



EMV 101: What small businesses need to know

DEMETRIOS MARANTIS, Head of Global Policy and Government Affairs

OWEN JENNINGS, Square Business Team

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October 2015: The Card Switch

Magnetic-stripe



Magnetic-stripe cards are pretty outdated—they've been around since the '60s. And they are run by the same technology you would find in an old cassette tape.



EMV or "Chip"



Now, things are changing in the US. The next generation of credit cards and payment methods are here to ensure secure payments.

What is EMV?

EMV is a global standard for credit and debit card payments, named after its original developers (Europay, MasterCard, and Visa).

The EMV standard requires a chip to be embedded in credit cards. This chip protects buyer data and is very hard to counterfeit.



How is EMV/Chip more secure?

ENCRYPTED

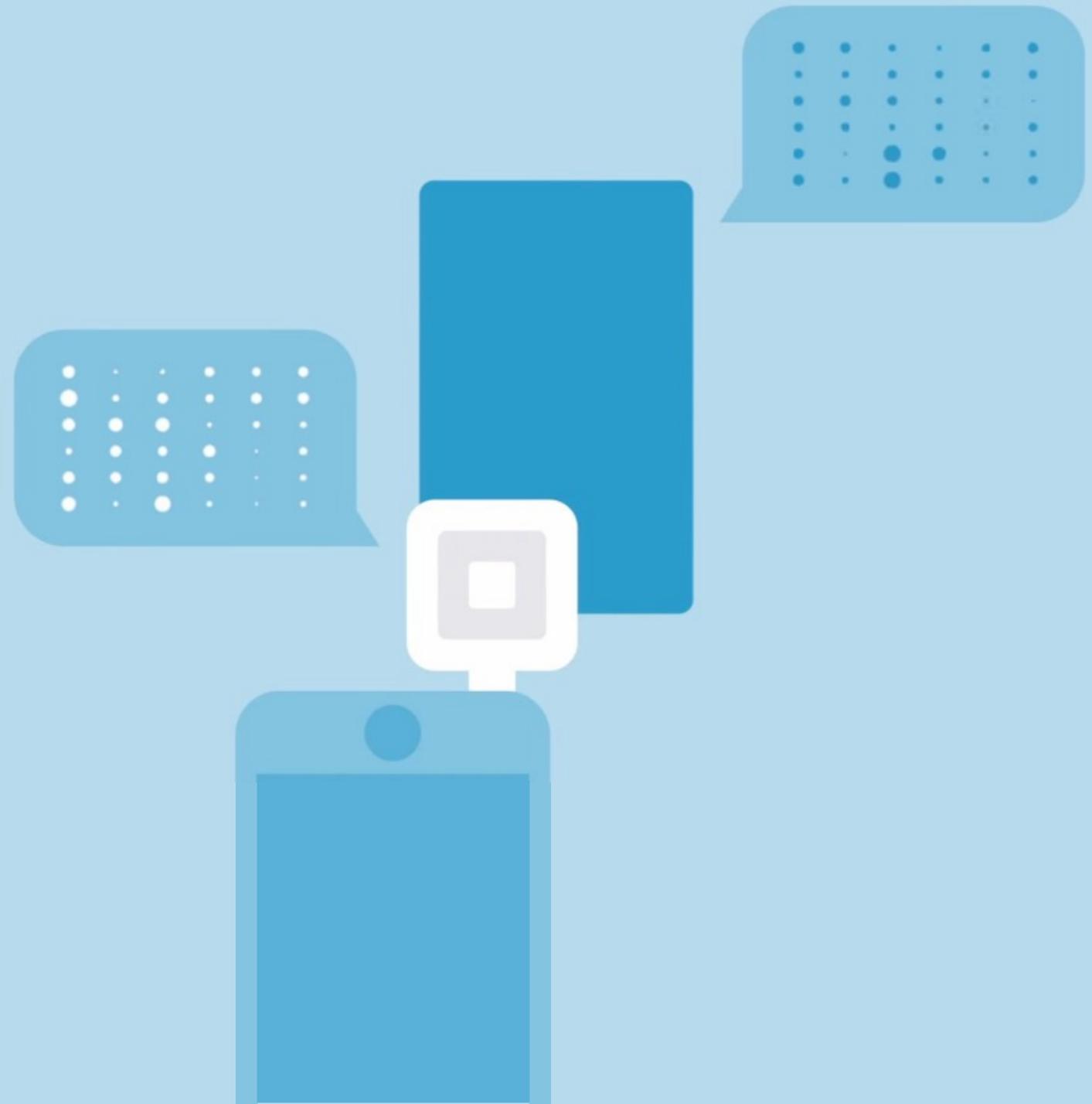
Chip cards are the standard in most parts of the world because they are encrypted, which makes it much harder to counterfeit than their magnetic-stripe predecessors.

