



Agenda Item 4a

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TO: Clipper® Executive Board

DATE: March 13, 2017

FR: Carol Kuester

RE: Utah Transit Authority (UTA) Fare Payment Program

Background

The Utah Transit Authority (UTA) is the public transportation provider throughout the Wasatch Front of Utah, which includes the greater Salt Lake City metropolitan area. UTA launched an Electronic Fare Collection system (EFC) in 2009 which allows for payment of transit fares with contactless credit/debit cards, student ID cards, electronic passes, and prepaid cards. UTA received the 2009 American Public Transportation Association (APTA) Innovation Award for the EFC system.

UTA offers a prepaid fare card called FAREPAY that can be used to pay fares electronically on any UTA operated transportation, including buses, light rail, and commuter rail. The FAREPAY card has a \$3 issuance fee and can be loaded with up to \$500 of value.

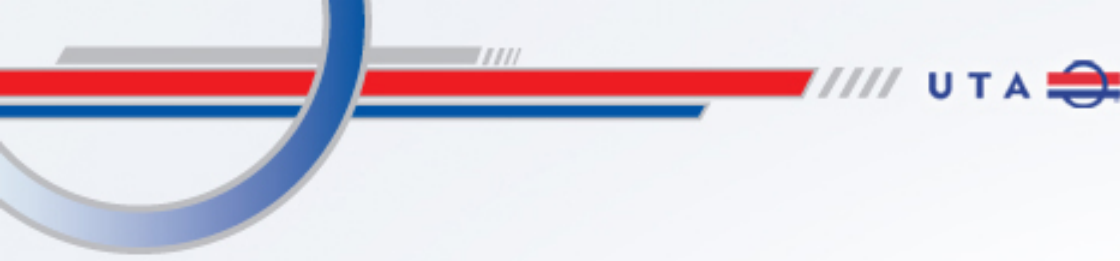
To share their experience and lessons learned with this Board, we have invited Clair Fiet, the Chief Information Officer (CIO) for UTA, here today to present UTA's experience with their fare payment program, and in particular to highlight their experience with an account-based system and open payments.

Clipper® program staff will continue to collaborate with our peers at UTA and other transit fare payment programs, and look forward to updating the Executive Board of any new developments.

Carol Kuester

Attachment:

- Attachment A: Electronic Fare Collection: The UTA Experience
- Attachment B: Riding the rails: Chicago's route to a cardless transit payment system



