IMPLEMENTATION OF TERMINAL MANAGEMENT SYSTEM (TMS) AT ISBT-43,CHANDIGARH

Project Report prepared by Amit Talwar,
Additional Secretary –cum-Director (Transport), Chd.UT

Scenario

- Chandigarh Transport Undertaking (CTU)
  - 515 buses
  - 370 City operation
  - 145 Inter-city / sub-urban operation

  Two ISBTs

  ISBT Sector 43 (50000 commuters approx)

  (1730 services) (220 local services also)

  ISBT Sector 17 (32000 commuters)

  (860 services) (200 local services also)

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Choice of Project: Factors

- Timeframe: should not be more than 6-9 months for implementation and another 6 months for stabilization
- Size & Control: Ambit should be within department: difficulty in inter-department coordination
- Characteristics: Innovative & use of technology, improvement in ease of doing business, Improvement in operational and economic efficiency

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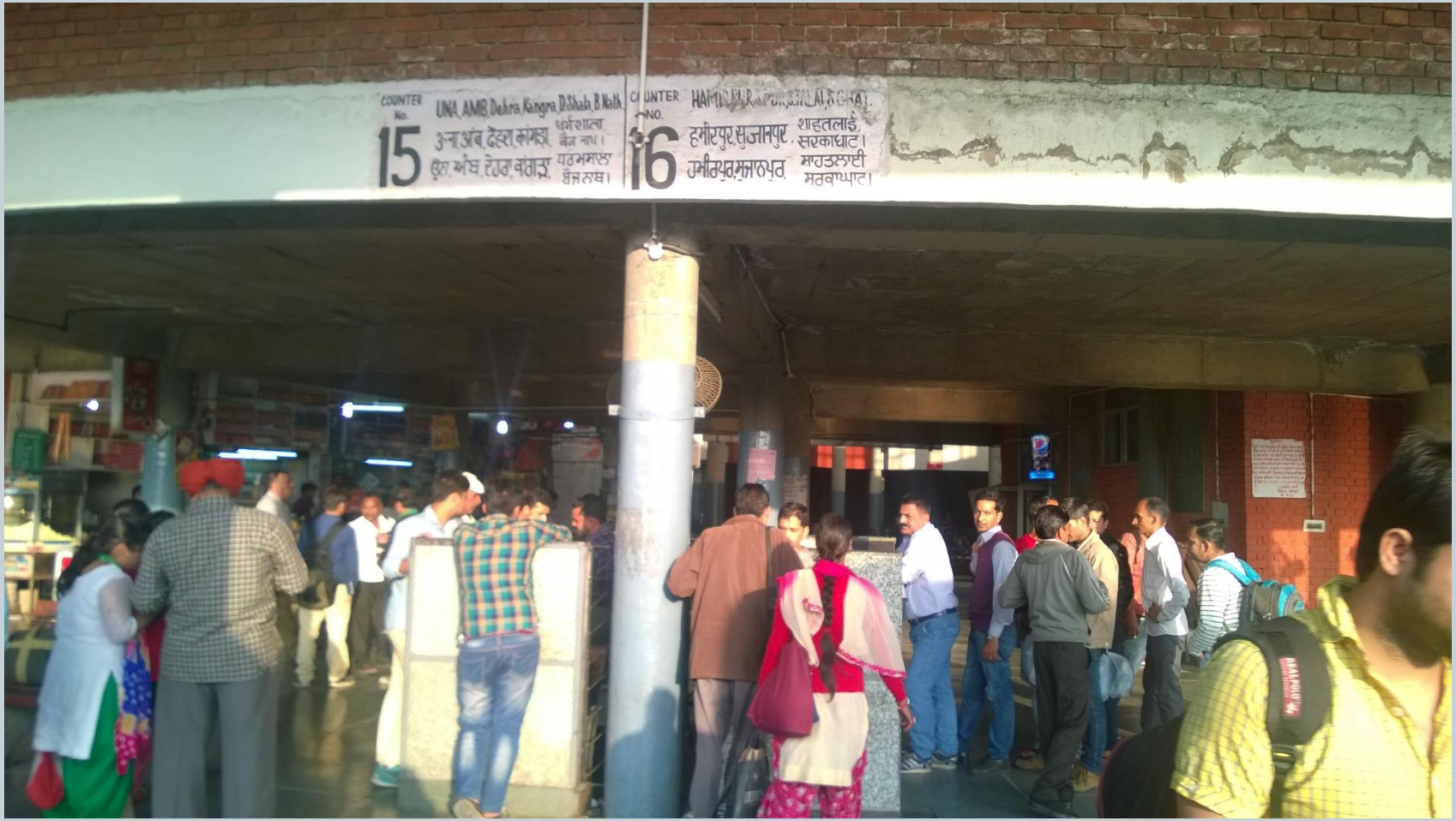
ISBT 43: As on date