HARD TO COPY

While the data on a magnetic stripe is static, the data on chip cards is constantly changing, making it extremely hard for fraudsters to copy it.

SECRET LANGUAGE

When a buyer dips a chip card, the chip card “talks” back and forth with the payment terminal in a secret language to authenticate the transaction.



Who uses EMV?

In most developed economies, EMV has been the norm for years. The United States is among the last major markets to adopt EMV.

This is largely due to the cost of replacing cards and terminals, as well as ingrained consumer behavior in the United States.

Increasingly, more and more buyers will be issued credit cards with EMV chips, and more and more sellers will need to update their payment terminals.

GLOBAL EMV ADOPTION



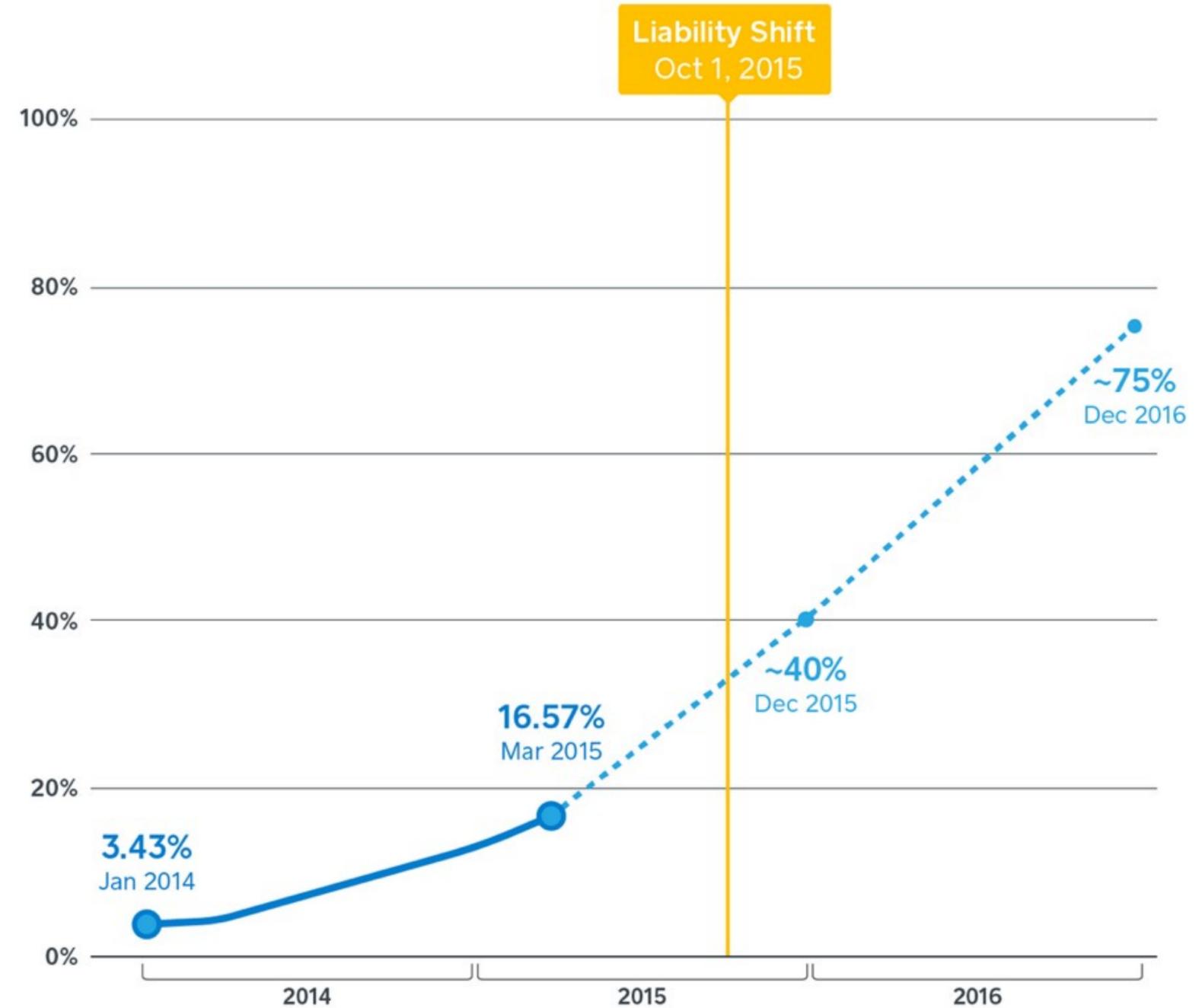
U.S. TO BEGIN ADOPTION IN 2015

When will we see EMV cards in the United States?

We are seeing penetration of chip cards increase quickly.

Currently about 17% of cards being swiped on Square Readers are chip-enabled, and we expect this number to grow to about 40% by the end of the year.

Share of Square Transactions Involving Chip Cards



Currently most transactions involving chip cards use the magnetic stripe on the back. This will change as more and more businesses in the U.S. switch to chip card readers.

Liability Shift to Businesses: What is happening in October?

In order to expedite EMV adoption, the card networks are shifting liability for fraud from banks to businesses on October 1, 2015.

This means, if someone pays with a fraudulent EMV/chip card, and a business can only process magnetic stripe cards, then the business could be liable for that fraudulent charge - a liability that used to be on the banks.

There is no law mandating businesses accept EMV. The liability shift is simply a change in the incentive structure.

<u>TYPE OF SALE</u>	<u>CARD PRESENT COUNTERFEIT FRAUD LIABILITY</u>
Chip card at mag stripe terminal	Any liability for counterfeit fraud will be passed onto merchants after October 2015.
Chip card at chip terminal	Nothing changes. Same as today. Bank holds liability.
Mag stripe card at chip terminal	Nothing changes. Same as today. Bank holds liability.
Mag stripe card at mag stripe terminal	Nothing changes. Same as today. Bank holds liability.
Keyed-in transactions	Nothing changes. Same as today. Bank holds liability.

What does the liability shift mean for small businesses?

