



SPA global smart payment card 2014 shipments

A unique set of data based on SPA Members' actual volume sales

Brian Russell, SPA Representative, February 2015





01.

SPA's role in shaping the future of payment



- ▶ 2014: The year of EMV in the US
 - 185 million smart payment cards shipped by SPA Members in the US

- ▶ EMV is a truly established, global secure & interoperable infrastructure
 - More than 1.5 billion smart payment cards shipped by SPA Members globally

- ▶ Contactless technology still growing in 2014
 - Over 600 million contactless payment cards shipped by SPA Members globally

- ▶ Move towards ever more secure ways to pay
 - DDA represents 70% of SPA' shipments



Who we are

The Smart Payment Association addresses the challenges of today's evolving payment ecosystem. We offer leadership and expert guidance to help members and their financial institution customers realize the opportunities of smart, secure and personalized payment systems and services - both now and in the future.

Since 2004

Members:



What we do

- ▶ The SPA works in partnership with global standards bodies, its own vendor community, and an expanding ecosystem of established and emerging brands; offering an ever-growing portfolio of advisory and support services.



Fig 1
Extending advisory and support across the evolving community, the SPA is addressing today's challenges and shaping the future direction of payment technologies, standards and business models.

How we do it



- ▶ Providing a comprehensive portfolio of consulting, marketing and advocacy services
 - An ever-growing library of expert technical resources and thought leadership collaterals to shape the future of payment
 - The market's most accurate barometer of payment trends – annual analysis based on actual manufacturer data
- ▶ Defending member interests from a regulatory perspective, while addressing issues of standardization, certification and security to drive the technologies and business models that are shaping the future of payment.
 - Engagement in industry bodies and standardization organizations across the world – offering guidance on best practices, providing the 'vendor' perspective and ensuring regulatory initiatives are beneficial to the efficiency of the ecosystem
- ▶ Opening to encompass a rapidly evolving and broad payments community addressing new verticals and geographies
 - Controlled expansion of membership – consolidating its influence on the payment issuing value chain and extending its support to a new generation of internet-based secure payment solutions and service providers.

Our workgroups program

Business Workgroups

Market Monitoring

- Quarterly market monitoring based on members actual volume sales data

Quality & Manufacturing

- Addressing issues facing Members and defend their interests from a regulatory perspective

Retail

- Addressing the challenges of today's digital retail environment and accelerate the adoption of new retail payments technologies and solutions based on the Secure Element working closely with retailers

eCommerce

- Based on the Secure Element, addressing the technical, commercial and regulatory issues needed to support the development of fully secure online payment options working closely with a new generation of internet-based secure payment solutions and service providers.

US Chapter

- Complimenting and extending the work already done by organizations such as SCA and EMV Migration Forum to extend best practice and accelerate EMV migration

Technical Workgroups

Specifications

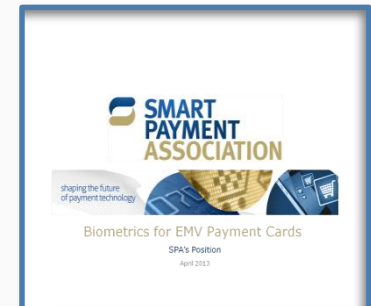
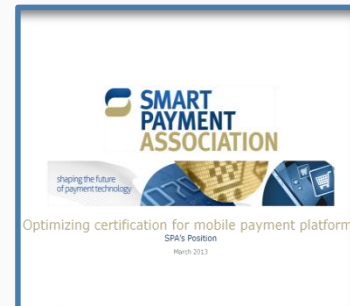
- Providing guidance and acting as the main interface between SPA and regulatory/standardization bodies ie. EMVCo, EPC-CSG, PCI, ISO etc.