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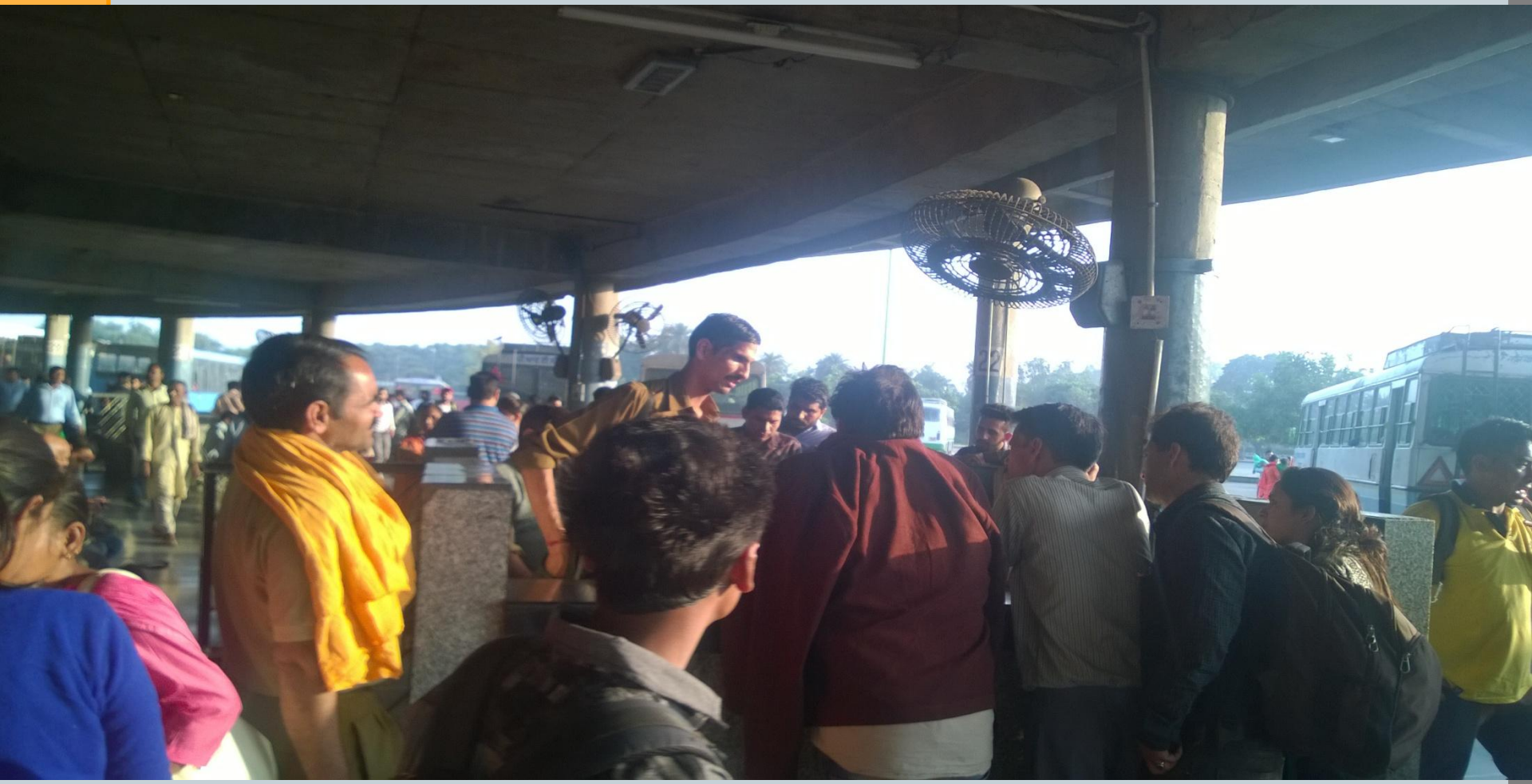
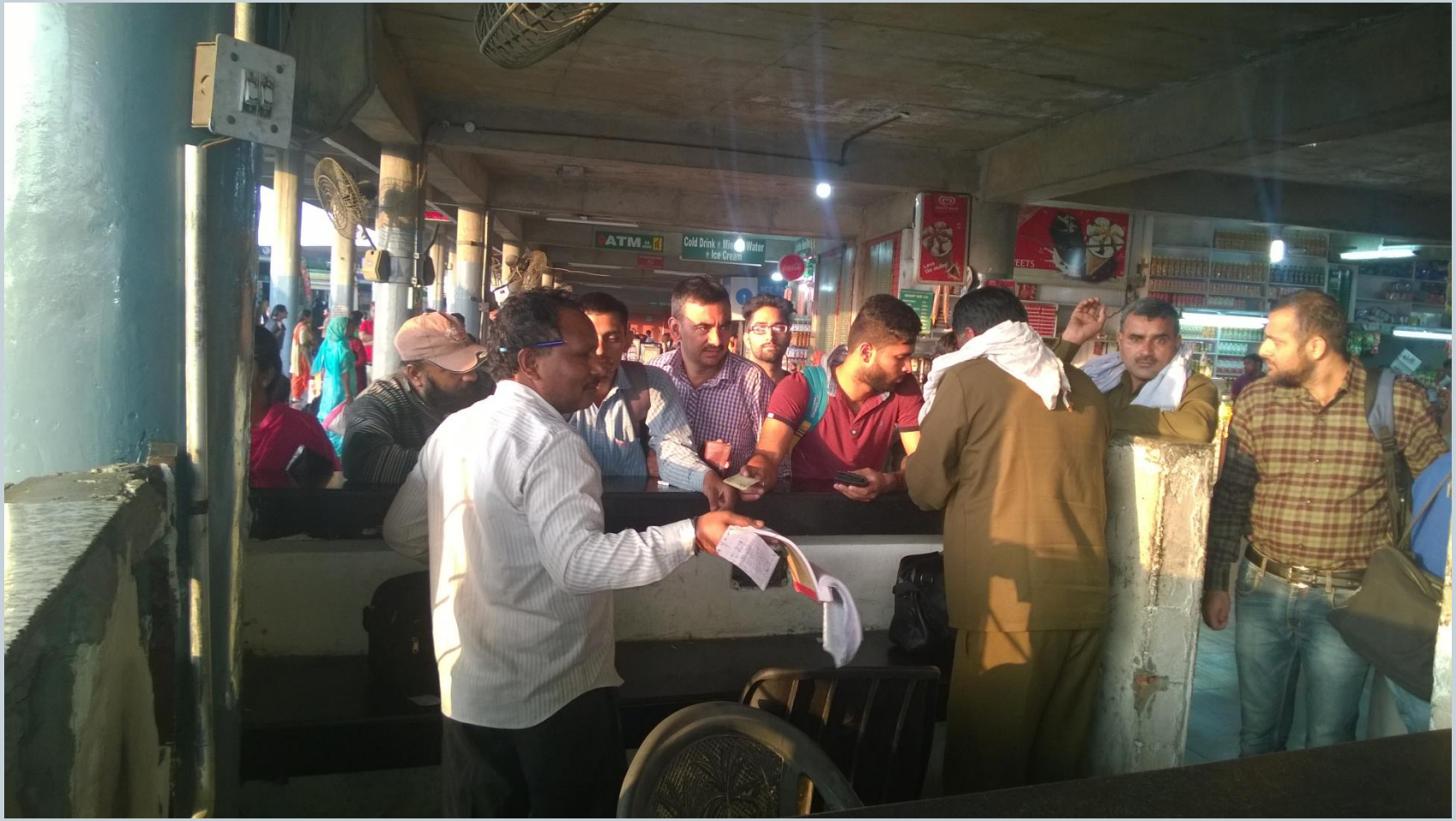


