# **TOKENIZED SERVICES FACTORY**

## **Mobile Services Providers**



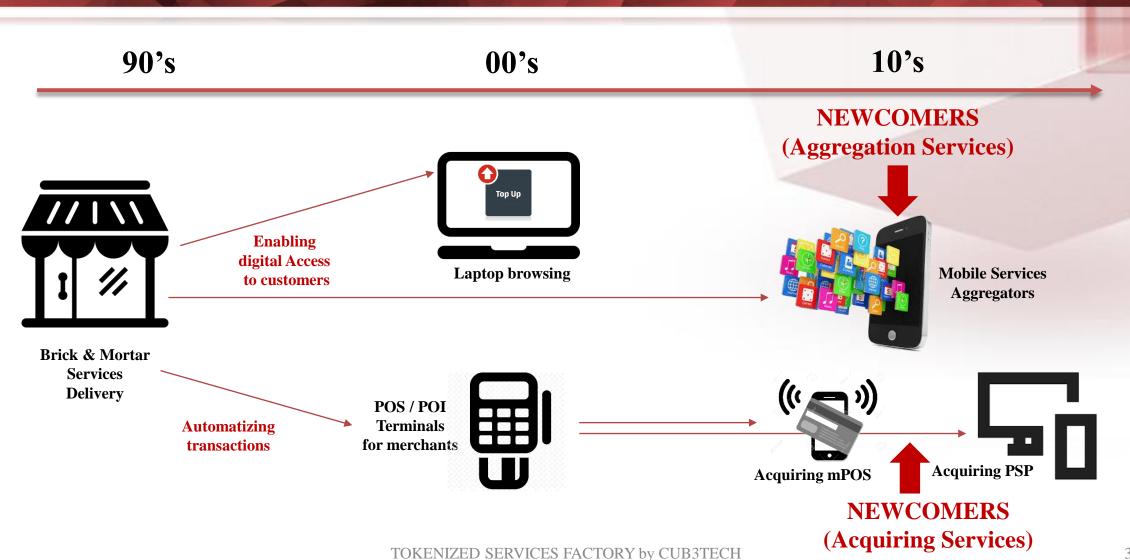
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### Mega-trends in providing Services

#### All the players are now impacted by the "Mobility" wave !

- Services Providers have been aggregating services starting in physical shops (90's)
  - From the Top-up (air time) for Telecom operators, passing by Bills payments and Benefits distribution, till money transfers & remittances,
  - Then giving access to their customers remotely, developing internet sites and *lately mobile Applications*,
  - And focusing on electronic terminals (handheld POS) for automatization of their local services,
  - Sometimes taking the *opportunity of acquiring* some payment transactions ...
- Becoming *Mobile Services Providers*, they are facing newcomers (*m-Aggregators*)
  - Which have developed new segments (Youth, un-Banked ...) based on a full-smartphone strategy,
  - From classical ubiquitous services (Airtime top-up, Bill payment, Benefits delivery...),
  - To Peer-to-Peer payments becoming popular way of payment in certain countries,
  - And also taking the *opportunity of acquiring* some payment transactions ...

#### Mega-trends in providing Services



### Challenges & Opportunities

#### For Mobile Services Providers time has come for an acceleration

- Their *Challenge* is to find a profitable second wave to surf on:
  - *Differentiation* is becoming key as the entry barriers are getting very low for new entrants
  - Monetization of *prime services* is needed, because basic services don't leave margins anymore
  - Multi-channel has become the norm and this includes ... the brick & mortar option !
- *Opportunities* multiply as they can leverage their presence on mobile devices:
  - Enabling their current mobile APPs as payment cards, in front of contactless-enabled POS
  - Proposing mPOS to new categories of merchants and acquire their transactions (cards or wallets)
  - But also offering new services for digital-Commerce with state-of-the-art security (*Mobile Present*)
  - And differentiating services: Card on File, embedding payments in *digital Journeys* (APPs, Social)