Certification

- Supporting the development of effective mobile payment certifications in collaboration with international organizations ie. GSMA

▶ **NEW! How we will be paying in 2020**

- ▶ Tokenization
- ▶ Cloud versus Card
- ▶ Biometrics for financial services
- ▶ Instant Issuance
- ▶ UICC Application Lifecycle Management
- ▶ Software to Chip Fallback Solution
- ▶ Security Certification for Mobile Platforms
- ▶ Security for Mobile Payments
- ▶ PIN by SMS
- ▶ Private Label Payment Solutions
- ▶ Business Continuity in the Payment Card Issuance Industry



Download at
www.smartpaymentassociation.com

SPA & its members in the US

- ▶ **SPA US Chapter** – to complement the work done by SCA and EMV Migration Forum

- ▶ **Smart Card Alliance**
(<http://www.smartcardalliance.org/>)

- ▶ **EMV Migration Forum** (<http://www.emv-connection.com/>)

- ▶ **ISO:**

- Smart cards, electronic authentication, biometrics, middleware / collaboration with NIST(ISO JTC 1)
- Mobile payments / collaboration with major US Banks & Federal Reserve (ISO TC 68)

- ▶ **EMVCo and PCI-** Member to contribute expertise in digital security for the development of the next generation of specifications responding to the new security challenges raised by omni-channel retail payment systems and new payment technologies offered by new market stakeholders.

**tamper-resistant hardware, personal, portable device to execute payments, i.e. ID-1 card contact or contactless, SE (SIM/UICC)*



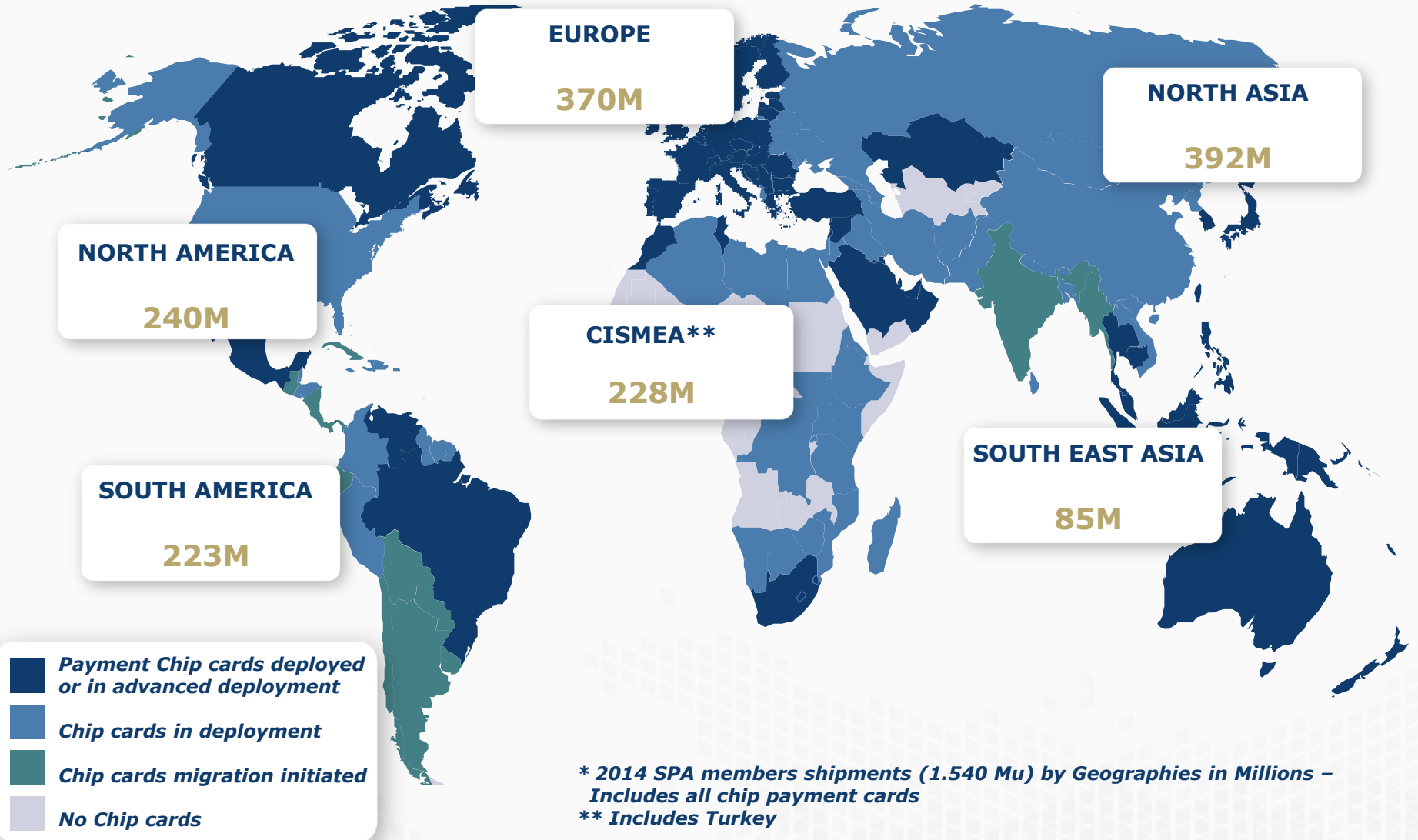


03.

