

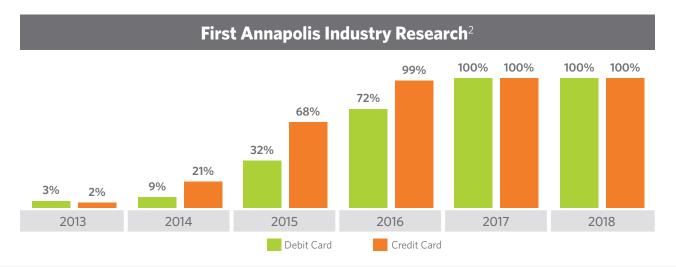


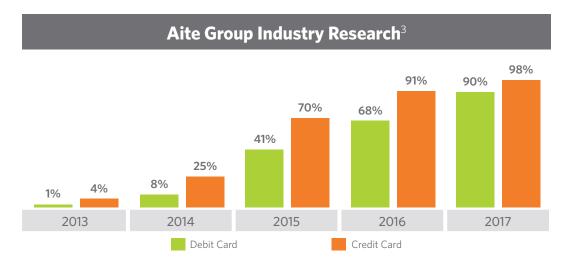
Getting to EMV will be a challenge, even for the most sophisticated banks and credit unions. That's because EMV conversion will take a significant amount of resources to plan and implement. Financial institutions must make an extraordinary number of decisions about highly technical choices — profiles, types of chips, data preparation, etc. — to begin the conversion process. Even after making these choices, the rollout itself will require clear, careful and consistent communication with account holders.

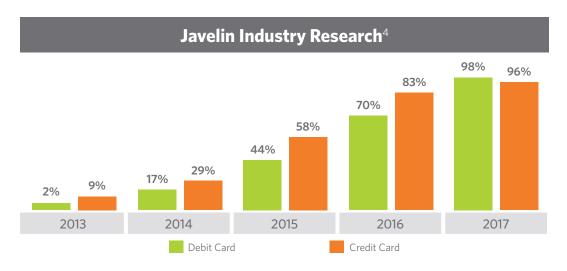
Financial institutions that delay EMV conversion of their credit and debit cards will not only deprive their cardholders of much more comprehensive card security, but will also put them at increased risk. Why? Fraudsters always go to the easiest targets first. Cards with outdated security that are easier to hack or circumvent could be low-hanging fruit for identity theft, credit and debit card thieves.



Multiple studies have validated rapid, near-term conversion to EMV for both debit and credit cards in the U.S.







 $^{^2\} Identity\ Theft\ Resource\ Center\ Breach\ Report\ Hits\ Record\ High\ in\ 2014,\ January\ 12,\ 2015$

 $^{^{3}}$ First Annapolis Industry Research, April 2014

 $^{^{\}rm 4}$ Aite, EMV: Lessons Learned and the U.S. Outlook, June 2014

Of course, it's always easier to break a big project into manageable pieces. A well-organized EMV conversion plan might look something like this:

1 Educate Your Team

Assemble the team

Your organizational structure will determine who needs to be involved, but it will likely include a cross-functional group of those who handle credit and debit portfolios, legal, marketing representatives and a C-level project champion. You'll also want to identify individual contacts to represent your card vendor, service bureau provider, transaction processor and payment brand. Your core provider may also need to be involved. This team will be responsible for the many decisions your institution will make and implement.



- Secure the support of a C-level champion
- Assemble a cross-functional team, including legal, marketing and those who manage credit and debit portfolios
- Identify contacts from card vendor, service bureau provider, transaction process and payment brand
- **✓** Engage your core provider

Define the internal communications strategy

While some inside your organization are living and breathing EMV, many others are completely in the dark about what EMV is and

what's going to be involved in the conversion. It's imperative that you develop an internal communications strategy early because a smooth transition will require the involvement of many employees at multiple levels of the institution – everyone from branch to call center staffers. You will need employee training materials that detail the benefits of EMV, timelines for conversion and card replacement, and how EMV cards are used. Your internal staff must be educated so that they can answer questions from cardholders when the time comes.











Your payment brand — Visa® or MasterCard® — needs to be aware of your conversion plans. Your transaction processor also needs to know you're migrating to EMV. Remember, reaching out to these partners in a timely manner is critical because every financial institution in the country could be attempting migration in a relatively tight timeframe.





