# Account Based Ticketing

Join the journey to a cloud-enabled future

FRICTIONLESS 'TAP AND GO' WITH BEST FARE PROMISE

SECURE OPEN PAYMENTS WITH MAJOR CARD SCHEMES

MOBILITY AS A SERVICE (MaaS) ENABLER





www.flowbird.group/transport



## **Account Based Ticketing**

### A paradigm shift for transport operators A great experience for customers

Account Based Ticketing (ABT) provides the pathway to cloud-enabled services for mass transit companies and their customers, and will transform the way people travel across multimodal networks.

At Flowbird, our ABT vision is for a single holistic system leveraging digital technologies to make transport seamless for people and more productive for operators.

Our new ABT platform uses 'tap and go' technology to make travel easier, whether it's rail, bus, metro, ferry or tram... or any combination of mode or operator on the journey from A to B.

There's no need for passengers to buy a ticket in advance because travel rights (tokens) are conferred by linking a suitable ID – such as a bank card, smartcard or mobile device - to a secure back office account. There's also a 'best fare' guarantee for consumers, thanks to our journey algorithm that automatically applies the most advantageous travel rules.

#### An agile platform for operators

Operators benefit from our open ABT architecture through cost and efficiency improvements by shifting core ticketing and related functions to a secure cloud environment, reducing reliance on local ticket issue, cash handling and associated infrastructure.

ABT effectively moves journey processes and fare calculation to the back office, simplifying fare collection management and the application of network-wide rules, improving the customer relationship, optimising operational and marketing effectiveness, and demonstrating a clear return on investment.

A provides a great passenger experience, seamlessly applying travel ues even when journey plans change

## Tailor your ABT platform Modular architecture for optimal value

Flowbird's ABT platform uses a modular open architecture, which not only makes it future-proofed, but also enables operators to invest in the functionality of most value to their businesses... and to grow their capability over time.

Our ABT system is perfectly in tune with digital and mobile technologies. It facilitates Open Payments through bank cards, mobile wallets (Apple Pay/Google Pay) and devices and enhances the user experience via an intuitive portal that makes registration and payment management simple and secure. ABT shifts core operator business rules from front office devices to the Cloud, where the infrastructure is cheaper and easier to configure

Account holders can simply 'tap and go' - our ABT platform tracks journey 'taps' and aggregates every step across all modes of transport to apply the best fare configuration rules.

Card transactions and data are stored within the card acceptance system, with tokens linked to payment devices used to fulfil journeys, thereby ensuring full PCI DSS compliance. Account holders settle their accounts at predetermined intervals, although the Flowbird platform also provides a pre-pay mode for purchases in advance of travel.

Operators access their unique data through a secure online portal, where they can manage accounts and account attribution, administer business rules, initiate debt recovery, access a suite of management reports, view settlement data and dive deep into passenger trends.



## MODULES



#### **OPEN PAYMENTS**

At the heart of ABT is Open Payments. Our card acceptance system is the interface between payment devices and payment service providers. This module handles payment data, forwarding authorisation, clearing and settlement requests in accordance with transit rules.

Working in combination with the Billing and Payment module, it settles payments resulting from journey costs reaching an intraday limit or an end of day settlement total, or an on demand request for a debt recovery. All financial activity is comprehensively logged and the Open Payments module is also responsible for processing the initial taps each day from customers using open payment cards.



#### **BILLING & PAYMENT**

There are three distinct profiles in Billing & Payment. In Post Pay, a payment method is registered and the aggregated journey fare is taken at a predefined interval. In Pre-Pay, the customer pre-purchases a product, such as a rail ticket, and this product is associated with their account. Payment may be made online, via a sales agent or customer, or through a ticket vending machine. Purchases made with smart media associated with the account may be used as a token to travel. An ePurse holds a financial amount of travel rights for an account holder in the back office which can be topped up and is used to provide funding for travel.



#### **BUSINESS RULES**

Flowbird's Business Rules module provides the operator with the ability to configure bespoke rules for defining the 'best fare' for the customer. This includes rules based on time, zone, service and transfers. Discount rules and specific concession rules may also be configured thus ensuring you meet the needs of all transit modes and customers.