SPA global smart payment card shipments 2014



SPA shipments > 1.5 Billion units in 2014*

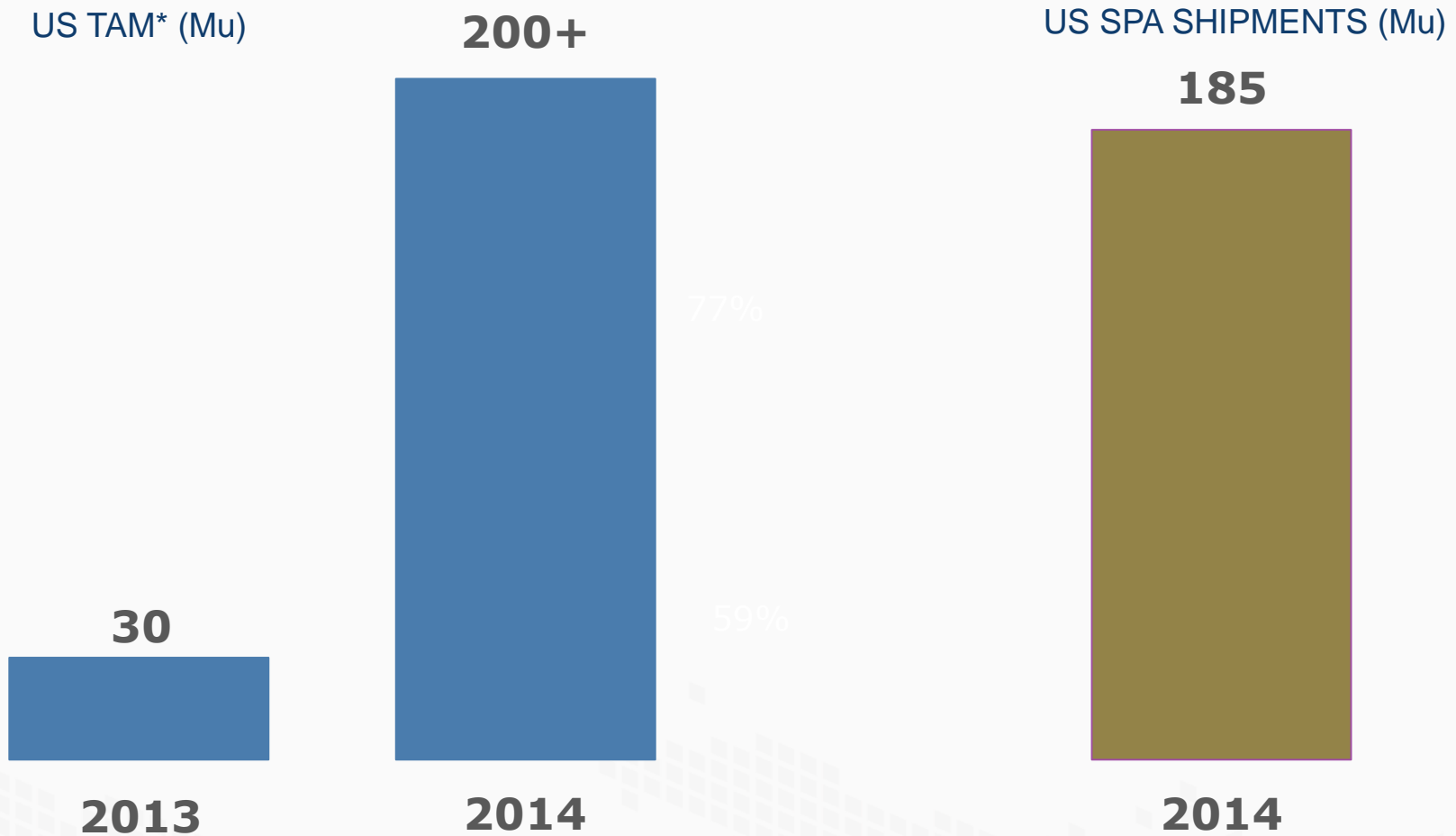


US is now surfing the wave

- ▶ EMV migration started in 2013
- ▶ Mindshift ignited among issuers and consumers, with a sense of 'urgency' , boosted by
 - ▶ Data breaches: an EMV enabled ecosystem would have been less attractive for fraudsters
 - ▶ 2015 Liability shift: MasterCard and Visa reiterated that they would not push back October 2015 counterfeit liability shift deadlines
 - ▶ Common AID solution facilitating domestic debit networks migration
 - ▶ Fear of competitive disadvantage by turning too late
- ▶ Translating now into concrete migration plans, and the first mass volume issuance