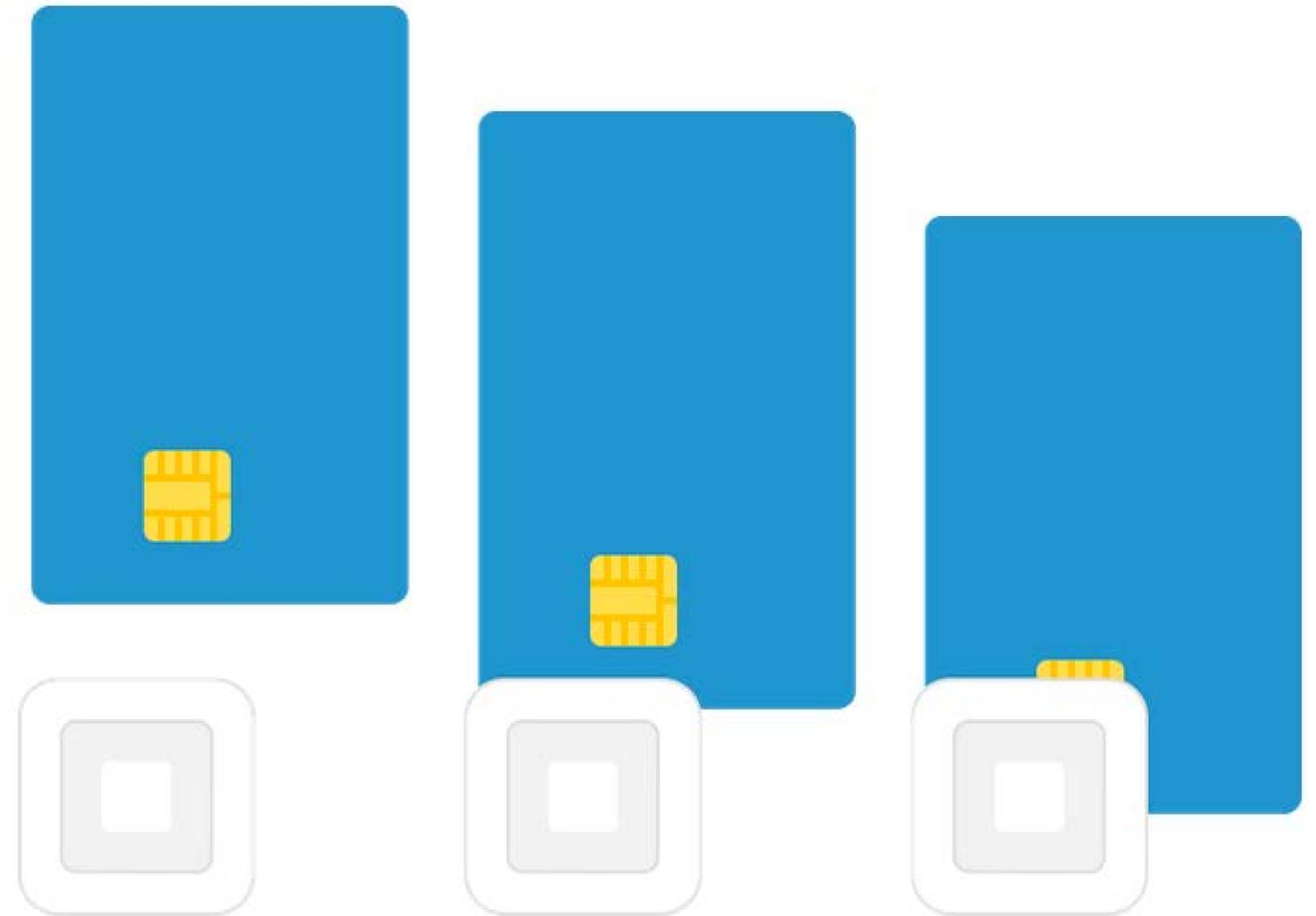
NEW READER

To ensure your business is fully protected from all EMV-related fraud liability, it must upgrade to an EMV-compatible terminal so that you can accept chip cards.

DIP VS. SWIPE

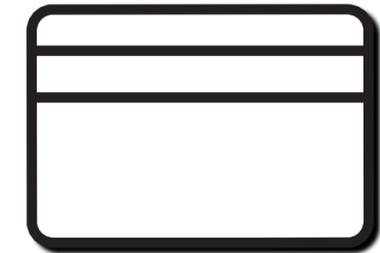
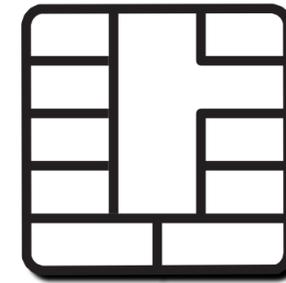
Instead of swiping a card, chip cards are inserted or dipped into the reader and left in place for the entire sale.

EMV transactions typically take a few seconds longer than magnetic stripe transactions as encrypted data is securely sent back and forth between reader and card.



What about other payment types?

Customers are expecting to be able to pay in more and more ways. Tender types are in various stages of adoption including not only EMV (chip) cards, but also mobile wallets incorporating NFC or “contactless” technology (e.g., Apple Pay, Samsung Pay, Android Pay, etc.).



