Mobile Operator Perspectives

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Mobile Operator Perspectives

Stakeholder Priorities

- Link: <u>Stakeholder Priorities: Mobile Operators</u>

Operator Activities in 2015

- Remote Payments and One-click checkout
- Identity and Authentication
- Value Added Services and Carrier Billing

New and Future Work

- Tokenisation, hardware elements, authentication

Realities and Ideas

- Guidelines, worthwhile work.

Note

GSMA represents the interests of Mobile Operators worldwide.

IPR is protected by FRAND.

Cannot explain what individual operators are doing, but can ask them to share this with W3C groups later.

Operator Activities in 2015

Remote Payments

Description: Paying for something away from the POS or through a system that does not require interaction with a POS

Operators as part of the remote payment chain

- **Operators:** customer-operator relationship, relationships with merchant acquirers
- **Consumers:** greater security and more widely accepted payments
- **Merchants / Acquirers:** greater number of transactions.

Update

- Operators moving to an authentication role.

One-click checkout

Description: order items (in store or remote) with one click

- Device based solution using assurances from mobile operator.
- **Requirements:** user must previously completed on-boarding
- **Recognised Issues:** regulations may may this globally impossible

Update

- Operators moving away from this.

Value Added Services

Description: tie-ins related to purchase items and services. Coupons, loyalty cards, frequent visitor card.

- Wallet based, successful with some operators.

Update

- Operators moving away from this.

Carrier Billing

Description: Paying for items and services through the mobile operator bill.

- Some operators working on this
- Not interoperable
- Not widely used

Update

- Some operators see a need for this
- APIs needed: authentication
- Operator APIs

Operators as Authentication Providers

Identity and Authentication

Description: Transaction Authentication for Remote Payments

- All payments will become remote, but online interchange fees are high
- Tokenisation can change this
- New Identity methods: identity verification and access
- Identity providers can provide authentication for remote payments

Needs

Tokenisation, Attribute Checking, Anonymity.

Identity Standards

OpenID Foundation, IETF, FIDO

- Mobile Connect standardised through OpenID Foundation
- SIM can be used, tokenisation preferred.

TSM, TSE, Hardware Elements

TSM, TSE, Hardware Elements

TSM

- Not as popular now
- Apple version named "Token Requester"
- Operators and banks had some difficulty integrating systems.

Hardware Element

- Operators support hardware element
- Can be a secure domain for storage
- Apple store tokens in hardware on the device.

Trusted Execution Environment (TEE)

- About 2 years away
- Many payments stakeholders interested in this.

Realities and Conclusions

Realities

User Wants

- Users will continue to want to pay with different forms of payment (credit card, bank transfer, pre-payment, pay by bill, etc.)
- Cash transaction will decrease

Payment Devices

- Users will want to pay with a variety of devices
- Mobile device is only one of these.

Identities

Users will use different identities for different purposes.

Conclusions

Tokens, Remote Payments, Identity, Trusted Execution Environments.

- Tokenisation is happening, Operator may or may not be in the token chain
- Handsets will be intrumental in providing "challenges"
- TEEs will come soon.

Requirements for the Web

- Tokens: storing, sending, receiving
- Supporting FIDO style "challenges"
- Enforcing HTTPS
- Simplification: payment provider and merchant onboarding and user enrollment.

Other Ideas

- Guideline Documents
- Regulation Guidelines.

Let's Discuss!

Items to Discuss

- Requirements for standards including Tokenisation

- What requirements were missed?

- Identity and Authentication

- Other operator requirements in the room.