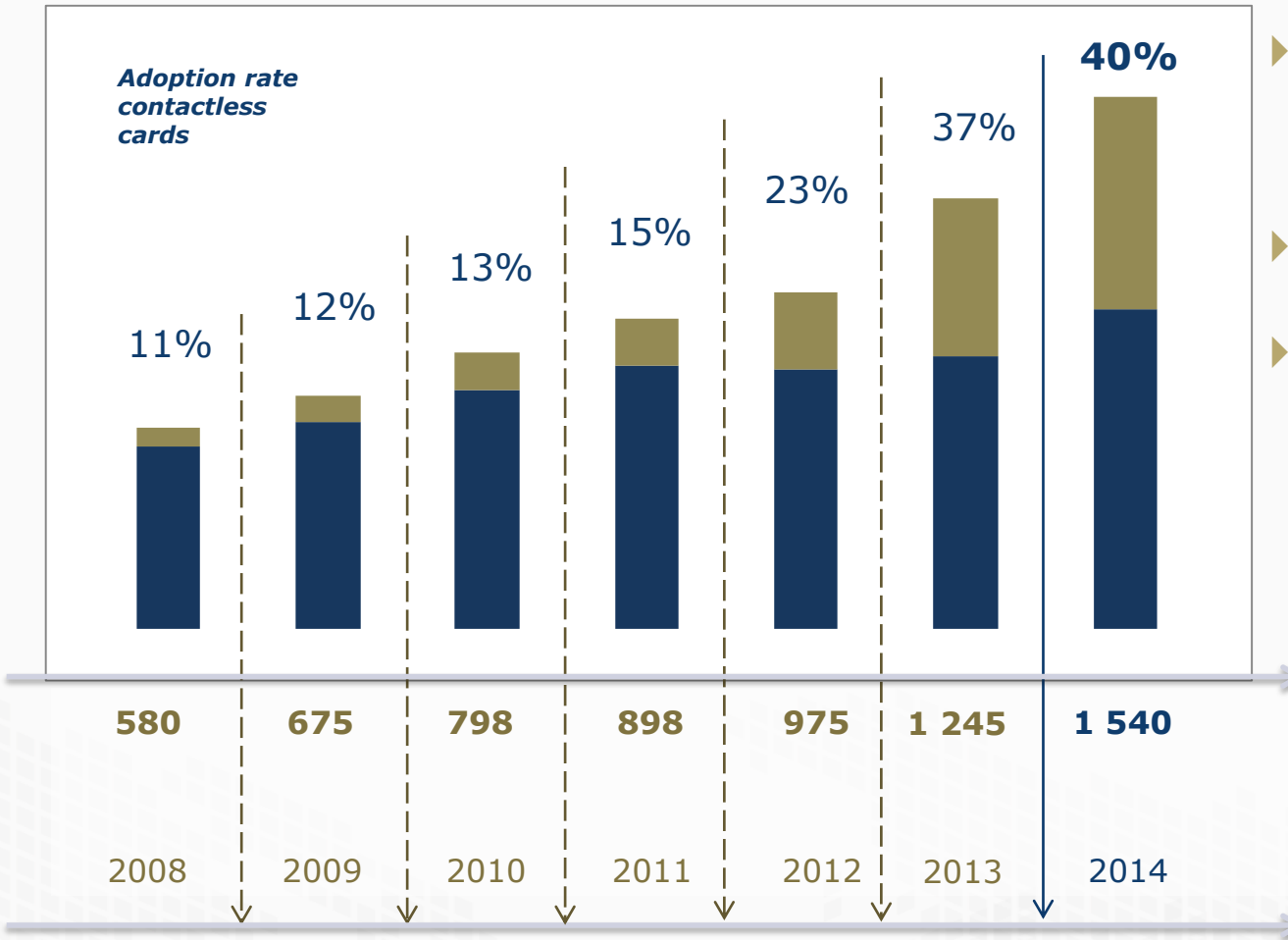


US smart payment card market from tens of millions to hundreds of millions



**Estimation*

Contactless migration continues following rapid ramp up in 2012 & 2013

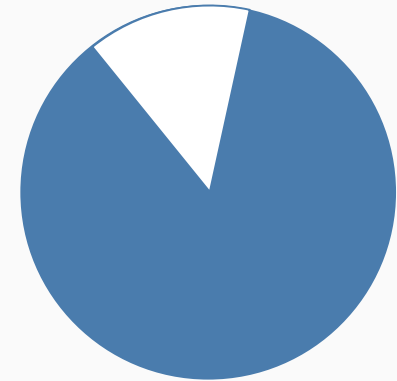


- ▶ Contactless technology = 40% share of smart payment card shipments
- ▶ +35% YoY growth
- ▶ Driven by Asia & Europe

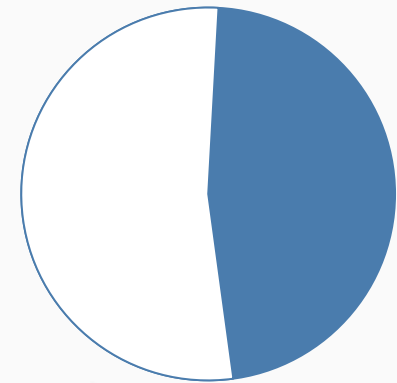


Contactless in the US

- ▶ US is starting migration
- ▶ Many challenges remain
- ▶ But mobile payment development is paving the way for contactless



