TRANSFOLIO

Centrally managed ticketing system

Advanced customisation

High performance

Multi-modal, interoperable, multi-operator

Web interface, simple and ergonomic

PARKEON

CITIES
ON THE MOVE

CHALLENGES

City populations are increasing dramatically, whilst the expansion of city centers is accelerating, creating a discord between living, working and leisure spaces.

The development of cities, megacities and urban areas makes it very difficult to address human and environmental issues.

RETHINK URBAN TRAVEL

Property redevelopment and changes-of-use in metropolitan areas are resulting in a transformation of lifestyles and dramatic changes in urban transit requirements : people are becoming increasingly mobile and looking for multi-modal transport solutions.

In most large cities, the use of the car is also in decline, marking a change in practice towards more sustainable urban mobility.

The awareness of increased travel congestion and pollution in cities, is forcing authorities to rethink how to analyse and manage urban mobility, giving priority to public transport.

Heavy congestion : a serious economic and political issue :
- +7.5% per year in North America
- >1% of GDP in terms of time lost in industrialised countries
- City centers are becoming inaccessible and suffering economically

One solution : public transport
- Trains and subways : 50,000 passengers per hour/line
- Bus : 9,000
- Cars : 2,000

MOBILITY MANAGEMENT SOLUTION

TRANSFOLIO, an integrated platform that provides the information required to better understand and improve transport operations.

50 MILLION
transport ticketing transactions processed each day

80 %
of CO_2 emissions are discharged in cities

MULTI-MODAL MULTI-OPERATOR INTEROPERABLE

TRANSFOLIO provides all the services needed to guarantee continuity of all the activities linked to urban transport facilities.

It has been designed for multi-operator environments and an open solution for multi-modal schemes.

According to interoperability rules, the system distributes the access rights to data, manages complex sales, and allows the sharing of topographical and fare data between servers. All types of fare schemes and ticket technologies are addressed: paper-based, magnetic, contactless, bank cards, etc.

CUSTOMISABLE

TRANSFOLIO fits specific, functional customer requirements in order to match differing and complex transport projects. Its architecture (is N-level, multi-services, multi-tasking) adaptable and flexible.

The light client Graphical User Interface (GUI) only needs simple Web browser access. This GUI gives the benefit of high customisation capability, enhanced by the possibility to create Portlets as directly sorted on the dashboard.

SIMPLE ET ERGONOMIC

As part of its core competencies, Parkeon pays special attention to user friendliness.

Graphical User Interface (GUI) provides visual tools, graphical indicators, search criteria, and business links between its different functional modules.

TRANSFOLIO also makes available statistical tools, thanks to Extraction Transform and Loading (ETL) data extractions and Business Object reporting. Its import / export advanced features are like in the basis for data publication or sharing.

SCALABLE AND LONG-LASTING

Designed to meet high standards and best practices, TRANSFOLIO is constantly evolving to enable users to benefit from the latest technical developments. All software changes are covered by functional automated tests with the Concordion tool, in accordance with Parkeon's core business.

TRANSFOLIO monitors all Parkeon equipment, even that based on Android, making possible the management of any third-party infrastructure through its open source platform.

TRANSFOLIO
CENTRALISED MANAGEMENT SYSTEM
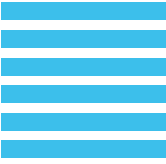
TRANSFOLIO includes a set of applications to manage tariffs, customers, all front end equipment and also consolidate revenue and usage statistics.

