



ALFA System

Intelligent Transportation Platform





PITON Technology, we have been proposing innovative software solutions in the fields of " Smart Cities, Intelligent Transportation and Geographic Information Systems. With the software solutions we have developed and consultancy service we have provided, we have been dynamizing the corporate usage capacities and labor productivity of our clients by increasing their sectoral competitive power in the field of "Information Technologies".

While transforming your requirements to product and service with our dynamic team and innovative software solutions, we ensure that the solutions we have developed are professional and sustainable. Since the day we went into action, we have proposed innovative solutions to a whole range of public establishments and sectors. By internalizing the approach of "Collaborative Work and Solution-Oriented Project Development" , we have moved on with the motivation of finding the most accurate and the fastest solution for the necessity. The experience we have had since the year of 2006; constitute a sound basis in implementations and accomplishments of the projects we have conducted.

PITON Technology, we aim for making a difference in intelligent urban technologies and providing qualified contributions for sustainable urban life with our innovative software solutions. In our steps leading to this aim, we have been keeping our adaptation alive by improving ourselves constantly.



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ALFA System - Sustainable Intelligent Transportation Platform

ALFA System | Sustainable Intelligent Transportation Platform is a sustainable, environmentalist, new generation Intelligent Transportation Platform that gathers all sources affecting transportation under a single roof, processes data with smart technologies, offers solutions that will meet the expectations of system stakeholders.

It allows you to manage the efficiency of your business in the best way, to get your passengers a comfortable transportation service and to manage the transportation system in the best way.

ALFA System | Sustainable Intelligent Transportation Platform enhances the overall quality of transportation services by focusing on passenger comfort and satisfaction. By leveraging advanced technologies and real-time data analysis, operators can ensure that passengers experience a comfortable and seamless journey. This includes factors such as accurate and up-to-date information on schedules, disruptions, and alternative routes, as well as amenities and services that enhance the passenger experience.

By prioritizing passenger needs and expectations, the platform enables operators to provide a high level of service quality, thereby fostering customer loyalty and promoting the use of public transportation..





ALFA System | Sustainable Intelligent Transportation Platform; with its powerful software infrastructure and architecture;



Rolling Stock

(train, metro, suburban, tram etc.)



Aircraft

(plane etc.)



Micromobility

(scooter, bicycle etc.)



Sea Vehicles

(ferry, boat etc.)



Land Vehicles

(bus, electric bus, metrobus etc.)

It is a new generation software platform that can work independently of hardware and integrate with other systems (API, Web Service, Can Open, TCP IP etc.) in E-Mobility vehicles (bike, scooter, taxi etc.) and other transportation vehicles.

