ACCOUNT MANAGEMENT

LIST MANAGEMENT

FARE ENGINE

DATA EXPORT INTERFACE

SECURITY

MANAGEMENT MODULES

PAYMENT GATEWAY

RISK MANAGEMENT

CUSTOMER INFORMATION SERVICE

REPORT

TAP MANAGEMENT

PRODUCT MANAGEMENT

Connection Module

Connection Module

SYSTEM COMPATIBILITY & SUPPORT*

- *Oracle Database*
- *Oracle Web Service*
- *Linux Operating System*
- *Cloud*
- *Elastic For Logging*

* Recommended System Configuration

FAST
SECURE
PRECISE
SCALABLE
VERSATILE

Account-Based Mobility

Account-based Ticketing (ABT) became the key technology for automated fare collection in public transport. Kentkart adopted a new approach to this advanced technology and named it Account-based Mobility (ABM).

In the ABM model, unlike traditional card-based ticketing solutions, all data is shifted from any physical media (e.g., smart cards or paper tickets) to the back-office. This reduces media complexity because all relevant data like the balance or passenger type is no longer stored in the media itself.

Accounts may have multiple media and can be personalized for students, the disabled, etc. ABM makes the transport system more flexible and less dependent on local ticket sales, cash handling and the top-up infrastructure. Moreover, passengers can board with mobile application by using QR or NFC technologies.

The solution provides a strong foundation required for MaaS (Mobility as a Service) by unifying the payment and ticketing processes. This guarantees a seamless travel experience and popularizes the public transport.

FREEDOM OF PAYMENT

CONTACTLESS CREDIT & DEBIT CARD

SMART CARD

QR TICKET (PAPER & DIGITAL)

E-WALLET (NFC & QR MEDIA)

THIRD-PARTY INTEGRATION

ACCOUNT MANAGEMENT

Used to manage media data and account balance, it allows passengers to personalize their fare media (student, disabled, etc.) via the website or mobile app. Each account has a digital wallet.

TAP MANAGEMENT

All data from front-end devices is verified by using the token identifier information in the back-office during the validation process.

FARE ENGINE MANAGEMENT

Calculates various fare discounts and rules at the back-office. This module does journey construction, revenue inspection, disruption and journey correction. It enables fare inquiry and product inventory, which can be shared with third-parties via API. Below are some of the supported fare structures:

- Flat
- Zonal
- Transfer
- Check-in / Check-out
- Distance-based
- Origin-Destination

