasing variety of noncard-based payment options available to consumers (Figure 37).

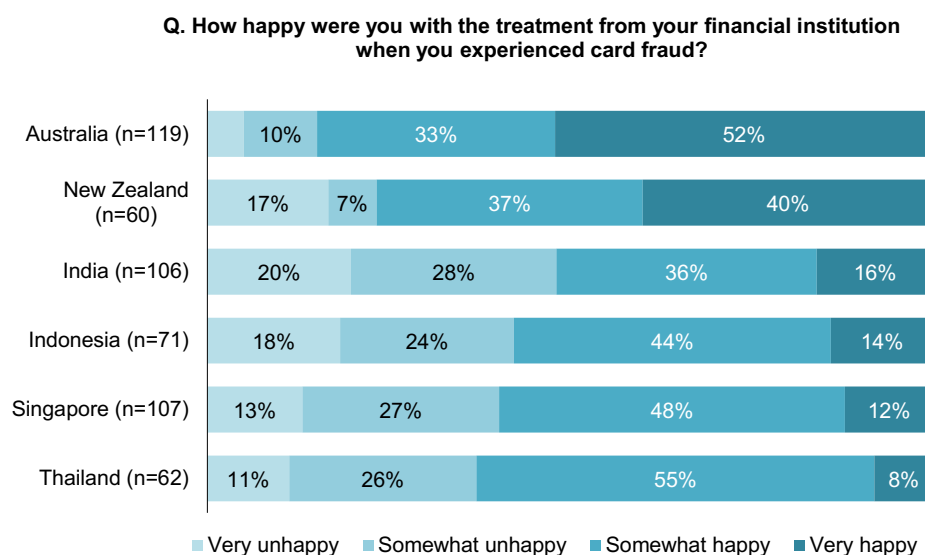
Figure 37: Use of Replacement Cards in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Consumer satisfaction rates with financial institutions' aftercare experience vary dramatically by country. In Australia, 85% of consumers were at least somewhat happy after a fraud experience, and in New Zealand, 77% were at least somewhat happy. In the other countries, high percentages of consumers were unhappy after their fraud experience: 40% were at least somewhat unhappy in Singapore (increased from 33% in 2014), 48% in India, and 42% in Indonesia (Figure 38). In many cases, customer aftercare is still evolving, as is the sophistication of card fraud monitoring in the growing economies. This is again clear compared to the more mature markets in Australia and New Zealand.

Figure 38: Satisfaction With Financial Institution After Fraud in the Asia-Pacific

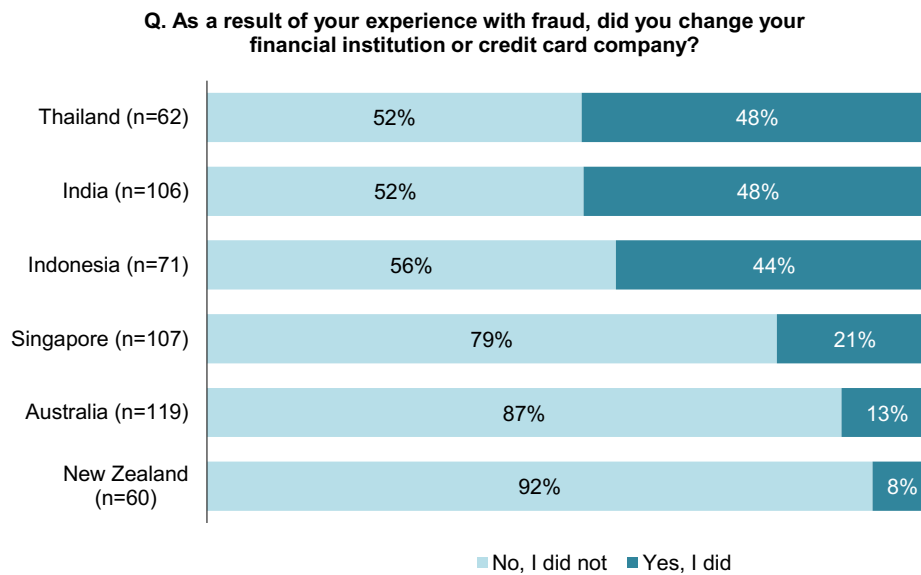


Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Compared to other regions, the Asia-Pacific's switching rates are rather high. In Thailand, India, and Indonesia, between 44% and 48% of consumers switch financial institutions after their fraud experience. These very high rates of customer attrition are very costly to financial institutions. In Singapore, 21% of consumers switch financial institutions after experiencing fraud, much greater than in Australia and New Zealand. This is troubling, as Singapore is a wealthy country with well-established global banks, regulations, and technology tools.

