



A competitive market for interoperable mobile wallets

March 2015– Lorenzo Gaston, Technical Director, SPA



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.

Business Workgroups

Market Monitoring

Contracts

Retail

eCommerce

US Chapter

Technical Workgroups

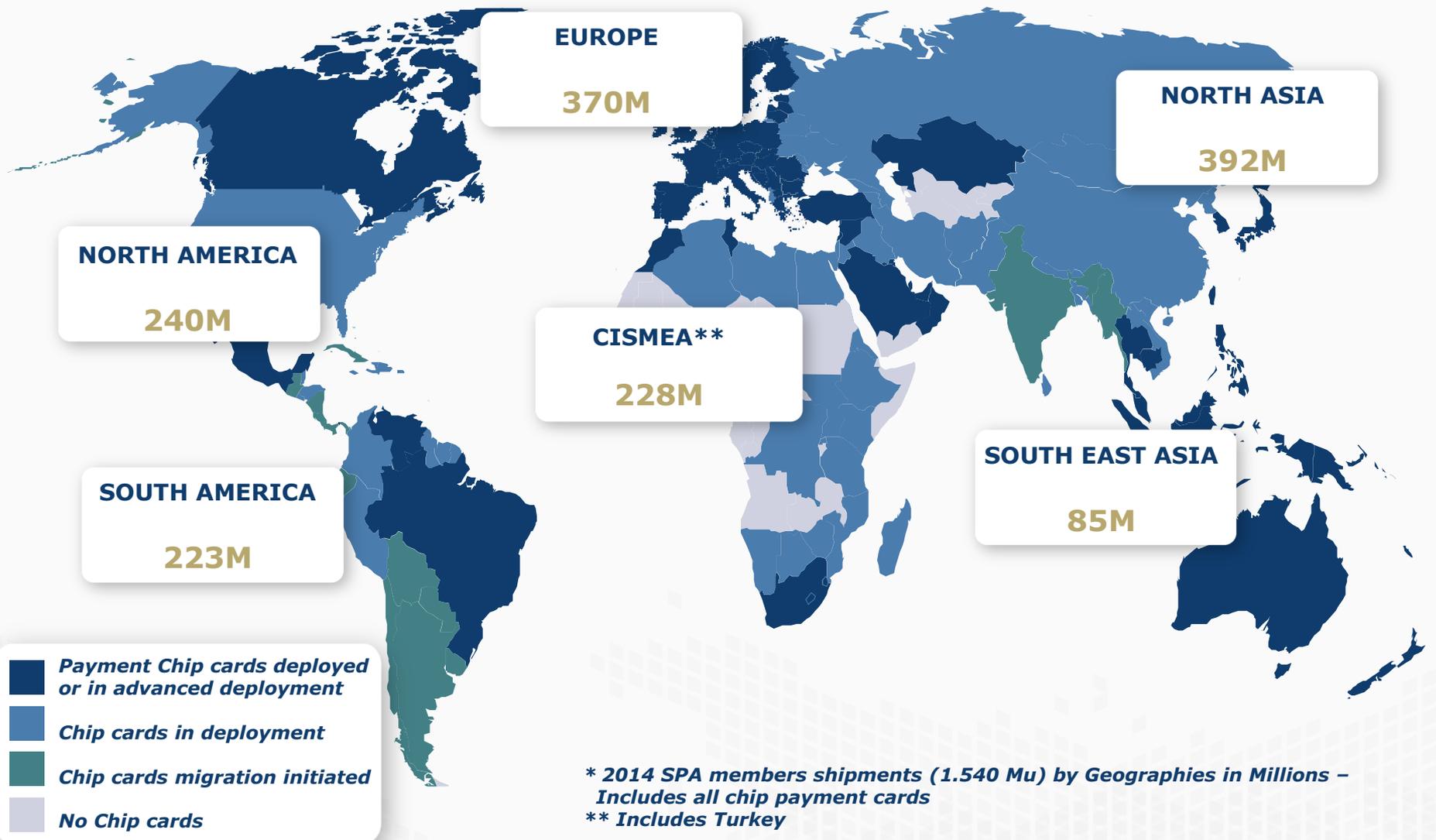
Specifications

Certification

Quality &
Manufacturing

Security

SPA shipments > 1.5 Billion units in 2014*



* 2014 SPA members shipments (1.540 Mu) by Geographies in Millions – Includes all chip payment cards

** Includes Turkey

- ▶ NEW! A COMPETITIVE MARKET FOR INTEROPERABLE MOBILE WALLETS
- ▶ 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



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A competitive market for interoperable mobile wallets

The case for Secure Element implementation

Lorenzo Gaston, SPA Technical Director, March 2015



Why a hard competition for Wallet market?

