Top 10 Considerations for Planning Your Next Generation Fare System
Top 10 Considerations for Planning Your Next Generation Fare System

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Agenda

- Introduction
- Platform
- Procurement
- Maintenance
- Closing
Even transit is dominated by tech “buzzwords”

So, to adopt these tech trends, what needs to be in place?
Top 10 considerations represent the next wave in fare systems transformation

1st Transformation
- Systems
- Procurement
- Operations

Next Transformation
- Systems
- Procurement
- Operations

Smart Cards
COMPLEXITY =

Digital
- Platform
- System, Devices, Services
- New skills
1. Platform must provide control and flexibility

- System components- modular, open, flexible non-proprietary
- Ability to select back-end and fare payment devices from different vendors
- Capability to integrate new components from different suppliers over the life of the system
  - As components become obsolete
  - As technology evolves
2. Leading practices prove the use of ERP and COTS software reduces risk

| ERP and COTS software companies have a product development roadmap | New capabilities, i.e., mobil, are developed by the software company | 3. Rating engine support for current and future pricing structure and business rules |

4. Fare payment system vendor should also have a product development roadmap
5. Most importantly, the platform must protect revenue and customer data

- ERP financial modules are designed and proven to NOT lose any transactions or data.
- ERP software companies take care of compliance over time, such as PCI.
- ERP software provides best practices and tools to protect customer data.

A digital fare payment system exponentially increases the data collected on each customer.
How can anyone distinguish one proposer from the other by what’s written in the proposal?

- Procurement structured for buying buses, trains, construction & engineering services
  - “super” detailed specifications
  - Procured at specific intervals
  - Traditional transit consultants for support
- Vendor selection based on traditional methods, “winner take all,” lots of gamesmanship…

6. Total Cost of Ownership primary selection process

7. Proposed solution proven in operations and available for demo

8. A “real” demo of the system will provide a good indication of future performance
Maintaining traditional fare systems performance over the useful life is challenging…

9. Adding new media and maintaining the system with minimal effort and NO major rework of the core

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<th>PROBLEM</th>
<th>IMPLICATION</th>
<th>MITIGATION</th>
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<tr>
<td>Device obsolescence</td>
<td>Expensive and time consuming to replace</td>
<td>Multiple device vendors, COTS devices</td>
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<td>Computer Hardware obsolescence</td>
<td>Continued operation with degrading performance</td>
<td>Adopt modern architecture and</td>
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<td>Software upgrades</td>
<td>Expensive and time consuming operations, non-compliance</td>
<td>Require the use of ERP software for critical operational functions</td>
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<td>Evolving tech skills</td>
<td>Inability to maintain optimal system performance</td>
<td>Add modern tech skills, agencies and consultants</td>
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...agencies are dependent on a single vendor to perform
Next generation fare system is a 10 plus year investment

• Current procurement practices will maintain the status quo
• Open architecture and standards are essential
• Customers will have more ways to pay
• Next gen fare system needs to evolve to new technologies cost effectively with ease

10. Next gen fare system needs to evolve to new technologies cost effectively with ease