ISBT 43: As on date



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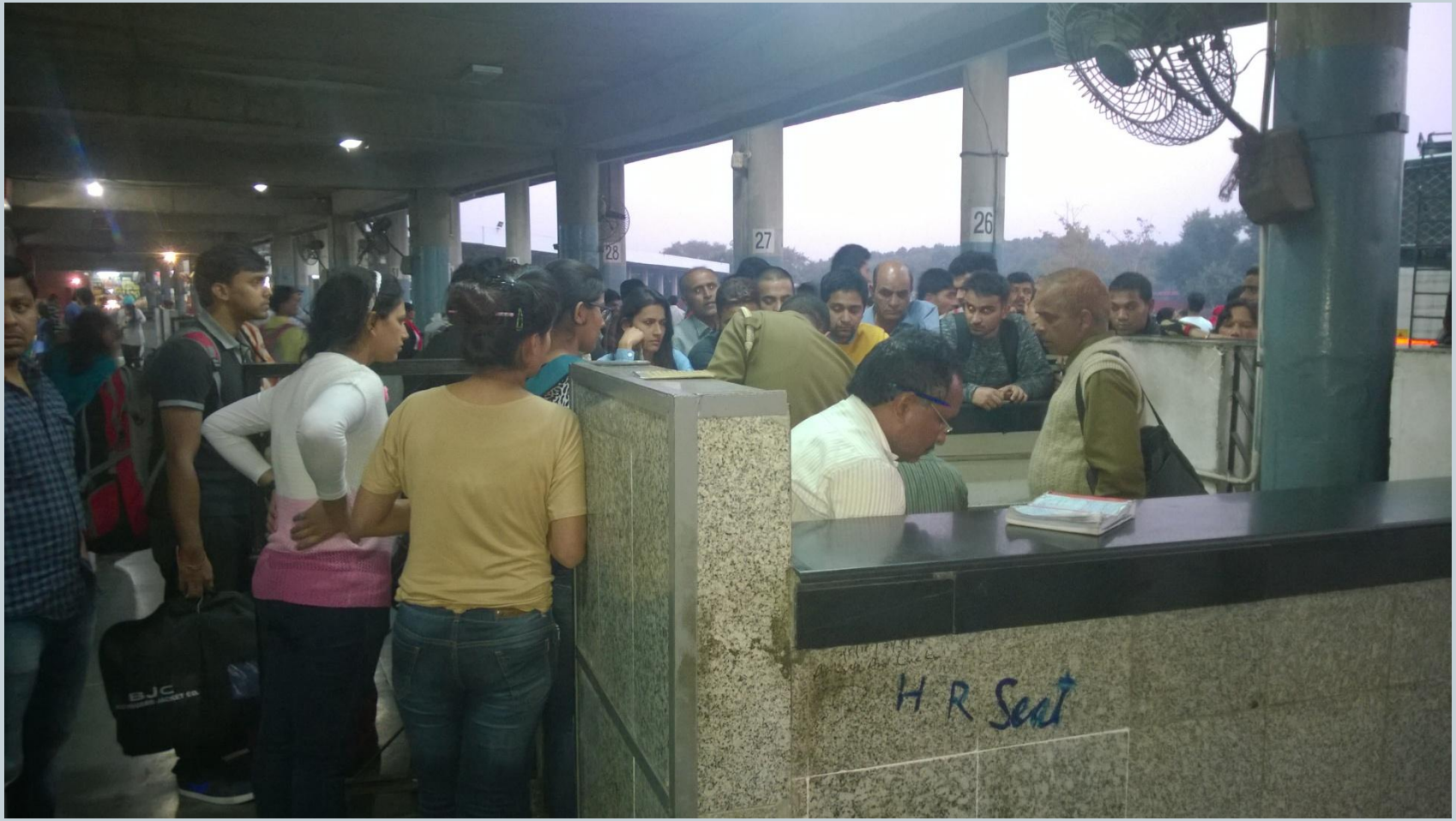