CKET ITEM	CRM ITEM	CUSTOM	ACCOUNTS			
ALENDARS	•••	ITEM	ITEM	ITEM		
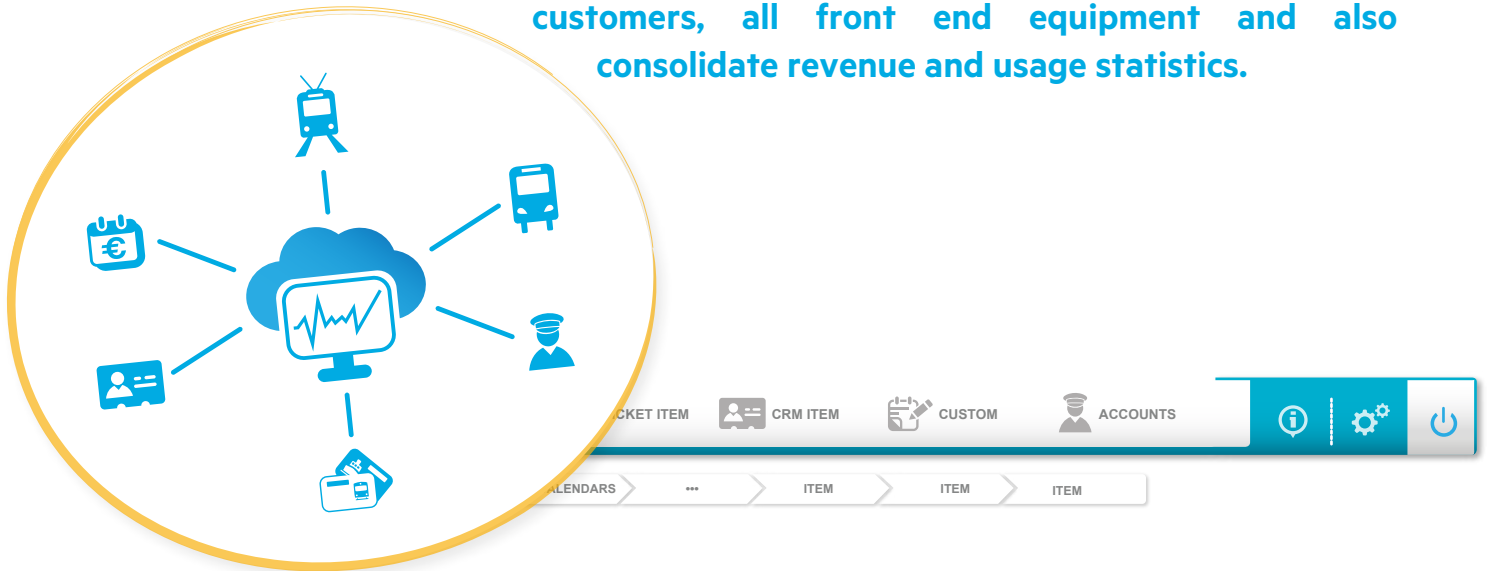
Customer management :
creation and modification of customers' information during the lifecycle of their transport cards

Cards management :
updates virtual copies of any transport card in case of theft, any contract may be changed remotely and cards can be invalidated

Setting fares :
defines of fare and application rules for the transport network

Tracking statistics and accounts :
complete financial consolidation to analyse user trends

Topography :
define and import stops, zones, lines and services

Technical parameters and monitoring :
configuration and operational status of ticketing equipment, allow remote updating of parameters and software

Asset management :
consultation of all internal counters, software versions and configuration for each item of equipment in the field

Stock management :
management of consumable supplies (e.g. tickets and media on which tickets are stored)

Secure Application Module (SAM) management :
remote management of card recharging parameters and thresholds settings