### Four generic initiatives for Mobile Services Providers

#### 1. Project: Brick & Mortar usage of mobile Wallet

- Objective is to leverage the growing number of contactless-ready terminals across the world
- Based on HCE-NFC standards from EMVCo, alternatively QR-Codes
- Universality of reading (*no friction nor pre-enrolment*) makes that initiative decisive
- 2. Project: Digital Commerce secured by mobile device presence
  - Objective is to extend activities in the field of e-Commerce, *bringing EMVCo-grade security*
  - Based on a button (Websites), or an extension of the browser (without friction of pre-enrolment)
  - The e-merchant website interfaces with the user-wallet which will create and use dynamic credentials
- 3. Project: Mobile Acquiring for new channels
  - Objective is to acquire transactions in new situations/use-cases, with highest grade security
  - Based on mPOS (Android device for *allowing new economics*) and NFC/QR interface protocols
- 4. Project: Embedding secure payment in digital business flows
  - Objective is to embed in digital business flows easy and swift payment steps, secured by dynamic credentials

### Embedded enabling technologies

#### **1.** Tokenization platform

- Fundamental technology to create and manage dynamic payment credentials
- To stay « future proof », exists one component (Token Requestor) for interfacing with the platforms of the « International Payment Schemes » (VTS, MDES...)
- 2. *Mobile SDK* for enabling any mobile APP downloaded by the user, as her own tool for requesting dynamic payment credentials
  - The ecosystem is becoming "user-centric", dynamic and mobile
  - Mobile APPs which integrate the SDK could belong to any entity (mobile SP, Issuer, 3rd party)

#### 3. Enrolment & Provisioning components

- Payment cards photo capture, or NFC, or APIs
- Integration with de-centralized personalization systems of payment credentials

## 1/ Brick & Mortar usage of mobile Wallet



Payphone in Ecuador by Produbanco

- Mobility is the main access for your audience
- Enlarging to brick & mortar is painful, because of required merchants pre-enrolment but needed for your global presence
- HCE payment is a way to access immediately all POS terminals, Contactless enabled
- This could be NFC air interface, or QR code
- Adding couponing, loyalty schemes, all the API's of your mobile App' ecosystem

## You can extend usage immediately with HCE-NFC

- CUB3 is providing you with an easy to integrate SDK, managing all mobile
  Payment applications (Visa, Mastercard, CPA, Pure and propietary closed-loop)
- CUB3 services platform will take care of ID&V (registering the payment cards), life cycle management of mobile App' and tokens
- Integration with TSP's from international schemes (VTS, MDES) or fully owned



Shopping in brick & mortar merchants

## 2/ Digital Commerce secured by mobile device presence



Digital Commerce is plagued by Hacking

- All issuers are experiencing steep growth of fraudulent e-Commerce transactions
- Acquirers and e-Merchants are looking for frictionless solutions to avoid drop-offs while going through the payment process
- Security counter-measures implemented by Issuers (3D-Secure) are creating cumbersome procedures and results in drop-off's
- Other solutions could be expensive (e.g. additional devices to deploy or displayable CVV2)

### You can bolt on-line payments with dynamic credentials

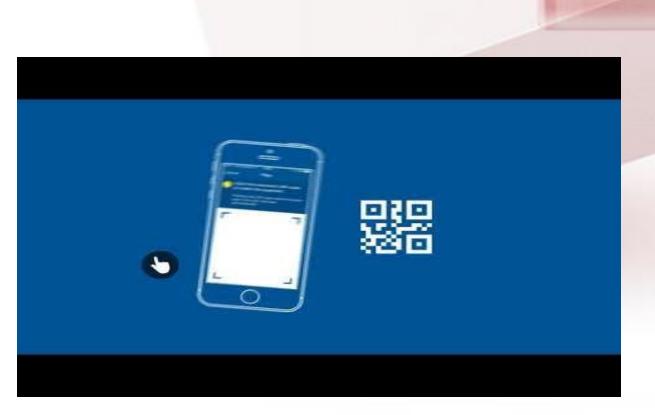
- Security in digital Commerce reaching *at last* EMVCo standard (Cryptograms grade)
- Consumers are in the driver seat, with the platform/device of choice: their smartphone!
- Integration in the eco-system is smooth, gradual, with loose or tight integrations
- « Mobile Present » allows flexibility in negotiation with all stakeholders (Payment Schemes, processors ...)



