Using Open Standards and Mobile Payment Technology to Help People with Disabilities and Senior Citizens

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A typical example of evolution: ‘The fare media’...

• Transit issued:
  • Metal tokens
  • Single use tickets
  • Cash
  • Magstripe cards
  • Reusable cards
  • Chip cards
  • Contactless cards

• Bring your own media!

Bigger changes are coming...
Fare media can help people with disabilities and seniors!

Mobile devices:
- 2D-barcode tickets
- Near Field Communication (NFC)

Wearables with different form factors:
- Near Field Communication (NFC) or RFID technology
- Alternative to smart cards
- NFC Chips embedded in different wearables – wristbands, key fobs, smart watches, rings, etc.
Wearables have been launched in the U.S.

LA Metro – TAP wearables
• Flex wrist bands
• Stretch wrist bands
• Mini keychain fob

Port Authority of Allegheny County
• ConnectBand
How to make fare payment easy and convenient?

A trip planner offers different transportation options:
- Identify any accessible needs
- Choose route based on preferences

Agnostic fare media:
- Mobile phones, wearables, etc.

Convenient locations to purchase or reload:
- Mobile phones, online, retail network, TVMs, etc.
- Social services, elderly housing, health care clinics, drugstores, etc.

Account-based ticketing (ABT) System:
- Allow riders to set up accounts, register fare media, purchase/reload, etc.
- Fare transactions are processed at the Central ABT system
Moving away from the station-centric historical approach

- New sales and distribution channels – from your mobile devices, online or retail network
- From card-centric to account-centric – Account-based ticketing system
- Pay-as-you-go, tap-in / tap-out
- Open loop payment – Contactless EMV bankcards
- Mobile phones
- Host Card Emulation (HCE) – virtual smart card stored in NFC smartphones

How does this fit in the travelers’ world?
Today’s consumer world

Shouldn’t this apply to transport too?
The industry’s focus is changing...

- From fare media-centric
  - (Security, Speed, Cost)
- To ‘mobility services’-centric...

Journey planning + Contextual mobility + Ease of transaction + Personalized services

...Linking all these together
How can transit agencies adjust to traveler expectations?

**Consumer**

Anticipate and plan for migration
  - Infrastructure
  - Service delivery

Travel local, think global!
  - Endorse, leverage & drive delivery of globalized, seamless services

Build upon open trusted standards to secure investment
**Benefits of open standards**

In a world without standards:

- Products might not work as expected or be of inferior quality.
- Products might be incompatible with other equipment or may not even connect with them.
- Non-standardized products may be dangerous.
- Customers would be restricted to one manufacturer or supplier.
- Manufacturers would be obliged to invent their own individual solutions with limited opportunities to compete with others.

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**Interoperability of services**

- **Legal protections**: Gov policies & legislations, liabilities, privacy compliance, patents protections
- **Safety & reliability**: Quality, performance of service, certification compliance
- **Sustainability**: Training & education, consulting support
- **Business benefits**: Access to global markets, economy of scale, increase competition, innovation
- **Consumer choice**: Standards provide a greater variety of accessible products to consumers

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Why would transport be any different?
What needs to be standardized: ‘The transactional network’

At a minimum:
1. Data structure
2. Transaction related processes
3. Transaction structure
4. Business rule architecture
Conclusion – What would it take to make this happen?

- Transit agencies must join forces to formulate and publish their needs
- It does not need to be technical, nor promote one solution against another
- It needs to gather sufficient transit agency’s support to create a critical mass in the market
- It needs to gather support from existing open standards
- Much can be reused from existing experiments/deployments

- And... a little spark to initiate the boom!

If you share that goal too, why not join the OSPT Alliance to help make it happen?

OSPT Alliance is working to help make this happen
OSPT Alliance in a Nutshell

8 years of investment

~100 member companies

Ecosystem

Specifications

Deployments

250 within 2-3 years

Russia, Brazil, Barcelona, Managua, Cuenca,...

Certification:

21 products | 8 vendors
• It’s been a long journey for mobile ticketing and still not finished...
• Could that have been different?

“Coming together is the beginning.

Keeping together is progress.

Working together is success.”

Henry Ford

But we need you!
Thank you!

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