Remote sales facility :
allows customers to manage their profile and purchase additional tickets via the Internet or using a mobile phone
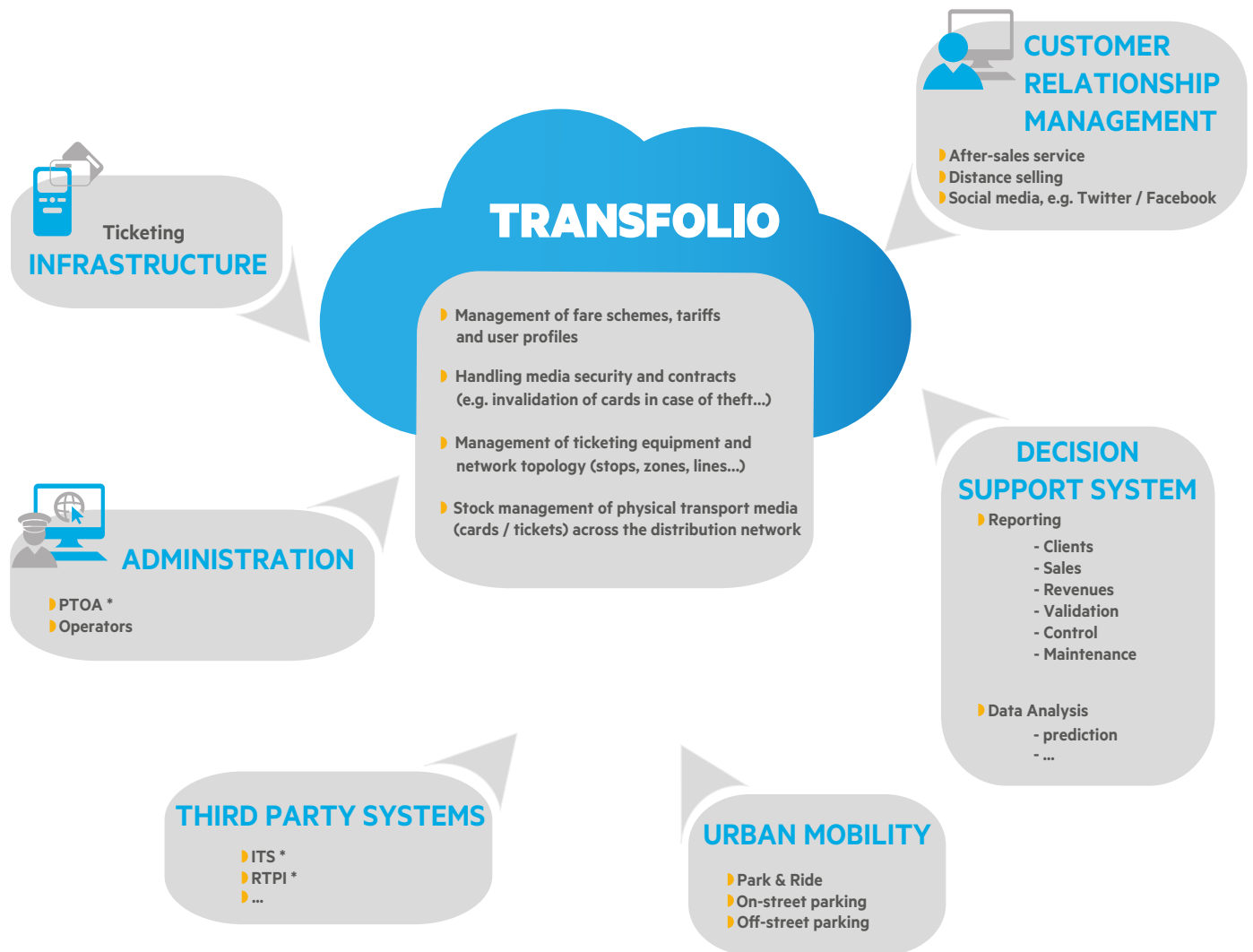
Machine learning :
Self-adaptive algorithmic solutions for new smart services to forecast the evolution of passenger traffic or predict fare evasion in a specific area. Algorithms are automatically adjusted through a learning process, taking into account real-time historical data, or external information such as the weather, school hours, etc.

ARCHITECTURE

▶ REST architecture (REpresentational State Transfer, W3C) used by Google, Apple, Microsoft on-line

▶ ATOM (XML) and Schema.org standards

TRANSFOLIO

▶ Management of fare schemes, tariffs and user profiles

▶ Handling media security and contracts (e.g. invalidation of cards in case of theft...)

▶ Management of ticketing equipment and network topology (stops, zones, lines...)

▶ Stock management of physical transport media (cards / tickets) across the distribution network

Ticketing INFRASTRUCTURE

CUSTOMER RELATIONSHIP MANAGEMENT
▶ After-sales service
▶ Distance selling
▶ Social media, e.g. Twitter / Facebook

ADMINISTRATION
▶ PTOA *
▶ Operators

DECISION SUPPORT SYSTEM
▶ Reporting
   - Clients
   - Sales
   - Revenues
   - Validation
   - Control
   - Maintenance

▶ Data Analysis
   - prediction
   - ...

THIRD PARTY SYSTEMS
▶ ITS *
▶ RTPI *
▶ ...

URBAN MOBILITY
▶ Park & Ride
▶ On-street parking
▶ Off-street parking

PTOA : Public Transit Operating Authority

ITS : Intelligent Transport System

RTPI : Real-Time Passenger Information