Australia and New Zealand have the lowest rates of switching behavior, at 13% and 8%, respectively, which is much more similar to North America and Western Europe than other parts of the Asia-Pacific (Figure 39). Much like in the Americas, there may be more stickiness with consumers in Australia and New Zealand due to more in-depth relationships via multiple products, whereas consumers in the growing economies may have more willingness to switch and are less closely tied to a given institution. There is an opportunity in Thailand, India, and Indonesia to create stickier multiproduct relationships and loyalty programs.

Figure 39: Switching Behavior in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Somewhat surprisingly, countries with higher fraud rates and lower levels of customer aftercare do not show particularly high rates of moving cards to back of wallet. Indonesia, Thailand, and India show large proportions of consumers who only change wallet position behavior in some situations (Figure 40).

Figure 40: Back-of-Wallet Behavior in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

CONSUMER ATTITUDES TOWARD FRAUD

Much like other regions, the Asia-Pacific enjoys a strong consumer sentiment that financial institutions are at least doing the best they can to prevent fraud (Figure 41). Singapore and Thailand have the lowest levels of confidence, with each showing a 15% unfavorable view. As in other geographies, marketing and demonstrating to customers the controls and technologies that are in place can improve customer satisfaction.

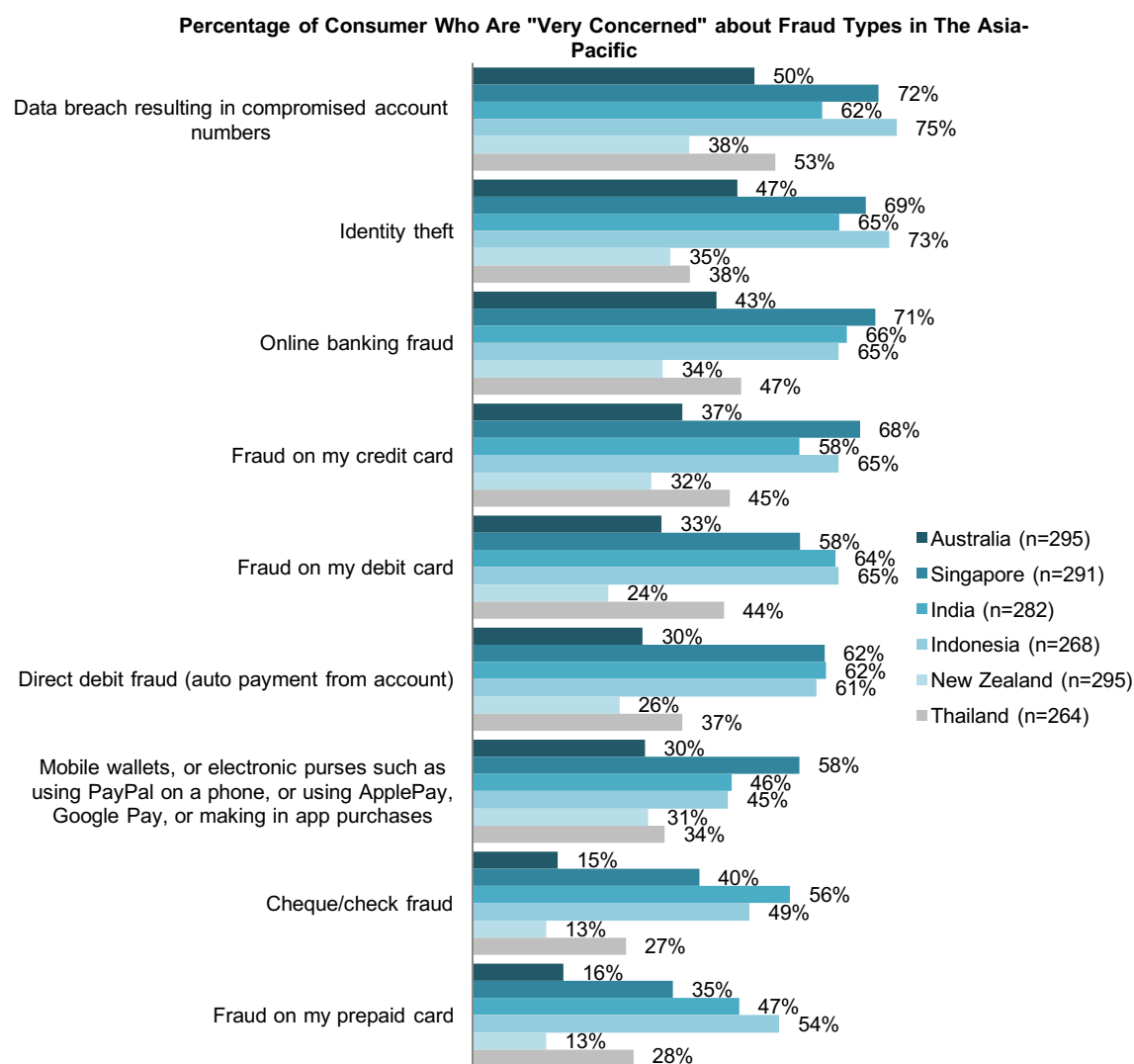
Figure 41: Consumers' Trust in Financial Institutions in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