Advise transaction processor that you're migrating to EMV

2 Define Your Product

Select from preapproved profiles

There are more than 23 EMV personalization profiles to choose from, some basic and some highly complex. The profile you choose is important because it translates program options — debit, credit, contact, contactless, single or dual interface, online or offline PIN, etc. — into chip data.

Note that your transaction processor is also making decisions about which profiles to support. You'll need to be sure your institution and your processor are on the same page relative to these choices.



- Determine program options, including debit, credit, contact vs. contactless, single or dual interface, online or offline PIN, etc.
- ✓ Select your EMV personalization profile from the 23+ personalization profiles available
- **Work with transaction processor to ensure alignment on profile choices**

Select your chip

Your profile decisions will dictate certain chip choices. However, there are hundreds of different chips from which to choose, each with a different combination of memory size, authentication method and operating system.



- Determine chip memory size, authentication method, operating system, etc.
- **✓** Select chip that meets these criteria

3 Consider Card Design and Arrange Printing

Procure chips

The chips you choose must be procured, pre-personalized, inventoried and embedded in new cards. You will need to coordinate this process with your card vendor.





✓ Coordinate with card vendor

Finalize designs

It's likely your cards will need to be redesigned to accommodate chip placement. Discuss design and branding options with your card vendor and ensure that the vendor has the correct chips available to mill and embed in the card body. Approximate turnaround time for this process ranges from 12 to 20 weeks.

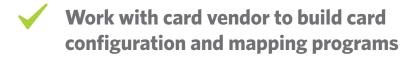


- **✓** Redesign cards to accommodate chip placement
- ✓ Identify branding options
- Ensure card vendor has correct chips available to mill and embed in card body
- ✓ Plan for 12 20 weeks for this process

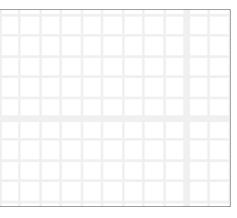
Prepare data

Your card vendor will need to build card configuration and mapping programs. All of the chip data tags must be created and developed to encode chips for each card.









4 Manage Keys

Keys are one of the essential elements of EMV security. Key management is a critical step in EMV conversion, as a whole new set of cryptographic "keys" will be needed to ensure data authentication at the point of sale. Key generation, validation, storage and transfer must be managed based on your institution's needs.



Build a new set of keys to ensure data authentication at point of sale

Manage key generation, validation, storage and transfer

5 Create and Execute Your Communications Plan

Communicate before, during and after issuance

Your conversion will require three distinct communications windows. Prior to card issuance, you will want to focus on awareness, letting cardholders know a change is coming. When the card is issued, you will need to provide information on activation, security benefits and advice about how to use the new chip card. Then, you will want to provide ongoing education about what to expect at the point of sale.

Use multiple channels

A multichannel approach is needed at each communication window and should include statements, ATMs and branches, call center, internet, advertising, social media, email and direct mail. Also prepare and print card carriers, welcome packs, posters, ads and other collateral to support the conversion. Your channel strategy must be thorough. For example, will your call center be prepared to handle increased call volume? Should you provide each branch with a card reader to demonstrate the EMV "leave the card in the reader" technique to account holders?



- Create and execute external communications plans for awareness, conversion and activation, and ongoing education
- Include statements, ATMs, branches, call center, website, advertising, email, social media and direct mail in plan
- Design and print card carriers, welcome packs, posters and other collateral
- **✓** Plan for increased call volume
- ✓ Consider in branch account holder demonstrations and education

6 Test, Print and Go Live

One of the final steps in the EMV migration process is creating test cards and validating with the payment brand and processor that the chips are coded according to their requirements. User acceptance testing follows, with a small number of live cards field-tested for transaction ability and acceptance.

Once testing and validation is complete, it's time to print live, personalized cards and manage their distribution.



- Create test cards
- ✓ Validate with payment brand and transaction processor
- **✓** Conduct user acceptance testing

7 Take a Deep Breath

EMV conversion is a formidable task, with numerous details to coordinate among many different players. But help is available.

Harland Clarke's Chip Complete[™] is a turnkey solution for EMV card issuance that includes all the essential elements – product education and training, chip procurement, card design, manufacturing and fulfillment. We know precisely which questions to ask and can easily guide you through the conversion process. Not only does this relieve you of the logistical burdens, but it also streamlines the process so that you're in the market with your new cards in just 10 to 12 weeks.

For more information about EMV conversion or Chip Complete, call us at **1.800.277.7637**, email **cardservices@harlandclarke.com** or visit **harlandclarke.com/ChipComplete**.

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