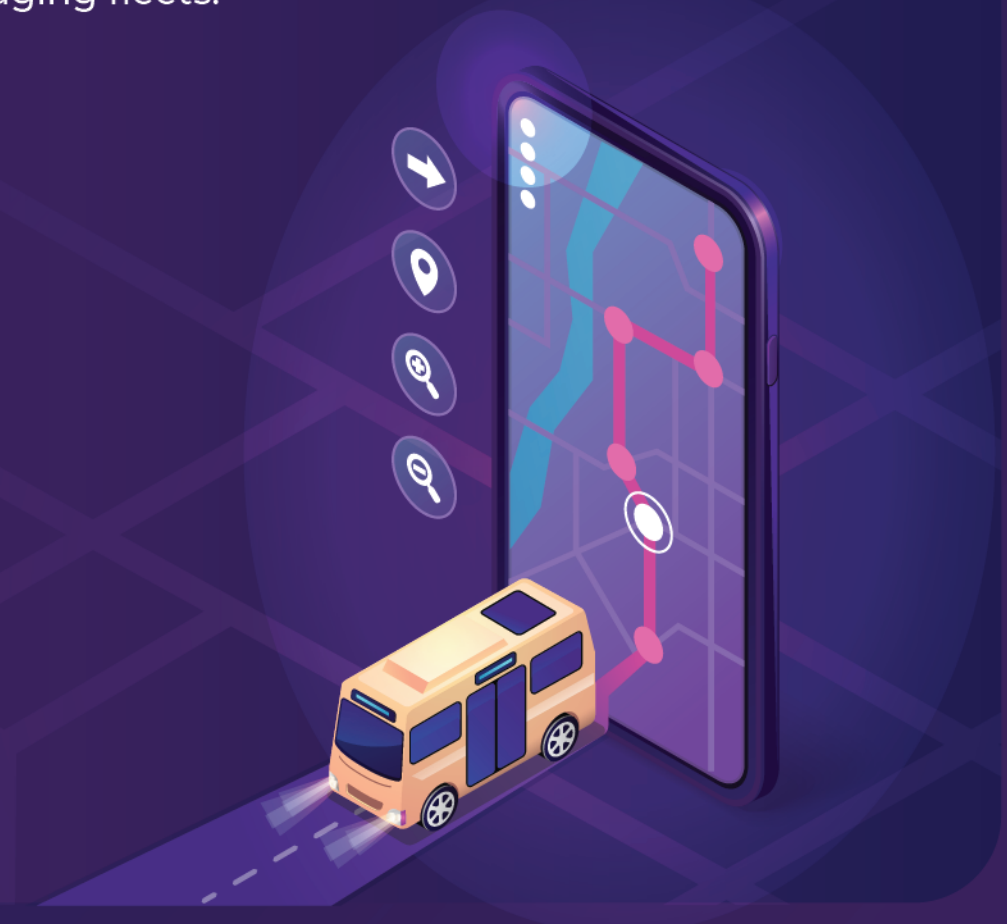
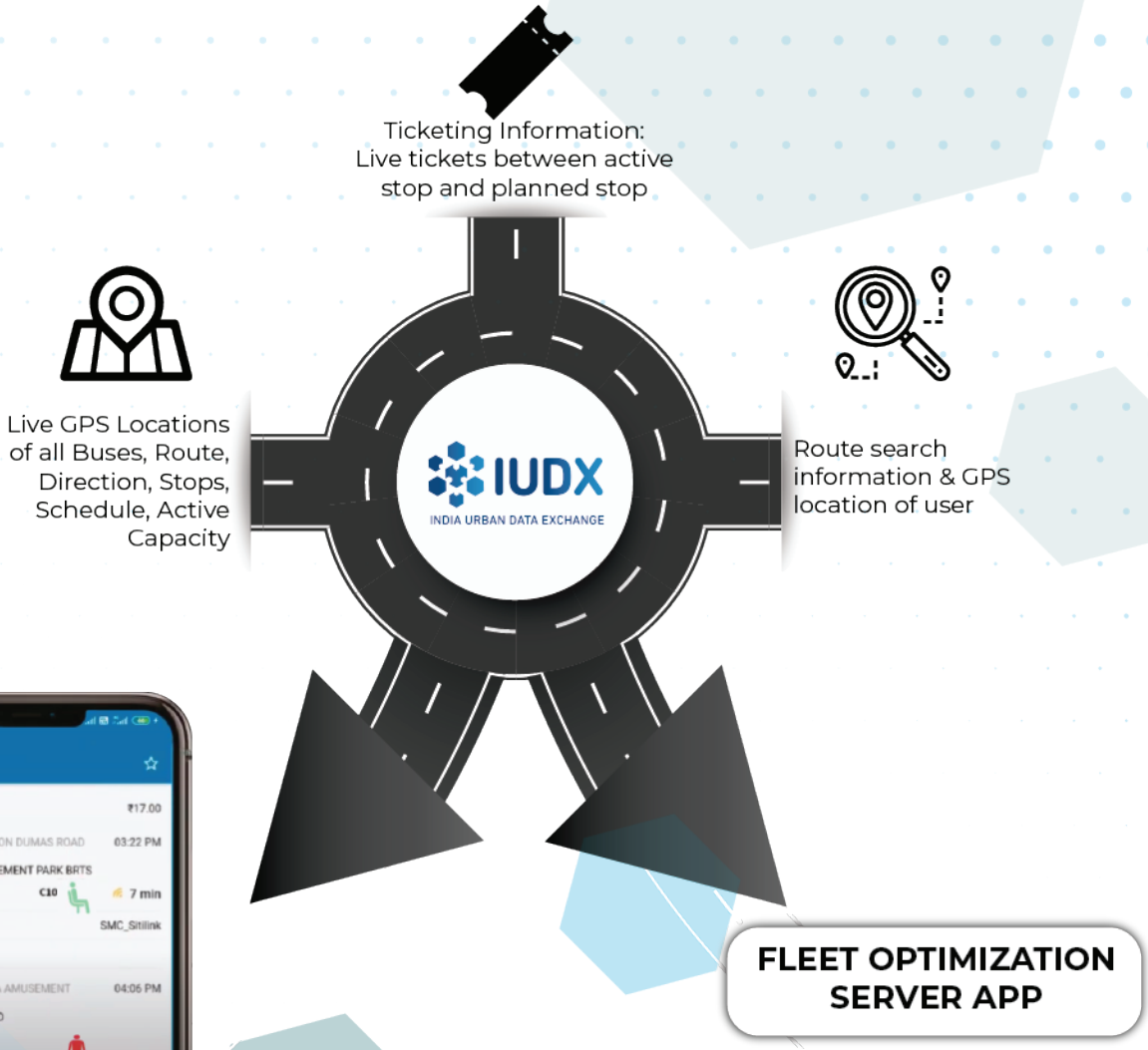
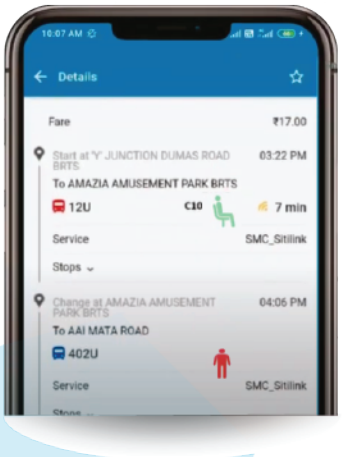
INTELLIGENT PUBLIC TRANSPORT MANAGEMENT