- ▶ Surveys show that consumers **not yet entirely comfortable** paying with mobiles
- ▶ ... But surveys also prove that **most consumers** are willing to leave physical wallets at home for a **mobile alternative**
- ▶ Mobile Wallets are a **hot topic** in financial services and February was a big month for wallets
- ▶ **All major stakeholders** in a play to dominate the market, capture consumer hearts and minds, and garner widespread retailer acceptance
- ▶ In the last **2 years continuous announcements** of wallets to watch followed by commercial death proclaiming
- ▶ This highly **market fragmentation** will continue until users (if ever ?) decide which business model will dominate the market
- ▶ It matters **to understand** the disruptive potential of the mobile wallet and how to make this potential a concrete market reality

1. The Mobile Wallet is more than a new payment financial service

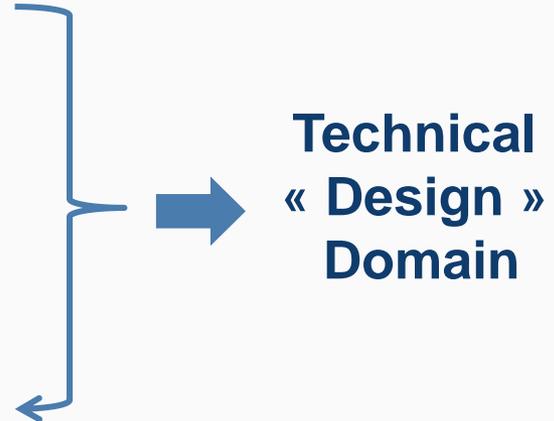
- ▶ Wallets enable to manage **different mobile payment instruments** resident locally or on a remote server - alongside their own personal credentials
- ▶ The combination of these functionalities is an **enabler for a cluster** of mobile financial services covering the day-to-day needs of any consumer
- ▶ Wallets facilitate **financial disintermediation** and new business agreements with a risk for traditional payment players to be left out of the payment loop
- ▶ Potential **strong value proposition for the consumer**: improve shopping experience by the delivery of just-in-time commercial offers ...
- ▶ ... and **value proposition for the retailer**:
 - The consumer provide personal information with high marketing value
 - They might take over the primary relationship with consumers
- ▶ Yet wallets must be **properly designed and marketed**

2. Eight rules for an ideal Mobile Wallet

- ▶ Ease of use and **convenience**
- ▶ Support « **universal** » **acceptance**
- ▶ **Strong authentication** capabilities
- ▶ **Transferability** over another mobile device

+

- ▶ Deliver evident **advantages** for the payer
- ▶ Benefits and **rewards** linked to their use
- ▶ A high level of **protection** for users
- ▶ Offering a **cost** advantage for merchants



3. Mobile Wallet: the case for Secure Element implementation

- ▶ Main factor limiting consumer adoption of mobile payments is **lack of trust**
- ▶ Mobile Wallet access should be protected by an **authentication hardware** device under the direct control of the customer
- ▶ The SPA has always advocated **extending the card security model** to other acceptance contexts like the mobile
- ▶ Mobile Wallet is best protected if stored in a Secure Element which **emulates a multi-applicative card** in the mobile device accessed through NFC
- ▶ Wallet would benefit from the interoperable infrastructure for the remote management of the Secure Element content, **using TSM**
- ▶ Utilizing a SE implementation ensures that the Mobile Wallet will benefit from
 - (1) the **security** and management capabilities of the Secure Element, and
 - (2) of the user interface and wireless **multi-channel connectivity** of the mobile device

4. Marketing strategies to boost Mobile Wallet adoption

- ▶ Mobile Wallets present multiple opportunities for **creation of revenue streams**
- ▶ To create a large core of loyal users you must **incentive adoption** first
 - Designing the 'ideal' wallet isn't necessarily a guarantee of success
- ▶ Mobile Wallet issuers are in a position **to collect big data** on the consumption and payment habits of users
- ▶ The diversity of complex skills to run a wallet is a significant investment so the **need to share costs** is a major incentive to cooperate
- ▶ Governance rules backing the business model must clearly set out the **rights and responsibilities of different members** of the wallet program
- ▶ **Diversify** business risks: different alliances could be assessed
- ▶ The plethora of wallet platforms currently on the market – each featuring their own **non-interoperable functionalities** – is hampering consumer adoption