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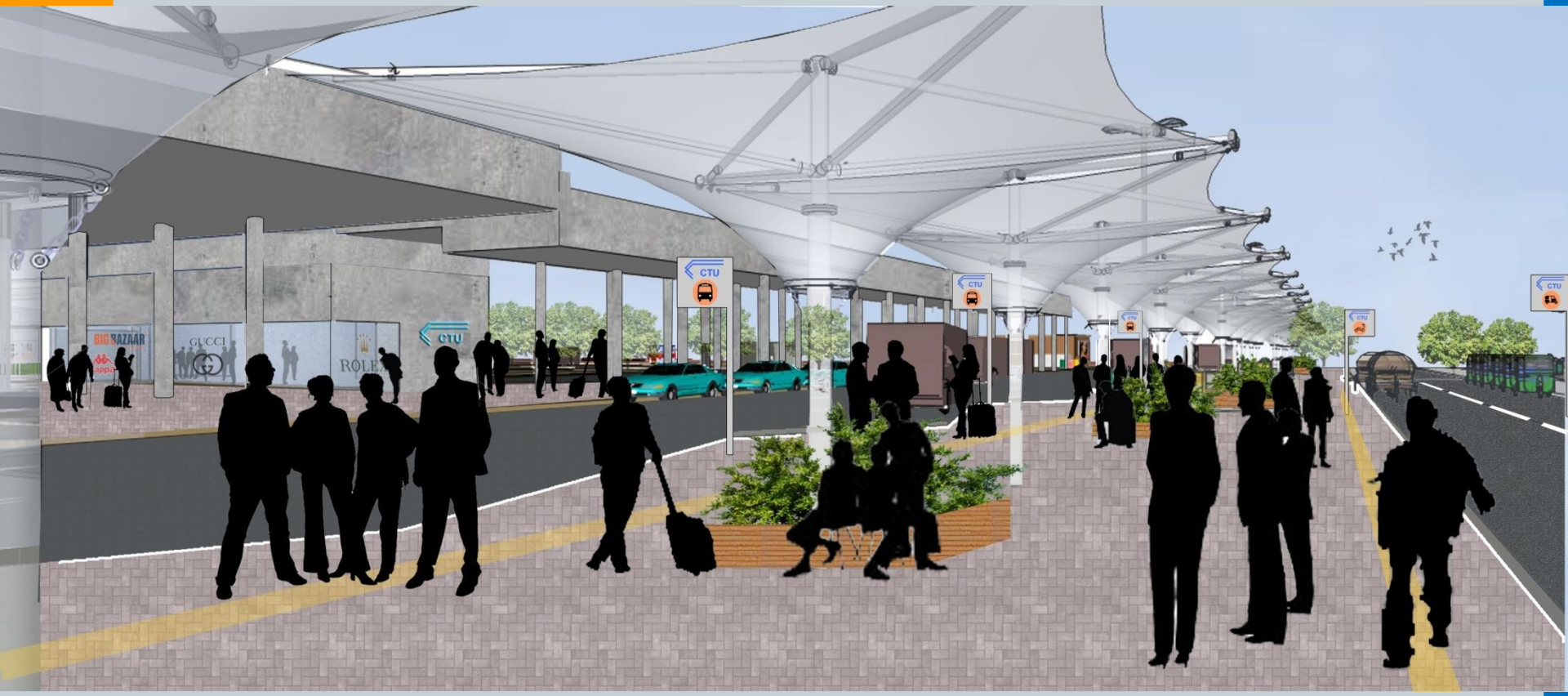