Across all countries, consumers in the Asia-Pacific are most concerned about identity theft, data breaches resulting in compromised account numbers, and online banking fraud (Figure 42). Singapore stands out as most concerned in nearly every category, which reflects these consumers' relatively low confidence that institutions are protecting them compared to the confidence of consumers in other countries. Check fraud is much more of a concern in India, Singapore, and Indonesia than in most of EMEA, as checks are more commonly used in the Asia-Pacific compared to most of EMEA.

Figure 42: Consumers' Fraud Concerns in the Asia-Pacific



Source: Aite Group, ACI Worldwide study of consumers in 20 countries, Q2 2016

RECOMMENDATIONS

When consumers are not engaged in the fraud-prevention process and unaware of how their behaviors put them at risk, financial institutions and consumers suffer. There is great mutual benefit in creating a partnership with consumers by providing education to reduce the risk of fraud in the first place, then having strong aftercare processes when a fraud does occur. Doing so can both reduce costs and preserve revenue.

At the same time, in the case of data breaches or skimming, there is little if anything the institution or consumer can do. Helping consumers understand that these events are not always the institution's fault and communicating clearly what actions are being taken can go a long way toward improving consumer confidence.

For financial institutions:

- **Customer education and participation:** This can come in many forms, such as on the website or mobile app, as a part of email notifications, community “shred it” days, and through the aftercare process. Ensure they have a basic understanding of how the institution is keeping them safe, too.
- **Offer example cases:** Many consumers do realize some of their behaviors are risky and don't necessarily know what alternatives are available to them. One approach is to create a short story explaining the risky behavior, the potential for fraud, and alternative actions. This can bring the message home to consumers. For example, consumers who need to use internet cafes or other insecure connections can be instructed on how to use a USB-based Linux instance to run more secure sessions. Another example is helping users create a mnemonic to help remember PINs and passwords.
- **Communicate clearly and simply:** Ensure consumers understand the reason for a replacement card, that it is safe to use, and why it is safe to use. Make fraud protection efforts easy to understand and easily available, without exposing too much information to fraudsters. Explain clearly why the card was reissued—because of fraud, to replace stripe with chip, or as part of the general expiry cycle.
- **Focus on customer experience:** After experiencing fraud, consumers are often emotional. Train agents to be empathetic and helpful to the greatest extent possible to retain victimized customers. Remind agents that while they work on fraud cases every day, the customer on the other end doesn't have that experience.
- **Focus on layers of security:** There is no “silver bullet” solution, but consider how tools like 3-D Secure, transaction monitoring, and biometric authentication could enhance both security and customer service.

RELATED AITE GROUP RESEARCH

Combating Fraud: Consumer Preferences, January 2016.

Not Your Father's 3-D Secure: Addressing the Rising Tide of CNP Fraud, February 2016.

EMV: Issuance Trajectory and Impact on Account Takeover and CNP, May 2016.

Digital-Channel Fraud Mitigation: The Mobile Force Awakens, June 2015.

Payment Cards: Current Threats and Protections, September 2014.

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AUTHOR INFORMATION

Ben Knieff
+1.617.398.5096
bknieff@aitegroup.com

CONTACT

For more information on research and consulting services, please contact:

Aite Group Sales
+1.617.338.6050
sales@aitegroup.com

For all press and conference inquiries, please contact:

Aite Group PR
+1.617.398.5048
pr@aitegroup.com

For all other inquiries, please contact:

info@aitegroup.com