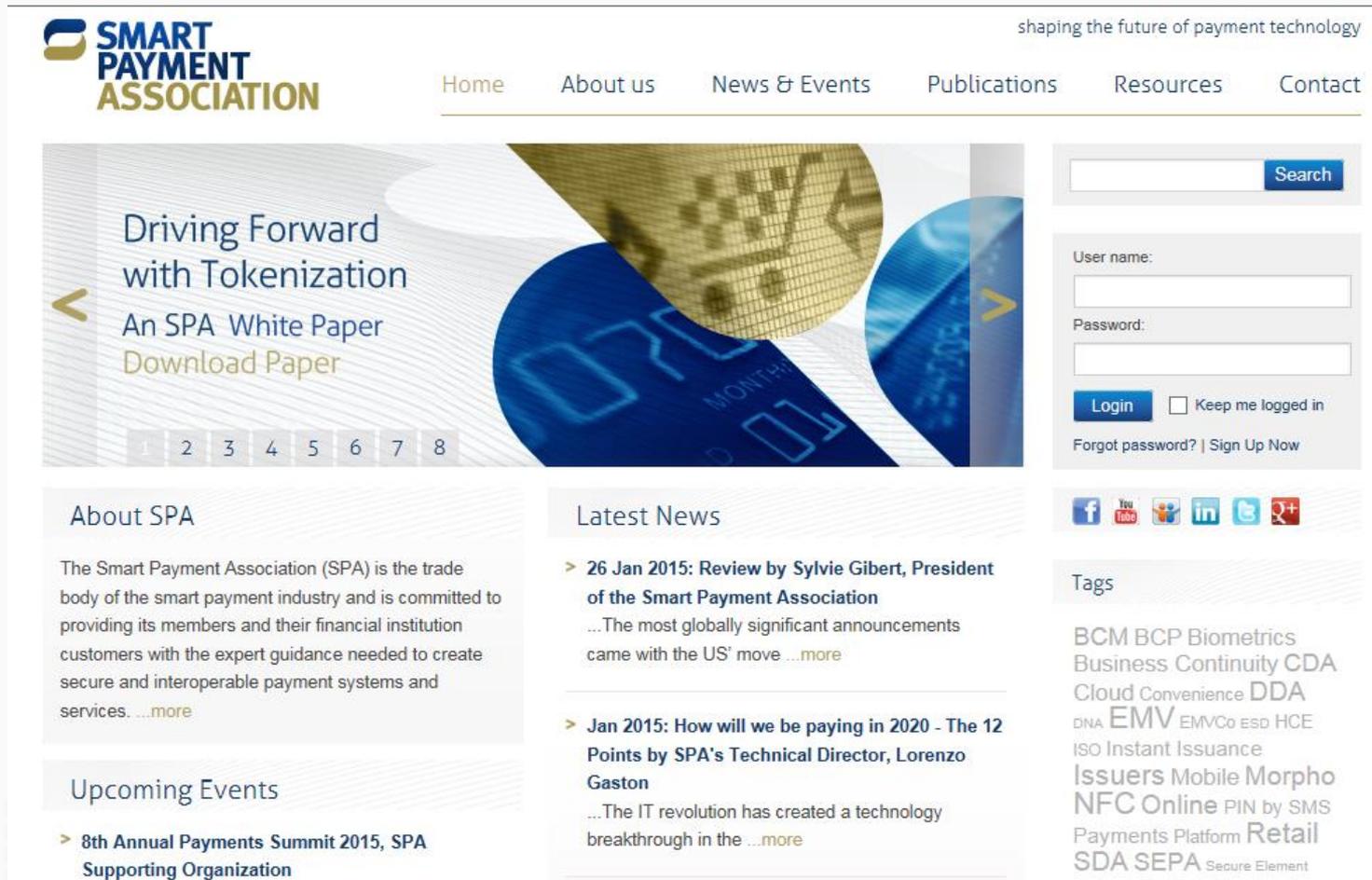
5. Is a standard necessary to boost mobile wallet adoption?

- ▶ A key point to debate is whether a **standardization** initiative might help adoption and to overcome market fragmentation
- ▶ Could **pave the way for interoperability** which in turn would fuel mass consumer and merchant acceptance
- ▶ Creating viable business models for mobile financial services is challenging and **minimizing the investment** required is a key business requirement
- ▶ To establish roles, a minimum set of additional functionalities, define **security and data protection** requirements elaborating on existing specifications
- ▶ This standard which could cover both the **interoperable access and the life cycle management** of Mobile Wallets
- ▶ **Reducing complexity and cost** for all parties within the Mobile Wallet ecosystem

Take Away

- ▶ The Wallet Ecosystem should target **consumer peace of mind in terms of security**
- ▶ Surveys show that consumers tend to trust Wallets **associated with their bank**
- ▶ Merchants have a triple- incentive to create a Wallet alternative : lower acceptance costs, control of their customer & transaction data and **drive loyalty to them**
- ▶ The challenge is **ignition**: how to convince the consumer to pay with a merchant Mobile Wallets instead of a smart card
- ▶ Banks and merchants joining forces in **cobranded Wallets** is also an option
- ▶ Lack of a clear winner, **market fragmentation** will make all Wallet scheme losers
- ▶ **Standardization** could provide a solution to excessive market fragmentation backing multiple business models and harmonizing a high level of security





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 8 items. 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. At the bottom left of the screenshot, the contact information "Contact: info@smartpaymentassociation.com" is displayed.

Contact: info@smartpaymentassociation.com