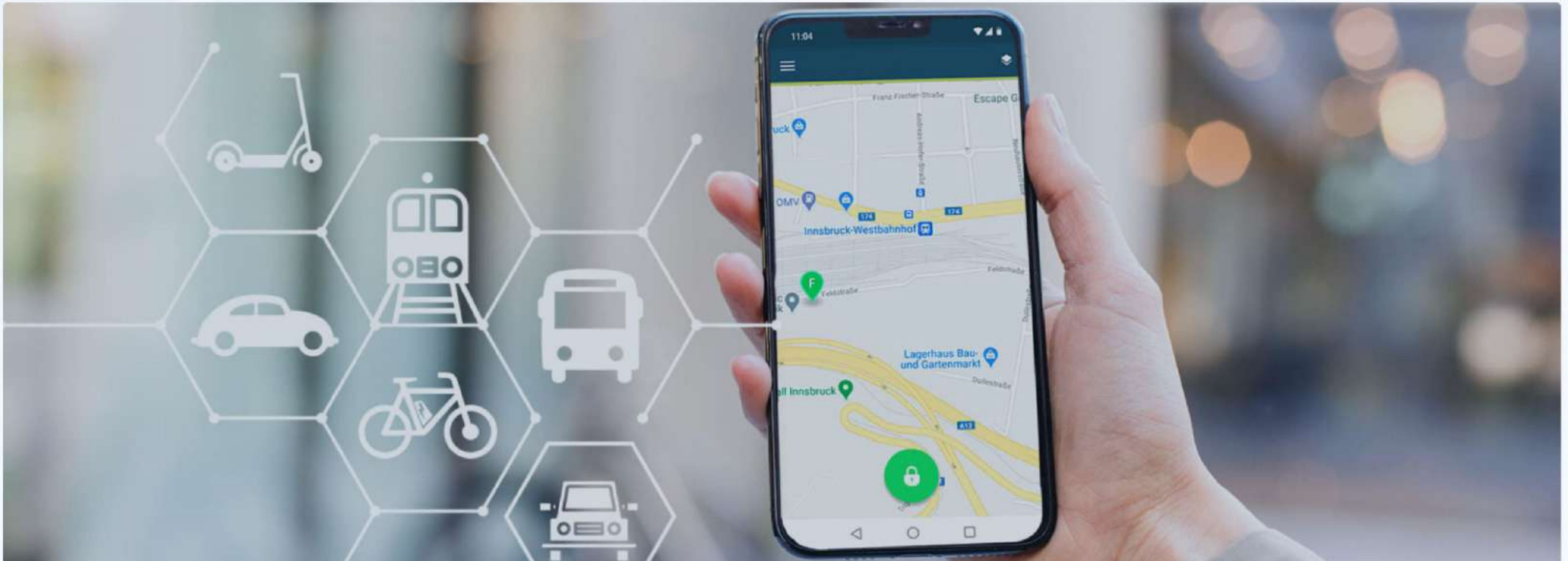
ALFA System & MaaS



It is the first Sustainable Intelligent Transportation Platform in the world that works with a MaaS approach.

The MaaS (Mobility as a Service) approach offers a transportation service that combines different transportation modes on a single platform according to the needs of the users. This approach allows users to plan their trips and travel using different modes of transport with a single ticket. The MaaS approach includes different modes of transport such as public transport, micromobility, car sharing, bike sharing.

With the ALFA System – MaaS approach, users can get integrated travel planning information, make reservations and make payments. In this way, they can make their journey much simpler and more comfortable.



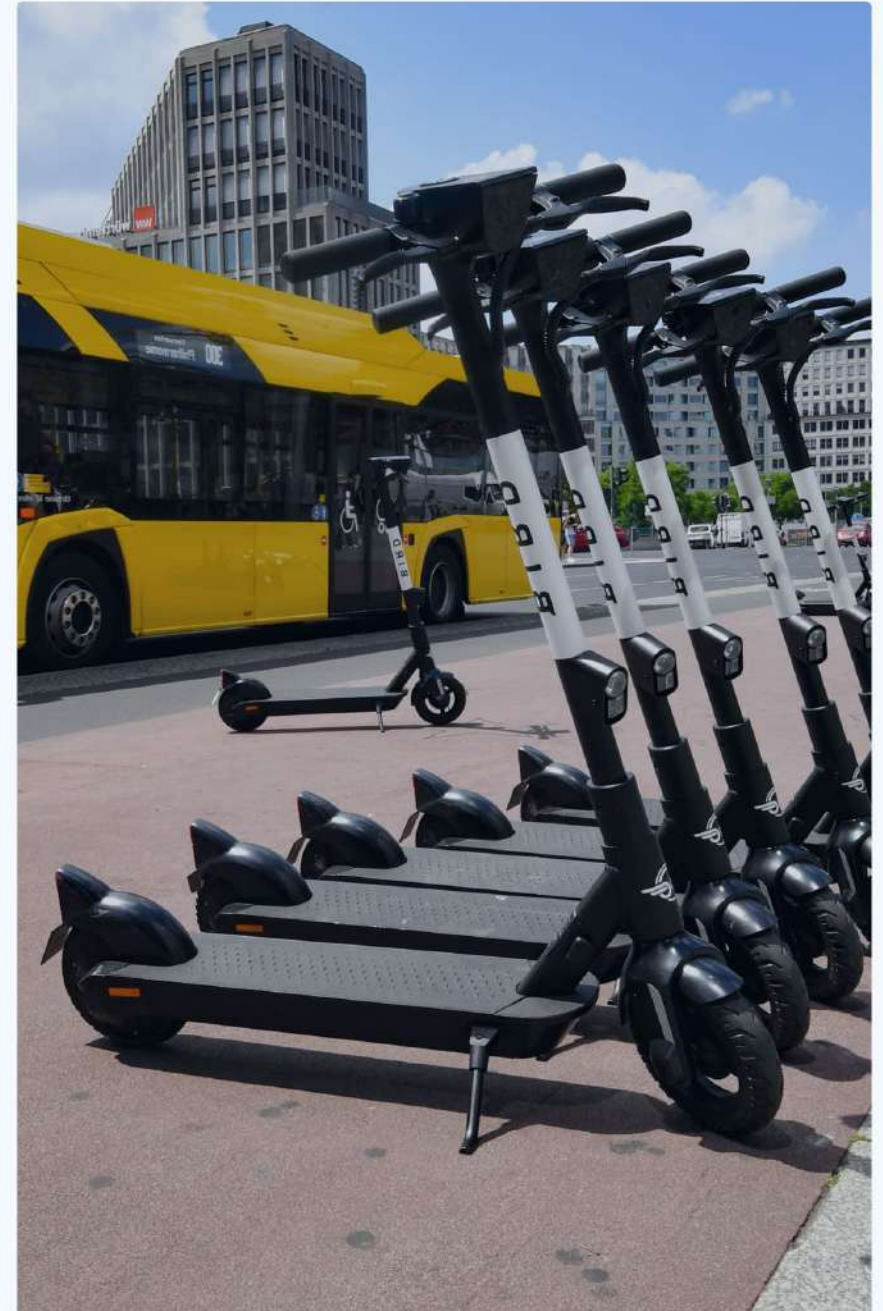
With the ALFA System – MaaS approach, travel times are shortened, traffic jams, transportation costs and damage to the environment are reduced, and it is possible to develop new smart transportation plans with the data obtained from the system.

