Public Transport Mobile Application with Real-time Traffic Information and Route Updates
Client Profile

UK based ISV with profound expertise in Traffic and Public Transportation domain, catering hardware and software solutions to government bodies and private transport operators. Rigorously rendering real-time solutions befitting the demands of various counties of UK and Australia.

Business Scenario

With Cygnet as their technology service provider, Client has been serving various real-time transport solutions that empowers government authorities and private operators to establish ideal fleet management. While catering a web solution, one of the Public Transport Management Authority raised a requirement of including commuters in the loop. Client saw an opportunity here and asked Cygnet to research, analyze and develop a mobile solution that can provide end-to-end transport information to the commuters of their county.

Looking forward towards a new solution to the product portfolio that can increase the profitability, Client had certain expectations that mobile solution

→ Can be accessed from Android, Apple and Microsoft devices
→ Serves commuters with real-time information about the various public transportation services
→ Provides vital information that helps public and private commuters in taking operational decisions

Mobile Solution That Can Provide End-To-End Transport Information To The Commuters Of A UK County
Cygnet’s Solution

A highly-experienced team of mobile application developers delivered a hybrid mobile application integrated with the Client’s parent website for required data collection and processing. A scalable mobile solution with following features and interactive user experience was catered to the commuters:

- **Disruptions:** For the commuter’s convenience, the app provided real-time information and notifications regarding following disruptions across the county:
  - Roadworks
  - Incidents and Accidents
  - Congestion
  - Events
  - Meteorological Stations

Users can get the overall view of the disruptions across the county on the Google Map or can also check the disruptions in their desired area.

- **Public Transport:** Public Bus Transport users can check real-time as well as scheduled departures and arrival timings of the buses. Commuters can search for information using following advanced search options:
  - Search by Map
  - Search by Bus Number
  - Search by Name, Road, Town or Village
  - Search by Post Code
  - Search by Service Number

The service number had additional option for commuters like they can find the service with exact match or can also find all the services that contains that text or number.

- **Information Signs:** Commuters can also motorway and trunk road signs in their area as well as real-time update about the contiguous road networks. Signs that are blank at the time of search are automatically eliminated from the end result.

- **Car Parks:** Detailed information about the nearest car parks along with number of occupied and vacant space is displayed on the map and in grid view for the commuters.

- **CCTV:** Commuters can also get direct access of the CCTV cameras of their areas and check the situation of any road or alleys with the updated snippet of the road and can also check previous snippets by entering desired time. Commuters can also get live coverage of the CCTV with negligible lag time.

- **Traffic Signals:** Commuters can check the number of traffic signals when they are trying to reach at a certain destination on their route.

- **Air Quality:** For commuters who have breathing problem or are carrying a child who can get affected by the pollution, they can get real-time update of the air quality of that area prior to their visit.

Apart from this, the major technological challenge in delivering perfect experience to the commuters was the Cluttering of 14 entities with simultaneous access and display on the Google Map.

Benefits to the End Users

- Real-time updates about their commute
- Detailed information about the public transport
- Ability to plan their journey well in advance keeping all the factors in consideration

Cygnet’s Key Contribution

- A market-ready product that client can deliver to various counties in 4-5 business days
- Cost-effective application designed with 80% re-usable code components
Mobile solution to provide real-time transport information