Unique experience for Digital Commerce

## 3/ Mobile acquiring for new channels

- Mobile Service Providers are taking all the opportunities of replacing traditional acquirers in new use-cases
- QR Codes are ubiquitous and became a convenient user interface
- The usage of Android-based devices revolutionizes the economics of these transactions
- To make sure the overall process is safe, implementation of tokenization



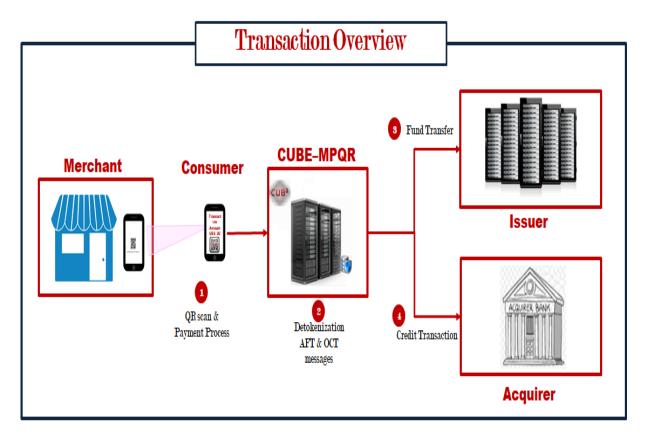
Merchants presenting QR codes to be scanned

#### mPOS for QR Code-based proximity Transactions

CUB3TECH solution is based on *three options of flows* ; these flows allow the use of tokens to extract funds from a customer account improving the user experience by using QR codes to generate these tokens

- CUB3 MPQR  $\rightarrow$  The merchant is presenting the QR on the mPOS screen
- CUB3 CPQR  $\rightarrow$  The user is presenting the QR for capturing by mPOS
- CUB3 MCPQR  $\rightarrow$  Both merchant and consumer are presenting QR's

## Example: CUB3 mPOS – MPQR



- The merchant presents the QR code which contains the details of the transaction (merchant, amount, etc.); the customer selects the payment option and scans the QR
- The wallet generates a transaction message to the CUB3 platform, performs detokenization and generates 2 messages:
  - Request for transfer of funds (FT) that will be sent to the issuer
  - Credit transaction for the processor which will deposit to trade

## 4/ Embedding secure payment in digital business flows



Solutions for mobile Business Flows

- Payment flows are now embedded in « digital journeys » provided by mobile applications:
  - Invoices/Bills presentment
  - Parking reservation and settlement ...
- The payment step must be secure but also nondisruptive, frictionless with appropriate notifications
- Service Providers are looking for seamless integration of payment flows, granting security, choice & control for the consumers

#### You can request « on-the-fly » tokens in your business Flows

- Streamline billing payment process (invoices generation, delivery, settlement)
- Leverage "push" payments approach to reduce risk and increase security
- Reduce payment credentials exposure (debit, credit, account numbers, card on file practices)
- Reduce billing companies, acquirers, processors, issuers overheads (administration)
- Solution is designed for easy integration in CUB3 Wallet SDK



Embedding Payment in business flows

#### Roadmap for Mobile Services Providers



#### Conclusion – Take Aways

- All Mobile Services Providers, either with a long story of adapting their offers, either as newcomers, need to deploy *differentiated and innovative services*
- A typology of initiatives are emerging which bring *higher-value transactions* to their current bundle (Payment in digital journeys, e-Commerce, payment in shops ...)
- The good news is that all these initiatives are enabled and secured by a technology which generates and processes dynamic credentials : *Tokenization*
- By leveraging a transversal platform of Tokenization and by designing solutions which are "*mobile-user-centric*", Mobile Services Providers can build a solid, longterm and differentiated bundles of Services (" Mobile Present")

# **MOBILE PRESENT TRANSACTIONS !**



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