



Discussion paper

Open Payments Systems for Connected Customer Centric Transport Services Towards an Open Internet of Mobility

Derek Halden, TravelSpirit Conference Workshop, 26 September 2017

Towards an Open Internet of Mobility

Convenience

- 1.1 Transport users have long sought to be able to buy transport in one purchase to cover all aspects of their end to end journey. Over the past 50 years there have been many attempts to offer users these services, but most have survived for only a short time or in restricted markets. Technology now offers many new possibilities for more widespread joint ticketing approaches. This paper reviews how opening up payment systems could overcome many of the most important barriers to enable seamless payment for transport across all modes of travel.

Networks

- 1.2 More connected payment systems using new technologies need to be as networked as the transport systems themselves. At their simplest level, payment systems can be aggregated and this could be a starting point in some situations. Charges for parking at a railway station aggregated with the train ticket could offer a more convenient ticket. However, the greater potential for added value lies in linking the services to offer combined benefits greater than the separate parts. This paper does not consider these opportunities in detail but notes that the scope of payment systems must be capable of integration across products and services to be able to capture the potential benefits of linking transport with the wider economy.

Business Models

- 1.3 New business models are emerging to provide the integrated offers delivering connected mobility, access to destination planning (e.g. for events and workplaces), mobility as a service (designing mobility packages around customer lifestyles), travel agents, travel planners, and others. This paper does not explore these business models in detail but notes that the payment systems must work as seamlessly with car parking, retail purchases and lift sharing as with bus and rail ticketing.
- 1.4 Transport ticketing remains largely closed with each provider offering a different way of paying. This has stifled integration and opportunity. The internet shows how

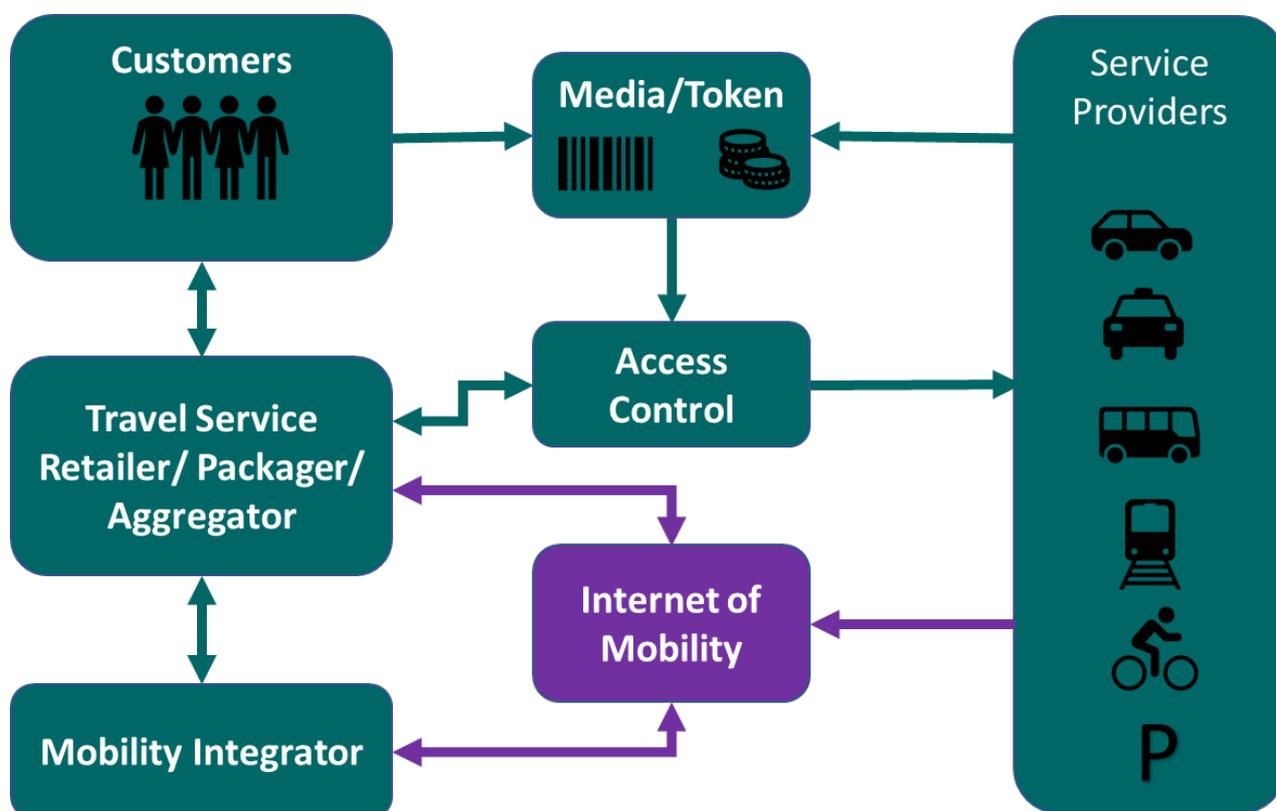
far greater value is achieved when open systems are used when compared with closed technology systems. Open transport payment systems can better:

- Meet passengers' needs
- Make ticketing simple and easy to use
- Attract more customers
- Attract more value to transport systems

The Open Internet of Mobility

1.5 Figure 1 shows the key concepts in an open internet of mobility. This is a practical way to connect the many different payment systems operating across transport so that service providers are able to design and retail more joined up approaches in the future.

Figure 1



Next Steps

1.6 This summary is designed to facilitate discussion within the Travelspirit community. Following the workshop in September 2017 it will be developed into a fuller white paper with a roadmap to open smart ticketing.