Electronic Fare Collection The UTA Experience

March 20, 2017

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Attachment A



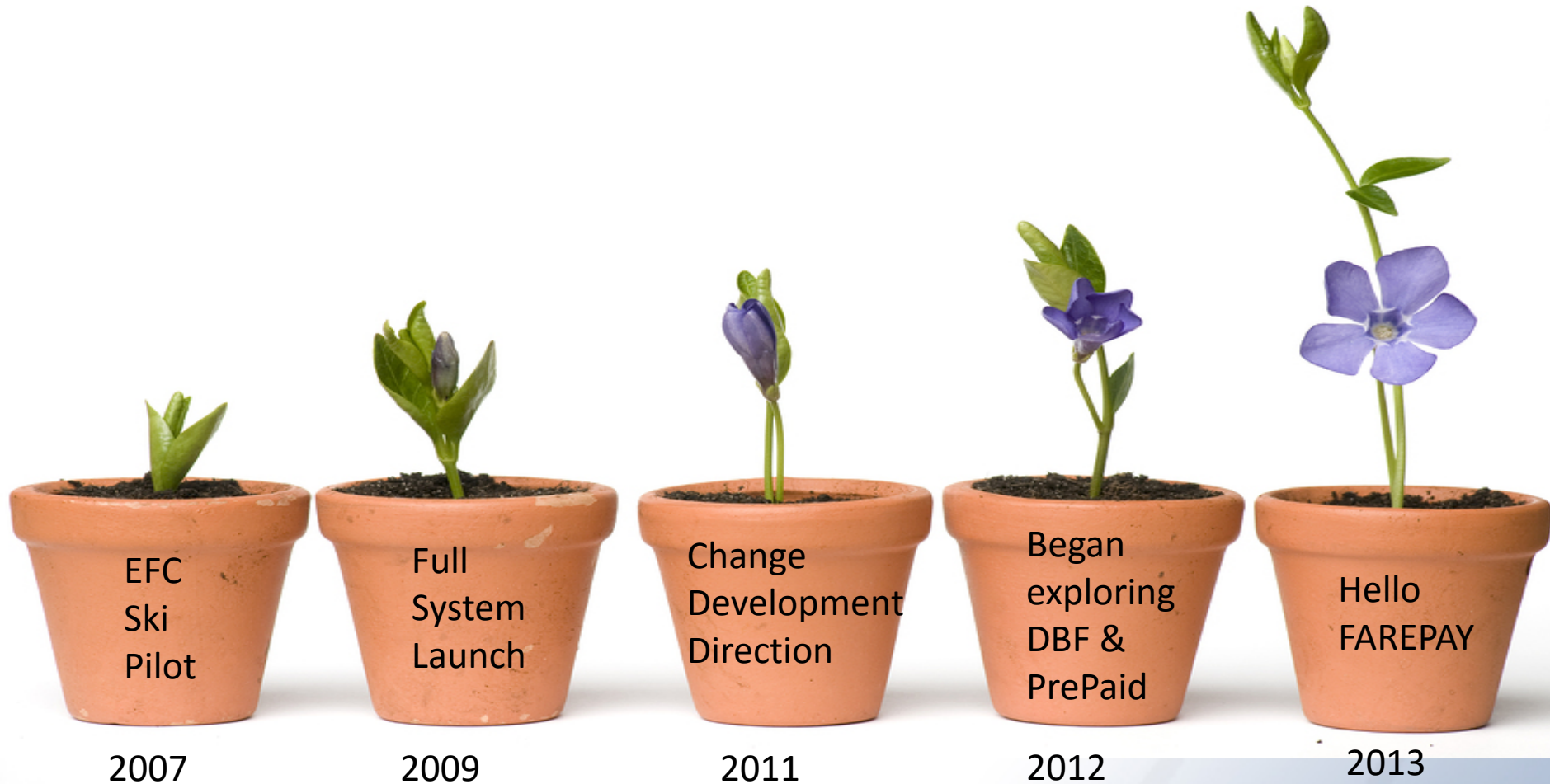
- 520 regular buses, 100% accessible
- 40 ski-service buses
- 117 para-transit vehicles
- TRAX light rail line has 114 vehicles on four lines with 41 stations over 35 miles
- Commuter rail service has 18 locomotives and 53 cars with 16 stations operating over 89 miles
- 45.5 million boardings (2016)

The Appeal of Contactless Credit and Debit (but does it deliver?)

- Others issue payment media
- Automatic interagency interoperability
- Customer service with issuers
- Security standard
- Architecture provides flexibility in product development
- Robustness of open payments ecosystem
- Commoditization of devices
- Potential for pathway to elimination of cash
- Cost
- Co-promotion

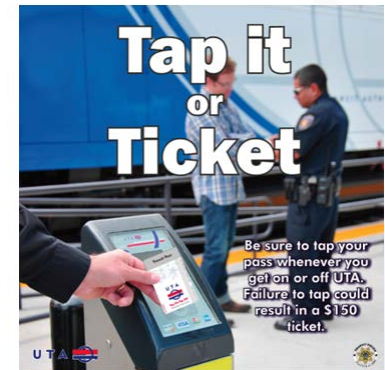


EFC Development Progress



Since 1/1/2009

- Contactless card readers on all buses and at all rail platforms
- 98% red-light accuracy -> EFC hard fare enforcement on bus
- Inspection solution -> hard enforcement of taps on rail
- Most EFC cards are 3rd-party issued cards (EcoPass, EdPass, SkiPass)
- We support open payments – but are still waiting to realize the benefits
- Ridership data is available



UTA FAREPAY Card

- Prepaid
- Closed loop
- Reloadable
- Contactless chip
- Merchant retail network
- Online



Flexibility is the Future

Bank Issued Contactless Cards

- AmEx, VISA, MasterCard, Discover (if they materialize)

Third Party Issued Cards

- Institution Cards
- Agency Cards



Smartphones

- ApplePay, SamsungPay
- Mobile Ticketing – may be the best option

Pre-Paid Cards

- Agency Branded – this solves a specific UTA issue

Lessons Learned

- Know your objectives – stick to them!
- Open Payment easy – Transit not so much
- Open Payments – big promise, not realized yet
- Partnering requires VERY stringent process
- Agency needs to understand risk model
- Consider your patrons' sensitivities
- Give patrons time to adapt before moving on
- Savings don't come until fare type is removed



JUST ONE THING

Questions?



