



# SPIT HACKATHON

## PROBLEM STATEMENT



## S.P.G.T. HACK

In the daily rhythm of urban life, millions of commuters step out of their homes with a single goal to reach their destination on time. What should be a routine journey of a few kilometers often turns into a mentally and physically exhausting experience shaped by uncertainty rather than choice.

A typical commute in an Indian city demands constant decision making under incomplete information. Commuters must decide when to leave, which train to catch, whether the bus will arrive, how crowded the platform might be, and how the final stretch of the journey will be managed. Each transport mode functions independently and offers only a partial view of the journey. As a result, commuters are forced to piece together their travel plans using multiple disconnected sources, personal assumptions, and last minute adjustments.

During peak hours, even minor delays or unexpected disruptions can trigger a chain reaction of missed connections, extended waiting times, and congestion. Commuters often discover problems only after they are already committed to a route. They may find themselves standing at the wrong platform, waiting for a service that has changed, or struggling to find a reliable last mile option. The lack of timely and end to end visibility makes it difficult to anticipate issues or adapt smoothly.



## S.P.G.T. HACK

This challenge becomes more severe for those who rely on multiple transport modes each day. While maps may show a straightforward route, the reality involves misaligned schedules, unpredictable transfers, and inconsistent last mile connectivity. Small inefficiencies compound over time, turning everyday travel into a daily gamble where time, energy, and productivity are repeatedly lost.

The impact extends beyond individual commuters. Transport services operate with limited awareness of how their systems intersect with others. This leads to situations where some routes are overcrowded while others remain underutilized. Decisions are often reactive, responding to visible breakdowns rather than anticipating demand patterns or commuter behavior across the city.

For city authorities and planners, understanding how people truly move through urban spaces remains difficult. Infrastructure is developed and routes are planned, yet the lived experience of commuters, including where delays occur, where transfers fail, and where stress accumulates, remains fragmented and hard to interpret. Without a cohesive view of daily travel behavior, improving efficiency and commuter experience becomes a slow and imprecise process.



S.P.G.T. HACK

As urban populations continue to grow, this disconnected approach to commuting risks becoming a permanent condition rather than a temporary inconvenience. Time lost in transit steadily erodes personal well being, work efficiency, and overall quality of life. The core issue is not the lack of transport options, but the absence of a unified way to understand, plan, and adapt entire journeys as a whole.

What is needed is not simply faster services or new routes, but a clearer and more coordinated understanding of urban movement that treats daily commuting as a single continuous experience rather than a set of isolated segments.