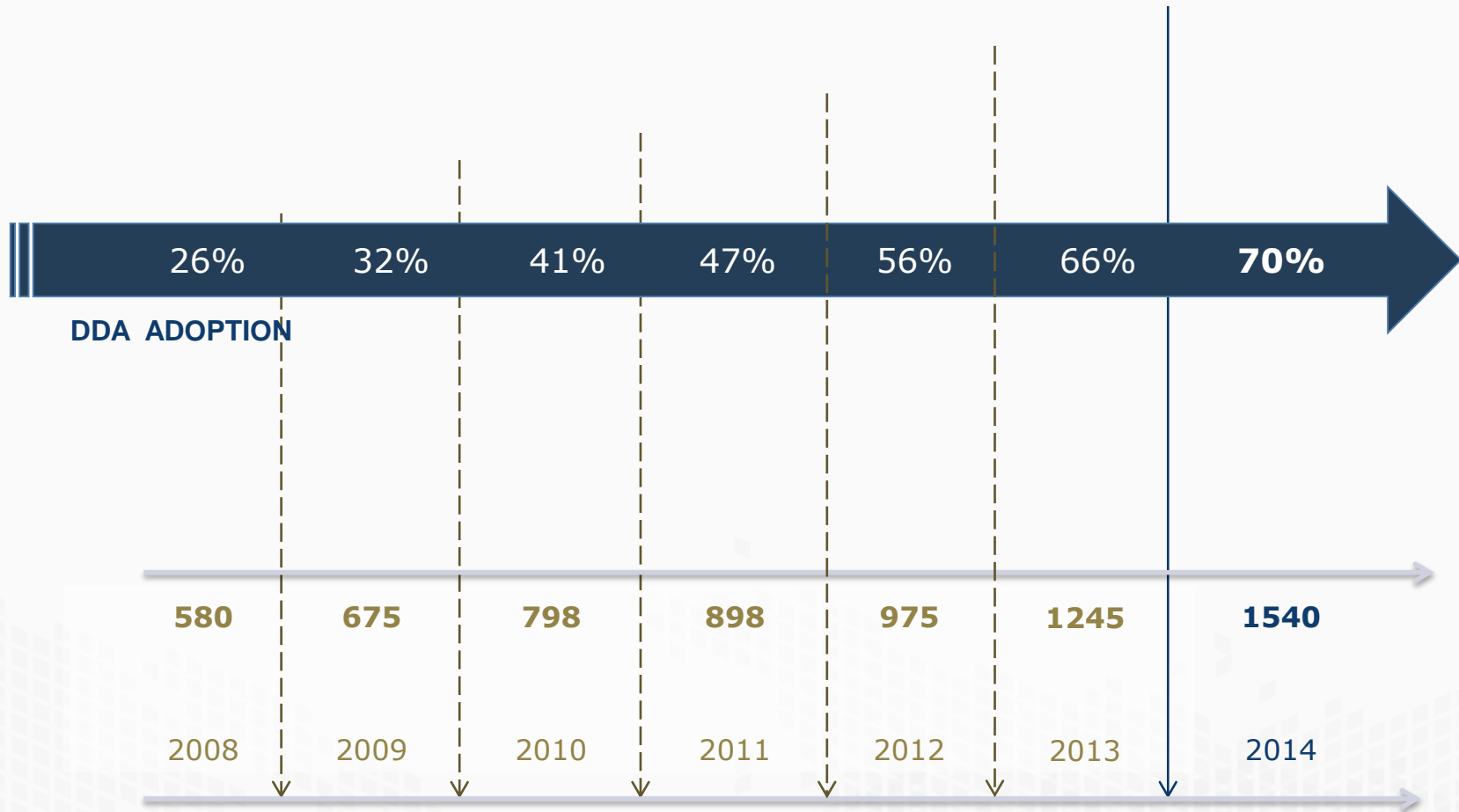
US



**REST OF
WORLD**

DDA cards reached 70% of shipments

- ▶ DDA Growth in 2014: +30%
- ▶ Supported by Europe, Asia, CISMEA and North America



04.

Take away





Take away

- ▶ 2014 is the year of EMV in the US – from tens to millions