How does NFC / Contactless work?

SPEED

Contactless (NFC) payments are significantly faster than other forms of payment such as EMV or good old-fashioned cash. For businesses that value line speed, increased NFC adoption in the US is exciting.

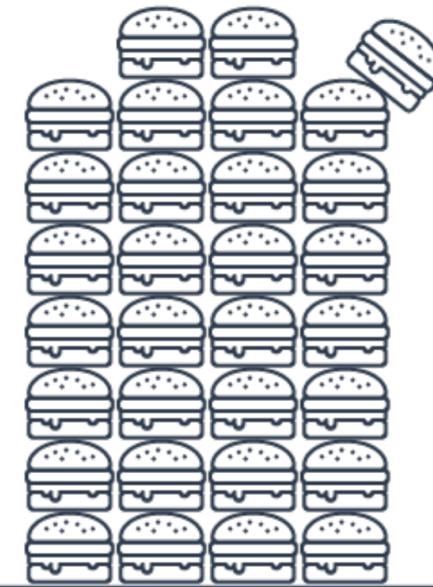
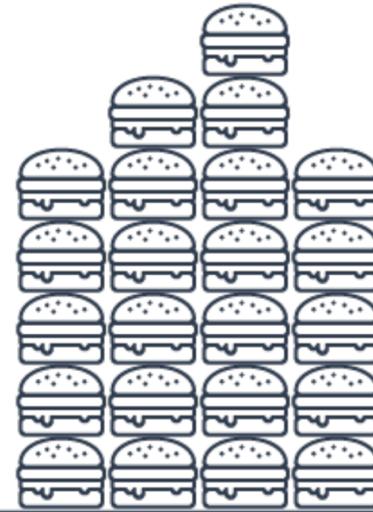
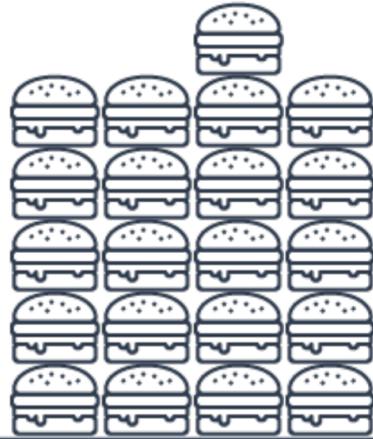
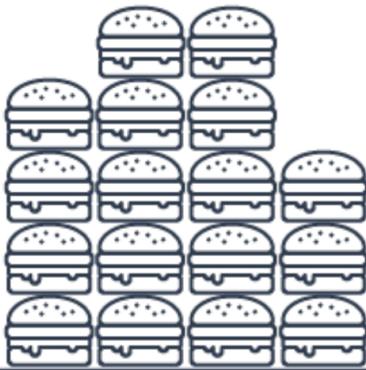
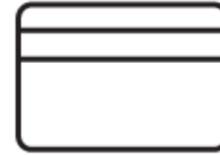
CONVENIENCE

We are moving toward a world where buyers can leave their wallets at home. All they need to do is tap their phone or watch at checkout to pay for goods or services.

SECURITY

Contactless payments are very secure. The technology uses dynamic tokens for post-transaction security, and some types use fingerprint technology to verify that a buyer is who she says she is.

Payment types vary in speed and security



Chip cards

Transactions are super secure because the data on chip cards is constantly changing, making them extremely hard to counterfeit. Secure, but slow.

Paper cash

Fast, but clumsy. Paper cash is dirty, can be counterfeited, and doesn't help you stay connected to your customers. And sometimes waiting for your change can take a while.

Magstripe cards

Faster transactions, but higher fraud rates. Swiping a magstripe card is quick, but magnetic stripes are easier to skim and counterfeit.

Contactless

Fast, secure, and convenient —with contactless you could securely sell more per hour than any other payment type.

Key Takeaways

- 1) Card switch from magnetic stripe to EMV.
- 2) Liability shift in October.
- 3) Alternative forms of payments are here.
- 4) The SBA and Square are here to help.

Q&A



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