Riding the rails: Chicago's route to a cardless transit payment system

MARCH 1, 2017 BY SUMAN BHATTACHARYYA



The commuter of the future will hold out a smartphone to get on a train or bus without worrying about losing a transit card or lining up to reload. Goodbye tickets, passes and balance inquiries — everything will reside in an app.

The U.S. isn't quite there yet, but South Korean commuters have been able to use Samsung Pay to board buses and trains for over a year. While most mass transit payment systems in the U.S. still use older technology to collect fares, Chicago is getting closer to cardless payments. Chicago's experience shows how a phased transition lets customers adapt while allowing the transit system to absorb technical changes.

"You have to focus on customer and design your system to fit the customer experience," said Sushil Rajendran, Americas central region general manager for Cubic Transportation Systems, the contractor that built the updated fare system for the Chicago Transit Authority.

The transformation of Chicago's transit payment system was a \$500 million undertaking. In 2013, it launched the Ventra card, a digital account-based contactless card for subways and buses. Customers could tap a Ventra card to pay for purchases and use it as a debit card.

In November 2015, the city launched the Ventra app, which allowed riders to buy passes or add credit for bus or subway rides, and purchase mobile tickets for commuter rail. Single-fare trips can currently be paid for through mobile wallets such as Apple Pay, Android Pay and Samsung Pay, and customers may also use contactless credit and debit cards of their own. While the Ventra card value can be added from within the app, the physical card is still currently needed to access transit. The city is now working on a virtual Ventra card that would operate within an NFC-capable smartphone — a shift that would allow transit riders to tap their phones before getting on trains and buses.

Chicago's phased transition let customers catch up with the technology while giving the city's transit infrastructure time to cope.

"If you try to bite everything at once, the supplier can't deliver, and the organization is not likely to be able to handle it either," said Michael DeVitto, who managed payment systems for New York City's MTA for 27 years and is currently chief strategy officer at digital payments startup Waltz. "It gets disruptive if you say, 'On day one, we'll take out the existing card and put in a new system.' In Chicago, they knew Cubic, so their process of layering allowed them not to be so disruptive."

DeVitto said the process of building a new transit fare system is complicated by city contracting processes and technological hurdles, including old fare readers that are difficult and costly to replace.

Many transit companies use several financial institutions to process payments, adding a layer of complexity.

The recipe for Chicago's success required both an immediate fix for a legacy system that would soon no longer be supported and an experienced contractor, DeVitto said. Cubic had the benefit of having worked with Transport for London on its payment modernization efforts.

"They were a partner of Transport for London, and they used a lot of information that they gained from not just the technical side but on the process side," DeVitto said.

For Cubic, accommodating customers using a range of legacy products required marketing efforts, including websites and gate displays.

“We had a divided group [of customers] — we had a large group using paper tickets, some using magnetic stripe cards, and others used smart cards,” said Rajendran.

Despite Chicago’s successes, for most cities, the transition to a modernized fare system won’t be easy. According to John Vasilj, a managing director at Accenture who focuses on transit, contactless cards aren’t catching on quickly and many customers still rely on cash. And while bigger cities may be able to emulate Chicago’s example, a smaller center may not be able to easily attract interest from companies that would build a new fare system.

“Chicago has scale, as there’s a lot of people who are going to use that system, so a system you might buy for Chicago you might not buy for a smaller mid-American city because there’s not the volume of users,” said Simon Laker, vp consulting at Consult Hyperion, a firm that advised Transport for London on its process to allow riders to use contactless cards to pay.

“You can get the big systems integrators interested in Chicago, but they may not be interested in a smaller city — it wouldn’t be commercially viable for them.”

Source: <https://digiday.com/marketing/riding-the-rails-chicagos-route-to-a-cardless-transit-payment-system/>