In addition, passengers are informed about travel alternatives and public transportation is encouraged, and it contributes to raising awareness on issues such as reducing environmental pollution caused by emissions.

With the ALFA System – MaaS approach, the operational burden of transportation authorities is seriously reduced.

With the ALFA System - MaaS Approach;

- 01 The cost (fare, duration, comfort, etc.) of the determined alternative journeys is calculated and presented to the user.
- 02 The estimated cost is reported according to the user's choice.
- 03 Fees are accrued if the user takes the planned trip.
- 04 Travel fees collected at the end of a specified period (daily, monthly, according to the operation of the business) are shared among authorized transportation actors.



ALFA System - Module Structure



Operation Management

- Smart Control Center
- Headway and Tariff Management
- Performance Management



Tariff & Planning

- Headway Planning
- Task Planning
 - Vehicle - Task Planning
 - Driver - Task Planning



Fleet Management

- Vehicle Tracking
- Reporting
- Vehicle/Line/Stop/Route/Speed Control
- CCTV
- Definitions



Asset Management

- Equipment Management System
- Fixed Facilities Management System
- Human Resources Management System
- Driver Control Panel



Passenger Information System

- On-Board Passenger Information System
- Smart Station System
- Mobile Passenger Information and Passenger Assistant System
- Disabled Passenger Information System
- Communication and Announcement Management System
- Media and Advertisement Management System



Reporting & Analysis

- Daily, Weekly and Monthly Reports
- Live Data Streaming and Viewing
- Listing and Graphing



MaaS Management

- Planning and Optimization
- Passenger Services Module
- Shareholder Services Management Module

ALFA System - Operation Management Module

It is the module where the entire operation is managed and instant changes are made so that the journeys go smoothly.

ALFA System | The Operations Management Module combines many subsystems on a single platform. Thus, it enables you to perform a more manageable and reportable operation.

With its comprehensive features and real-time monitoring capabilities, the Operations Management Module plays a crucial role in ensuring the reliability, efficiency and overall success of transportation operations.

Faults, accidents and forensic events reported to the center by vehicle drivers can be viewed on a vehicle basis and can be viewed remotely with a closed-circuit camera system.

All violations that occur during the operation are immediately reported to the control center and the control center can intervene immediately.

In summary, the Operations Management Module; while it allows temporary and permanent changes to be made in transportation lines, it ensures that these changes are made in the most optimized way. In cases such as traffic jams, accidents, malfunctions, interrupted journeys, necessary actions can be taken quickly by following this module.