PRODUCT MANAGEMENT

Provides top-up and sales infrastructure including mobile application for different types of media like smart cards, QR, contactless cards, tickets, NFC, etc. Additionally, it manages product lifecycle: create, activate, modify, deactivate, and end life.
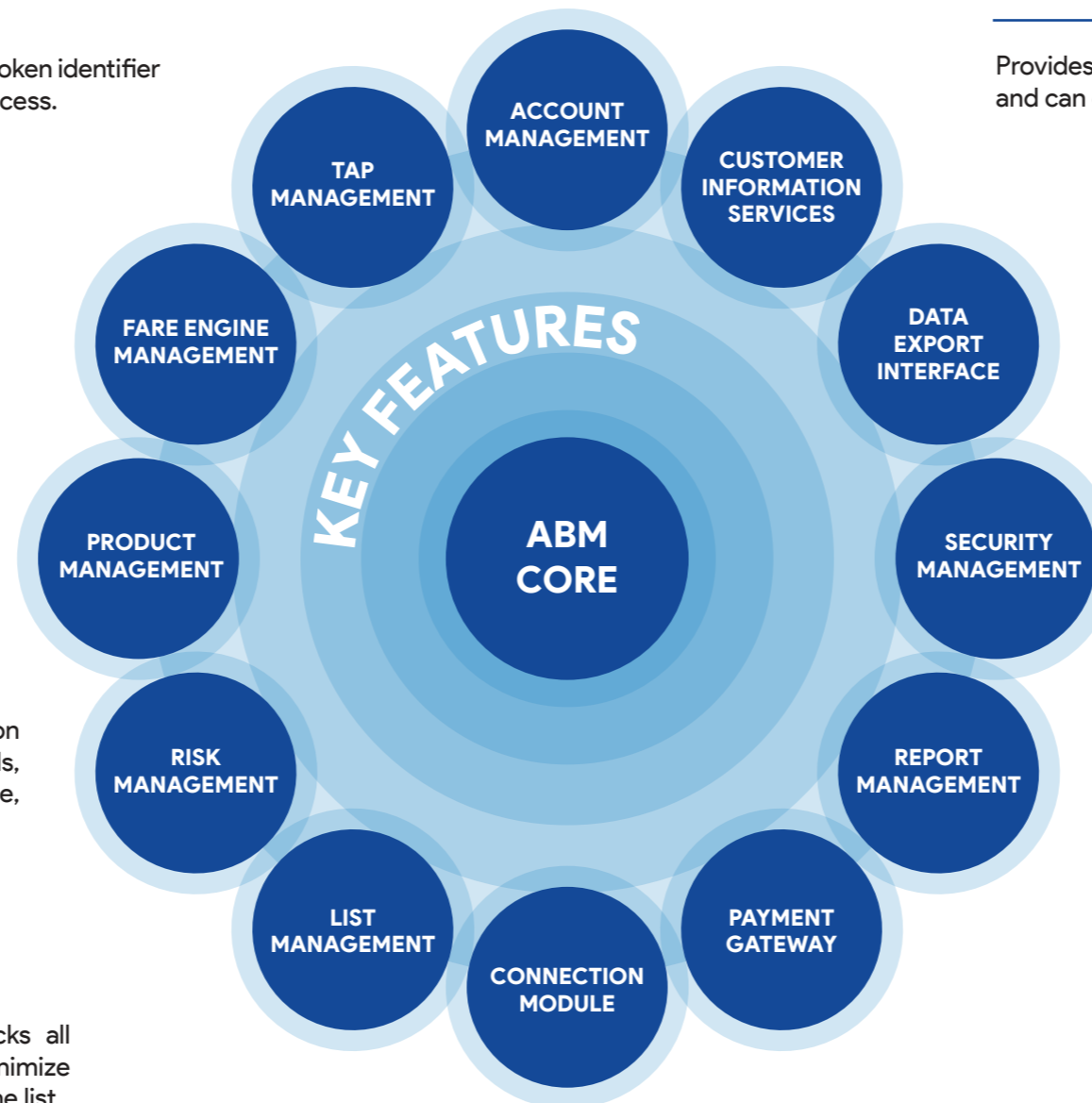
RISK MANAGEMENT

The aim of this module is mainly fraud detection. It checks all transactions in accordance with predetermined rules to minimize risks and may use Status List (SL) to discard or mark media in the list.

LIST MANAGEMENT

Status List stores all necessary media data. The list is continuously shared among all online front-end terminals and provides guidelines in case the system goes offline. Status List (SL) stores the following data:

- Unique Identifier (Token)
- Stored Value Status
- Blacklist Condition
- Risk Level
- Tap Limits
- General Status (Passenger Type & Expire Date)

CUSTOMER INFORMATION SERVICE

Gives passengers detailed information related to account, media, product, and usage. Users can also get historical data.

DATA EXPORT INTERFACE MANAGEMENT

Provides high levels of integrality, which opens vast possibilities for third-parties, and can export media, account, and transaction data.

SECURITY MANAGEMENT

ABM is GDPR-compliant and is based on the advice structure of ISO 20526:2017 and ISO 24014-1. Its payment system fulfills the requirements for global EMV and PCI DSS standards, which ensure electronic security and encoding at the highest level. ABM is also responsible for key management and procedure.

REPORT MANAGEMENT

Provides different kinds of detailed reports (financial, usage, top-up, etc.) including such reports on credit/debit cards. This module allows users to create their own reports by using Business Intelligence (BI) tools.

PAYMENT GATEWAY INTEGRATION

Manages all bank card operations according to urban transit rules in the back-office by providing integration with acquiring banks and payment processors. This module also supports such features as debt recovery, reverse, refund, and deferred authorization.

CONNECTION MODULE

Each front-end terminal in ABM works online and stays always connected to the back-office, allowing the system to be continuously updated and easily adjustable.

KEY FEATURES

- ACCOUNT MANAGEMENT
- TAP MANAGEMENT
- CUSTOMER INFORMATION SERVICES
- FARE ENGINE MANAGEMENT
- DATA EXPORT INTERFACE
- ABM CORE
- PRODUCT MANAGEMENT
- SECURITY MANAGEMENT
- RISK MANAGEMENT
- REPORT MANAGEMENT
- LIST MANAGEMENT
- CONNECTION MODULE
- PAYMENT GATEWAY

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