Problem Lens

The concept of public transit trackers isn't new but it does offer up a wealth of opportunities to work with imperfect data that is incredibly important to the users of a given app or service. Few things will make people run faster than discovering their bus is a mere 2 minutes away from the bus stop.

In this exercise you are tasked with helping create a mobile app called BusyBus, an application operated by the local city transit system that serves thousands of commuters in a large city near you.

Transit officials have identified a problem they would like to solve. Due to expansion, numerous bus routes have been recently added and many of those routes stop at the same bus stop. Riders want to know what the next arriving bus is and how much time they have to get to the bus stop. Simply rushing to the stop when you see a bus coming no longer works because it might not be the bus the rider is expecting.

Riders are currently complaining the most about the bus stop at Washington and State, which has seven bus lines serving the stop.

1 moovit

Positioning:

- Cross-platform app for public transit tracking
- Available for web, iOS, and Android
- Boasts 70 million registered users in 1,400 cities in 77 countries around the world
- Especially accurate for Chicago area

Differentiators:

- Allows users to actively report status of transit line during a journey — combines officially available transit data with crowdsourced live information from approx. 60 million users
- Active core global community of approx. 20,000 users
- Nearby public transit stops are clearly marked
- Updates real-time as user travels
- Alerts user when it's time to exit bus or train
- Extremely detailed and precise geolocation
- Step-by-step instructions for routes
- Prediction of arrival of buses and trains within a 2-minute range

Brand Impressions

Friendly | Modern | Tidy | Responsive | User-centered | Professional

S W / O T	Helpful in achieving the objective	Harmful in achieving the objective
Internal Origin attributes of the organisation	• Very accurate for Chicago area • Combines official and crowdsourced data to present accurate real-time information, including route changes • Informs how far the next bus stop is • Allows user to adjust both times of departure and arrival • Allows user to combine transit and bike routes — also informs nearest bike-share availability • Provides information on accessibility • Alerts user when it's time to exit bus • Home screen keeps Recent Journeys, allowing for one-click tracking of bus arrival time	• Not very accurate data on some cities • Lack of location names and points of interest in database (i.e. users have to input postal code of locations, as a search for location name may not give results) • Lack of accurate (to-the-minute) bus arrival times, which may cause user confusion when buses arrive at the same time but app shows otherwise • Relies heavily on user contributions • 'Earlier' and 'Later' arrival adjustments does not work sometimes, requiring user to move to a different screen to manually adjust arrival time
External Origin attributes of the environment	• Massive market size for this vertical • Improve time accuracy for bus arrival times, especially during peak hours • For accessibility purposes, allow users to view crowd level of arriving buses and crowd level of bus stops • Improve accuracy for cities with less dense population or less active contributor community • Improve bus stop and location name databases as average users will not have knowledge of no postal codes • Include other non-public transport alternatives in case user missed a public transport and is running late	• Many competitors with specific key differentiators, such as: – Current UI **may** appear utilitarian or basic when compared to competitors' – Detailed information on ride-sharing alternatives (e.g. Uber, lyft) • May show significantly longer travel time when compared to competitors', thus users may not opt for buses • No apparent peak-hour functionality

2 Citymapper

Positioning:

- Cross-platform app for transport planning
- Available for web, iOS, and Android
- Reported to be accurate for generally all areas

Differentiators:

- Very accurate prediction of arrival timing of buses and trains, and accurate geolocation
- Does not focus only on public transit, but also provides detailed journey planning for many transport methods
- Presents users with very efficient options
- App home screen contains all features, including a detailed location map of the user, as well as the nearest public transit stops
- Nearby public transit stops are clearly marked
- Alerts user when it's time to exit bus or train
- Extremely detailed and precise geolocation
- Step-by-step instructions for routes
- Designed for convenience — provide 'heat-safe', 'rain-safe', 'cold-safe' options
- For health-conscious users, also provides information on calories spent during travel

Brand Impressions

Friendly | Modern | Smart | Fun | Feature-packed | User-centered

S W / O T	Helpful in achieving the objective	Harmful in achieving the objective
Internal Origin attributes of the organisation	• Very smart and friendly UI • Provides detailed information for many transport methods (buses, trains, ferry, taxis, ride-shares, bikes, walking) • High overall accuracy of arrival times • Highly relevant — frequently updates any real-time route change and status • Informs how far the next bus stop is • Allows user to adjust both times of departure and arrival • Provides information for up to 5 subsequent arrival timings • Good location names database • Alerts user when it's time to exit bus • Home screen features one-click 'Get me Home' and 'Get me to Work'	• Does not provide information on accessibility • Has limited bus stop name database • Unclear intentions of some features (e.g. Trip Stats, Catapult, Jetpack), although it may contribute to branding • Available only in approx. 30 cities • May have very slightly mixed results when it comes to providing the most time-efficient route • Quite draining on phone battery level
External Origin attributes of the environment	• Massive market size for this vertical • Improve bus stop name database • Opportunity to work with local transit authority for more comprehensive data • Allows user to combine bike with other transit options • Provide bike-share availability across the entire city, not just on users' specific route • Provide information on accessibility • Provide peak-hour-specific feature • Provide information in case of route disruption prior to travelling • Recently launched a 'bus-taxi' hybrid (Smart Ride) in London	• Market is saturated with competitors • No apparent peak-hour functionality, but home screen has a feature that shows all available and arriving and departing buses at one click, and is reported to be quite accurate