DIGITIZING PUBLIC TRANSPORTATION

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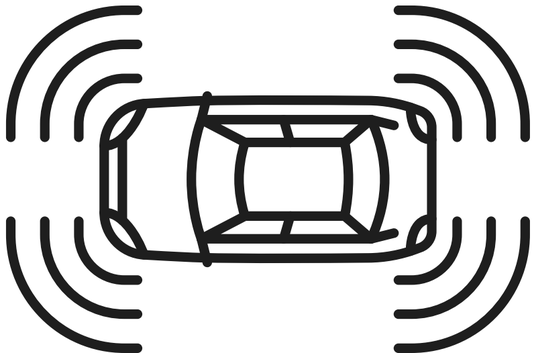
The plan

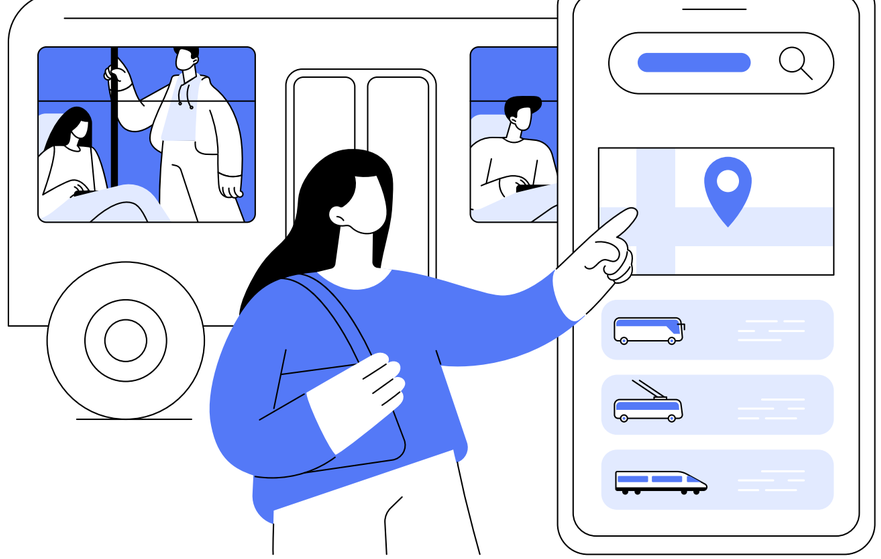
1. Enhance real-time data accessibility
2. Improve payment systems
3. Foster sustainable practices
4. Increase operational efficiency

Introduction

Digitizing public transportation services involves implementing digital technologies to enhance efficiency, accessibility, and user experience. Here's a detailed look at the key components and benefits of such an initiative:



Real-Time Data Systems



Integration of IoT Devices:

- **Vehicle Tracking**: Install GPS and other IoT sensors in vehicles to track their exact location and status in real-time.
- **Environmental Sensors**: Use sensors to monitor traffic conditions, weather impacts, and even vehicle occupancy to optimize routes and schedules dynamically.