Improving bus travel experience for commuters

Intelligent Public Transport Management creates improved commute experience for passengers by providing bus occupancy status in real time and enables authorities to dynamically improve bus scheduling, planning and managing fleets.







IMPACT

- Optimised fleet management
- Minimized waiting time of the passengers at bus stations/stops
- Option for selecting the bus as per the seat availability.
- Information on passenger load on the specific route
- Reduced safety concerns

IUDX
INDIA URBAN DATA EXCHANGE

CITIZEN BENEFIT

- Differently abled commuters, senior citizens, women etc. can utilize the system more efficiently due to occupancy information.
- If buses are delayed, passengers can make informed decisions about taking alternative routes or modes
- Better service would lead to decreased usage of personal modes of transport, reducing the traffic on the streets
- Better social distancing in the current pandemic
- Lesser wait time for busses on busy routes because of fleet optimisation

HOW IUDX MADE THIS USE CASE BETTER AND EASIER TO BUILD?

- IUDX presents a general and global transit data model, which can be reused across multiple cities. So apps developed in one city can easily adapt to the transit sources from other cities.
- Opportunity for partners to scale engagement across multiple cities with IUDX facilitation.
- Easy access to transport data held by city administration, which otherwise will be difficult to obtain.
- IUDX acts like a bridge between city specific implementation and global standards.
- Reduced development cost. IUDX provides an open source foundation to build upon, with standard interfaces simplifying implementation.
- IUDX presents a standardized view of datasets from various fleet and transit data sources.
- IUDX also provides transit feeds from multiple sources and types - private and public, which gives the flexibility for consumers to build apps that utilize heterogeneous transit modes.

IUDX
INDIA URBAN DATA EXCHANGE

CASE STUDY

The bus occupancy and fleet management use case went live in Surat in October 2020. Under this, IUDX onboards and organises data from sources such as ITMS, Surat Money Open Loop Smart Card, QR code-based ticketing, and Google's bus-related real time data. This data is then used to derive the actual time of bus arrival and the number of passengers on board. The passengers can access this information via a mobile based application and the city transport department can use the same to optimally utilise the fleet by dynamically adding or reducing buses on a particular route depending on the requirement.

Impact: With the implementation of the IUDX based intelligent public transport management the city transport department is inching towards making profit and minimising its fiscal deficit. The city runs a total of 840 buses with a revenue of INR 285 Cr/year and incurs expenses worth INR 319 Cr/year. After implementation of the use case there has been a 1% increase in the ridership, which would lead to additional revenue of INR 2.85 Cr/year taking the total revenue to INR 287.85 Cr/year. Additionally, the city will save INR 47.8 Cr/year because of the 15% reduction in operational expenses through fleet optimisations based on occupancy data, reducing the expenses to INR 271.2 Cr/year.

INR 47.8 Cr/year on expenses and increase revenue by **INR 2.85 Cr/year**