ALFA System - Tariff & Planning Module



It is the module where the resource planning (vehicle, driver, line, etc.) required for the journeys to be realized with optimum efficiency is made. The tariff and planning module is a unique tool that allows you to easily plan your fleet in all transportation modes with its user-friendly interface and powerful software infrastructure.

The Tariff & Planning Module allows you to create and make changes to your timetable. By optimizing the routes your vehicles will travel to, it plans the traffic of these vehicles and ensures that the lines of the enterprise are created more efficiently. Thus, it also increases passenger satisfaction.

In summary, ALFA System | Tariff & Planning Module plays a critical role in optimizing resource planning and facilitating efficient journey execution. With its user-friendly interface, powerful software infrastructure, and advanced optimization capabilities, this module empowers operators to create well-structured timetables, optimize routes, and maximize the overall efficiency of the transportation network.



ALFA System - Fleet Management Module



It is the module where the necessary management processes related to the fleet are carried out and reports can be created. The Fleet Management Module enables you to manage your fleet of thousands of vehicles and drivers in a simple way. It allows you to overcome the situations that you can't get out of or can't keep up with.

The Fleet Management Module ensures that the vehicles of the enterprise are managed independently of the type, brand and model. With the Fleet Management Module, the operations of the vehicles belonging to the enterprise, the assignment of drivers and the creation of work schedules, and the instant status / violation information of the vehicles can be tracked on the map with the Fleet Management System.

This module provides easy access to all information with its user-friendly interface. With the graphics on the dashboard, you can see all the data of the business in a visualized way and access the report details. With the Fleet Management Module, Vehicle Map Tracking feature, you can track the vehicles of all operators serving within your company live on the map.

ALFA System | Fleet Management Module

- Vehicle Tracking Operations
- Driver Control and Driving Assistance System
- Reporting and Analysis System
- Vehicle/Line/Station/Route/Speed Control
- CCTV Operations

provides the management of the following systems.



ALFA System - Asset Management Module



It is the module where facilities, equipment and human resources processes are managed and supervised. Asset Management Module ensures the management of all vehicles, equipment, fixed facilities and human resources owned by the enterprise. Asset Management Module keeps all the data of your inventories securely with its advanced and secure infrastructure. You can easily plan and manage your work order processes related to your inventory and processes. This module plays a pivotal role in ensuring that these valuable assets are efficiently utilized and effectively maintained.

With the Asset Management Module in place, operators gain the ability to effectively manage and supervise all aspects of their assets. This includes vehicles, equipment, fixed facilities, and the human resources integral to the enterprise's operations. By centralizing these management processes, the module provides operators with a holistic view of their assets, enabling them to make informed decisions and optimize resource allocation.



Equipment Management System



Fixed Facilities Management System



Human Resources Management System



ALFA System - Passenger Information System

It is the module where passengers are informed from various platforms both inside and outside the vehicle, and media content is managed. In short, it is the face of your Public Transportation System.

With the Passenger Information System Module, you can increase the service quality and offer a comfortable transportation service and combine many subsystems on a single platform. Thus, it enables you to provide more manageable and reportable service.

With the ALFA System I Passenger Services Module, you can easily perform all of the following operations on a single module.

ALFA Sistem I Passenger Information System Module

- On-Board Passenger Information System
- Smart Station System
- Mobile Passenger Information and Passenger Assistant System
- Disabled Passenger Information System
- Communication and Announcement Management System
- Media and Advertisement Management System



ALFA System - Reporting & Analysis Module

It is the module where meaningful reports are created by analyzing the data obtained such as income, expense, number of passengers, etc. of the Public Transportation company.

Thanks to the ALFA System I Reporting & Analysis Module, the information coming from all public transportation modes (tickets, fares, cameras, etc.) is analyzed and meaningful information to be used by both the management and the user is produced. By this information, many useful reports such as better planning of journeys, passenger behavior, driver and vehicle performances can be obtained.



ALFA System - MaaS Management Module

It is the module that enables the planning of transportation services and the payment processes seamlessly by integrating all transportation modes (bus, tram, bicycle, scooter, etc.) used in the city.

It enables you to provide more easily accessible, environmentally friendly and sustainable services by integrating the progress payment, fare collection, operation, etc. processes of transportation operators.



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that make life easier..*

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