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#### JOURNEYS

Each journey leg has an associated fare which is the same as if the customer had purchased a ticket for that leg of the journey at that point in time. Journey legs are then aggregated together and passed through the relevant business rules to apply any specific caps based upon usage. These caps ensure that the customer will always get the best fare for the journey.



#### ACCOUNT MANAGEMENT

A secure area for the management of customer information and lists. There are numerous profiles for ABT, including Anonymous - a customer doesn't need to register in order to use the system; Registered – these customers are granted enhanced functionality, such as increased access to journey details, notifications along with the ability to register dependent family members; Groups – an account that provides travel for multiple users, such as business personnel. There is also a CRM function for further data to be managed by the opererator.



#### **INSPECTION & ENFORCEMENT**

A key management function to enforce travel rules and travel entitlement while safeguarding financial integrity.



#### WEB PORTALS

Account holders view and manage their travel activity and billing through the passenger portal which also provides a pre-pay mode for purchases in advance of travel and Post-Pay options for registered customers.

Operators access their unique data through a secure online portal, where they can manage customer accounts, administer business rules, initiate debt recovery, access a suite of management reports and view settlement data.

#### **BUSINESS INTELLIGENCE**

Prism is a business intelligence tool which offers data driven insights through highly interactive, guided analytics applications and real time dashboards. Prism is purpose built to support the analysis of operational and financial information injected from Flowbird's Bus and Rail systems.

ABT is a ticketless system – no queues at service windows or vending machines

## MODULES



#### VIRTUAL MEDIA

The Virtual Media module provides a back office image of the token media used for travel whether this be a transit issued travel media or Bring Your Own Device functionality.



#### INTEGRATION

Flowbird's ABT system provides an open architecture through industry standard REST API's to provide multiple integration options for future proofing the system. This acts as an enabler for Mobility as a Services allowing 3rd party systems to interface to CloudFare's multimodal network management platform as a key component.

The ABT module integrates with the core CloudFare product allowing fares and topology to be easily integrated.

ABT optimises the value of smart ticketing, making frictionless travel a reality



## TECHNICAL FEATURES

The Flowbird ABT platform offers extremely high performance levels utilising micro-services and stateless RESTful interfaces which enable the framework to scale resource usage in response to system demands.

#### Core Elements:

- Flexible, secure cloud-hosted SaaS delivery model or On-Premise option
- Integration with global payment providers complying with the latest scheme transit rules and standards (VISA, MASTERCARD, CB)
- GDPR compliant with strict separation of Personally Identifiable Information (PII)
- WCAG/W3C compliant for web content accessibility standards
- Mobile responsive user interfaces scaling down to use on smart phones
- Integrate through open architecture and REST API's

ABT enables changes in business rules to be applied across transport networks much more quickly

ABT promises 'best value' fares, always applying correct caps and discounts

#### FLOWBIRD Transport Intelligence

Around the world, around the clock, our world-class multi-modal solutions meet the needs of transport authorities, operators and communities. We are harnessing the power of the digital age to meet the challenges of urbanisation, applying technological solutions to make life better.

Our partnership with customers span the globe which, allied to continuous investment in research and development, helps ensure that our innovations deliver value for our customers, for our customer's customers and for the wider community.

Through our facilities in the UK, France, USA, Sweden and Australia, we deliver completely scalable systems that enable transit authorities and operators of every size to develop public transport networks that make life better for people, more productive for businesses and more sustainable for the environment. Our mission is to make it easier, safer and quicker for people to access and use public transport and to provide operators with the tools and information they need to serve their customers better.



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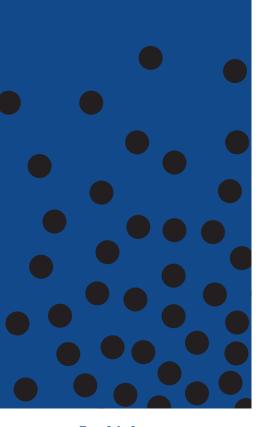
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Some of the features described may be optional. Due to continued product development, specifications are subject to change without notice.

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