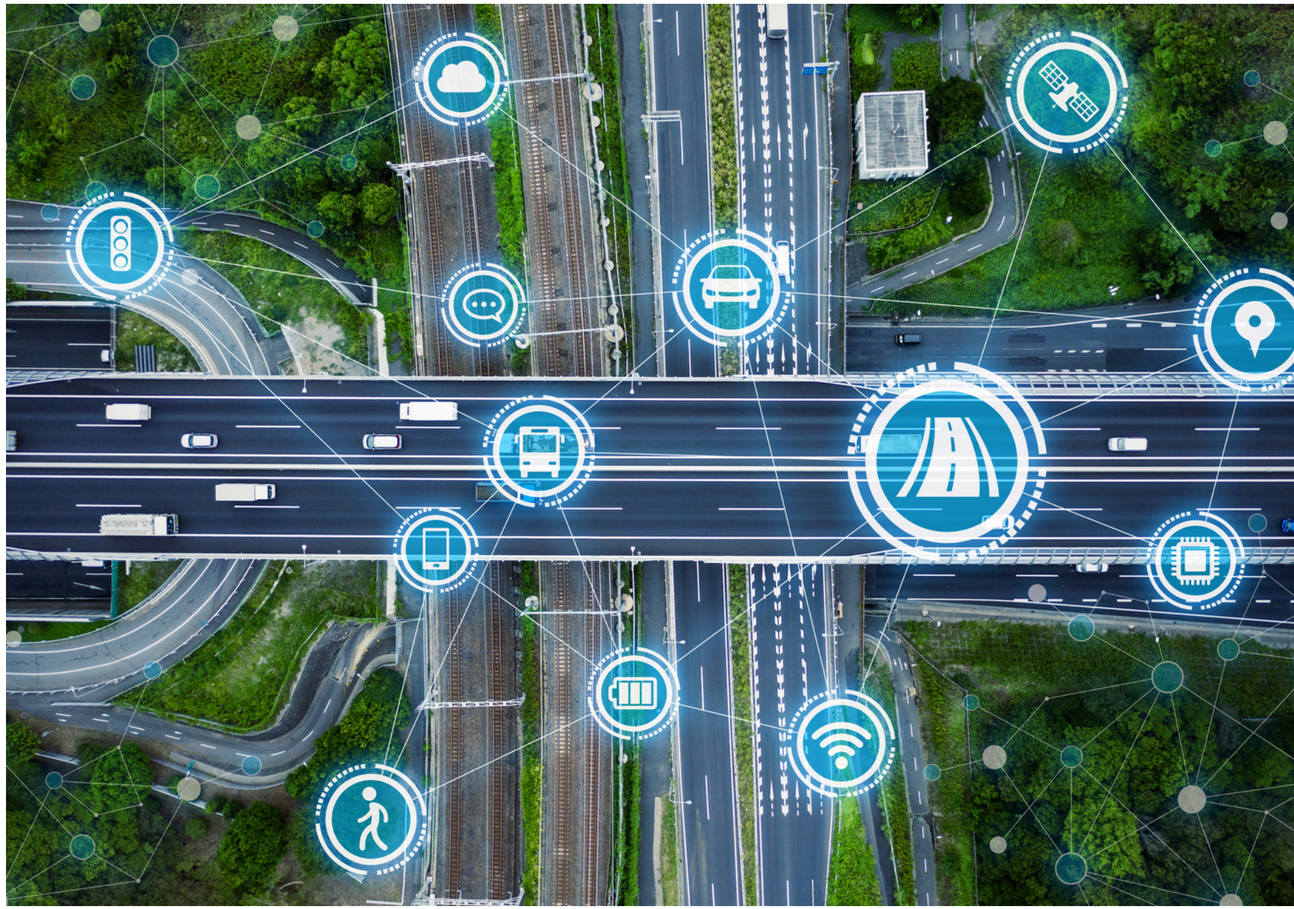
Development of User-Friendly Apps

- **Mobile Applications**: Develop comprehensive apps that provide real-time updates on vehicle arrivals, departures, and delays, as well as interactive maps and route planning features.
- **Notifications**: Implement push notification features to alert passengers about real-time changes, such as delays or route modifications.

Digital Signage and Information Systems:

- **station Displays:** Install digital displays at stations and bus stops to show real-time arrival and departure times, service alerts, and other relevant information.

- **Onboard Information:** Equip vehicles with screens that provide real-time updates about the journey, next stops, and transfer options.



Improve payment systems

Contactless Payments:

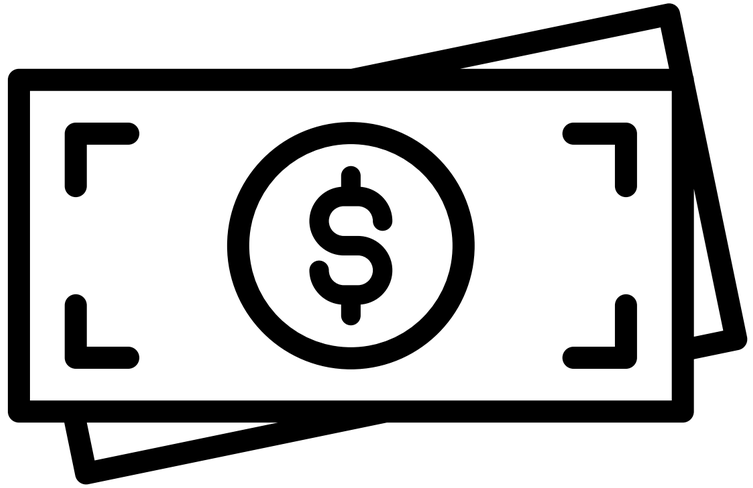
Implement contactless payment technologies that allow riders to use contactless cards, mobile phones, or wearable devices to pay their fares. This method reduces boarding times and eliminates the need for cash handling.

Mobile Payment Integration:

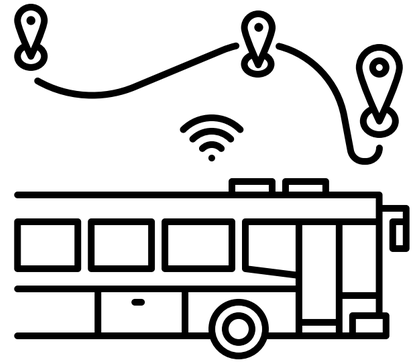
Develop or enhance mobile applications that support payment through popular platforms like Apple Pay, Google Wallet, and other NFC-enabled apps. These apps can also support pre-loading of funds and automatic reload features to streamline the payment process.

Promotion and Education:

Conduct campaigns to inform and educate the public about the new payment options, demonstrating their benefits and how to use them effectively. This step is crucial for encouraging adoption among users.



Foster sustainable practices:



Electrification of the Fleet :

- **Electric Buses and Trains:** Transition to electric vehicles to reduce greenhouse gas emissions and dependence on fossil fuels. This includes acquiring new electric vehicles and retrofitting existing vehicles where possible.

- **Charging Infrastructure:** Develop a robust infrastructure for charging electric vehicles, including fast-charging stations at key transit hubs.

Smart Transportation Systems:

- **Route Optimization:** Use GPS and advanced analytics to optimize routes and schedules, reducing idle times and improving fuel efficiency.
- **Traffic Management:** Implement smart traffic management systems that can coordinate with public transit to reduce delays and improve service reliability.

Increase

operational efficiency

Advanced Scheduling and Routing:

- **Dynamic Scheduling**: Implement software that adapts schedules in real-time based on traffic conditions, vehicle availability, and demand.
- **Route Optimization**: Use GIS and advanced routing algorithms to find the most efficient routes, minimizing travel time and fuel consumption.

Integrated Multi-Modal Transport Systems

- **Unified Information Systems:** Create a unified platform that integrates different modes of transport, allowing passengers to easily plan and switch between them.
- **Seamless Transfers:** Design infrastructure and schedules to minimize transfer times and enhance the convenience of using multiple modes of transport.

THANK YOU

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