 - 185 million smart payment cards delivered by SPA Members
 - TAM* above 200 million

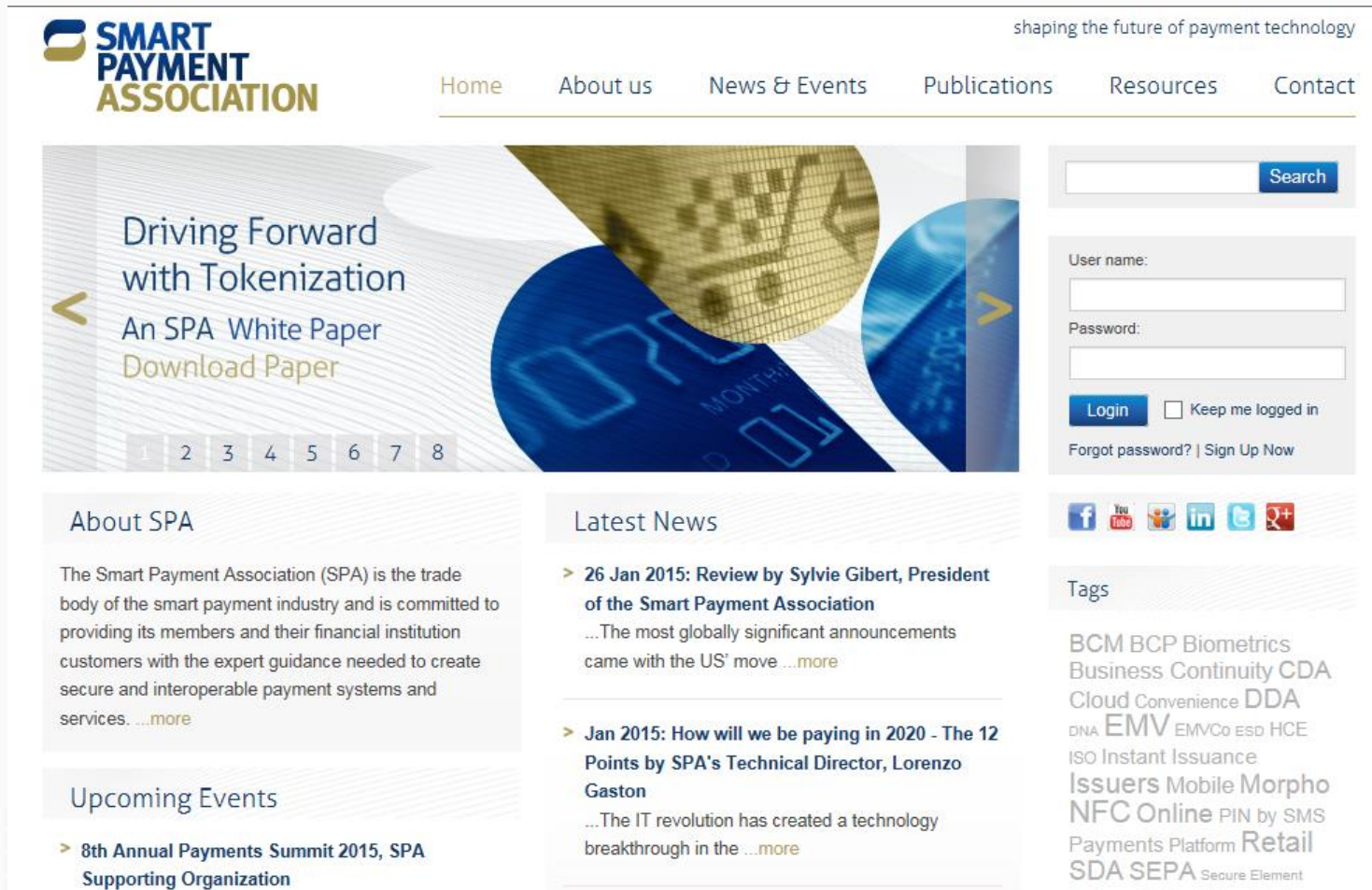
- ▶ EMV is a truly established, global secure & interoperable infrastructure
 - SPA smart payment card shipments exceeded 1.5 billion in 2014
 - TAM* above 2 billion globally

- ▶ Contactless technology continues to grow in 2014 – with over 600 million contactless cards delivered by SPA members – US is at the beginning of the migration process

- ▶ Move towards ever more secure ways to pay
 - DDA represents 70% of shipments globally



*Estimation



The screenshot shows the homepage of the Smart Payment Association website. At the top left is the SPA logo. To its right is the tagline "shaping the future of payment technology". A navigation menu includes links for Home, About us, News & Events, Publications, Resources, and Contact. A large banner features a white paper titled "Driving Forward with Tokenization: An SPA White Paper" with a "Download Paper" button. Below the banner is a numbered list of items 1 through 8. On the right side, there is a search bar and a login section with fields for "User name:" and "Password:", a "Login" button, and a "Keep me logged in" checkbox. Below the login section are social media icons for Facebook, YouTube, LinkedIn, and Twitter. A "Tags" section lists various payment-related terms such as BCM, BCP, Biometrics, Business Continuity, CDA, Cloud Convenience, DDA, DNA, EMV, EMVCo, ESD, HCE, ISO, Instant Issuance, Issuers, Mobile, Morpho, NFC, Online, PIN by SMS, Payments Platform, Retail, SDA, and SEPA.

Contact: info@smartpaymentassociation.com

Thank You

www.smartpaymentassociation.com



05.

Appendix





SPA Market Data Monitoring Process

- ▶ The figures in this presentation are actual shipments published by SPA.
- ▶ Actual shipments data, segmented by region and by interface, are sent on a quarterly basis by SPA members to an independent third party.
- ▶ There is no direct exchange of data between SPA members. Consistent with SPA's practices for the exchange of historical data, the third party aggregates and anonymizes the data so that no SPA member is able to identify another SPA member's contribution.
- ▶ The data is published on an annual basis, at the end of the first quarter of the following year.
- ▶ Once a year, total market estimates by region are also sent by SPA members to this independent third party to evaluate TAM (Total Available Market).



Comparing Market Figures

▶ Cards in circulation / installed card base:

- Cards in circulation means that all cards that have been issued in the current/covered year as well as all previously issued cards that are still valid are taken into account.
- Card validity differs across markets, typically between 2 to 5 years.

▶ Total Available Market (TAM):

- Only cards issued in the current/covered year are counted (new cards, replacement cards, re-issued cards) – This number is estimated by SPA.

▶ Actual Shipments:

- Actual shipments data, segmented by region and by interface, are sent on a quarterly basis by SPA members to an independent third party who aggregates and anonymizes the data so that no SPA member is able to identify another SPA member's contribution.

▶ Differences in card types counted

- EMVCo reports on EMV payment cards only
- Other reports may include local/domestic schemes and other non EMVCo member payment chip cards.

Source	2011*	2012*	2013**	Growth
EMVCo Cards in Circulation	1,340	1,549	2368	53%
SPA Estimated TAM	1,036	1,166	1,548	33%
SPA Actual Shipments	898	975	1244	28%

**In million units*

*** Union Pay in EMVCo since 2013*