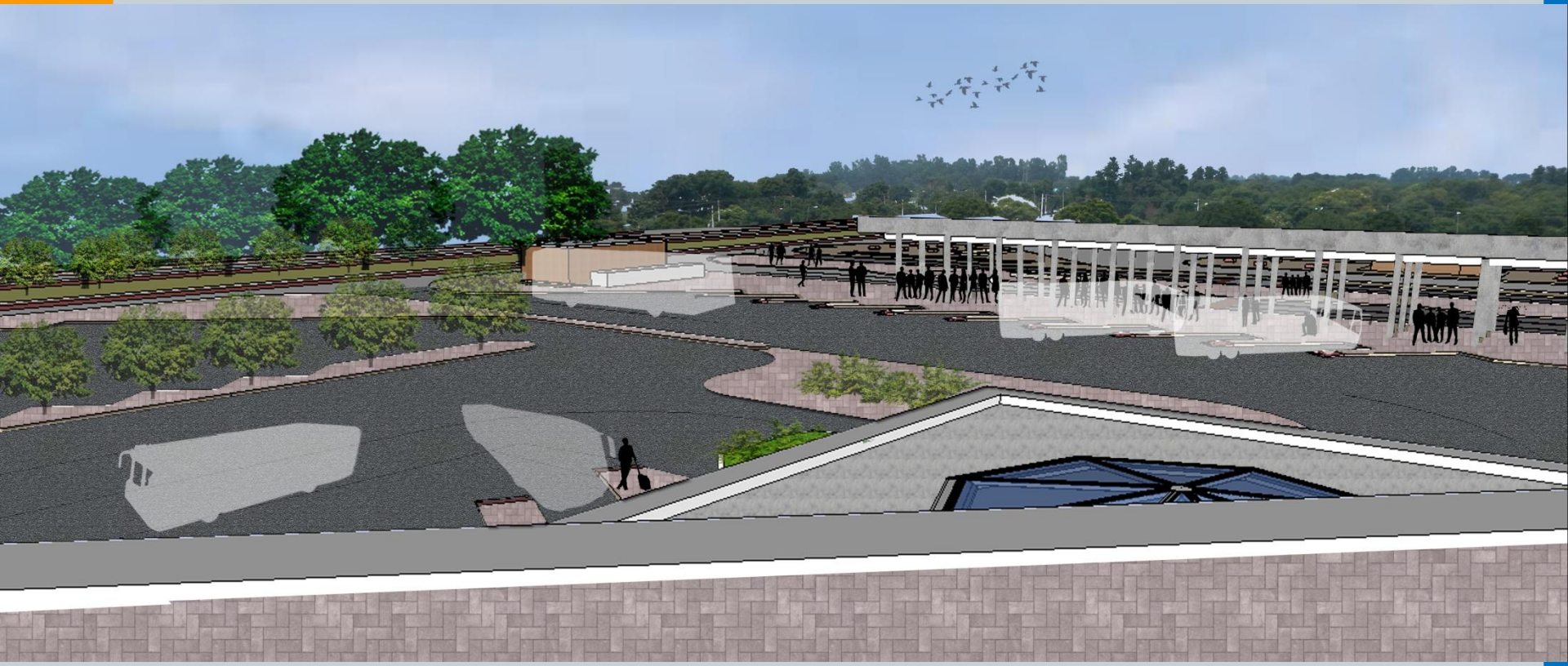
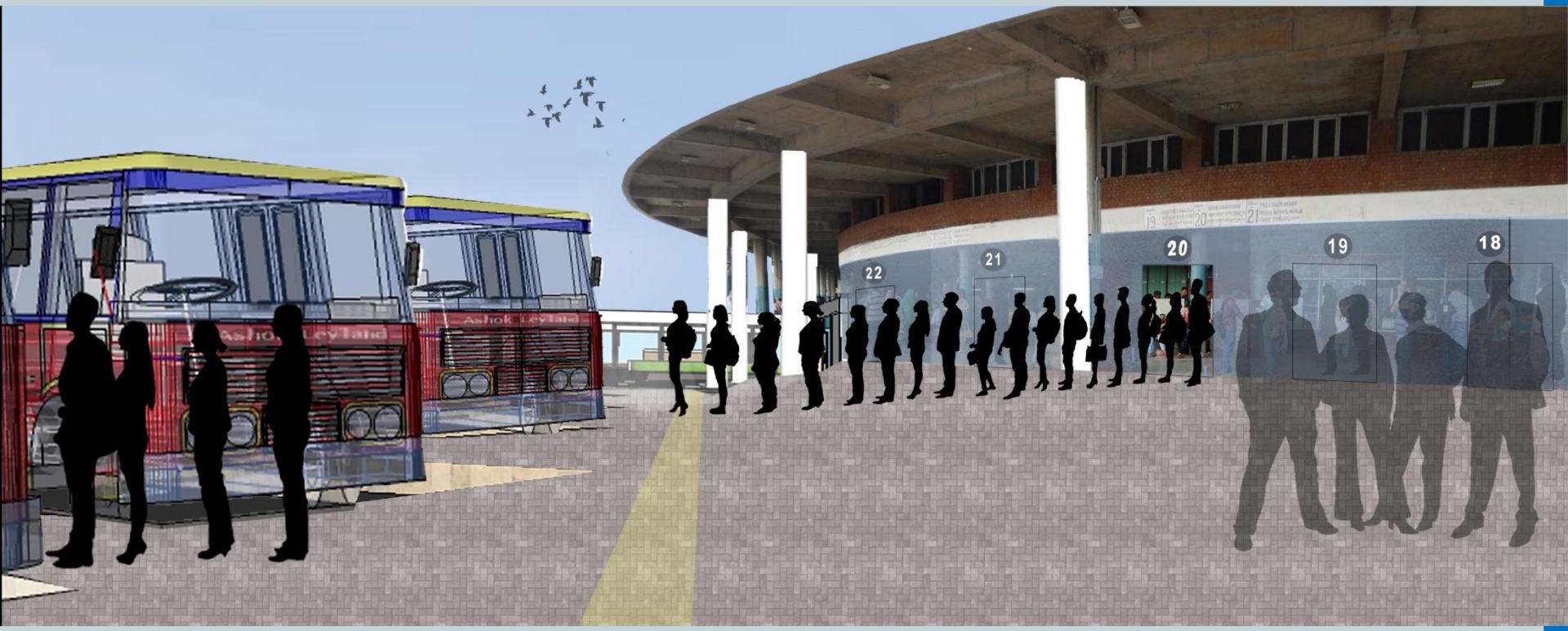
Desired

8th Urban Mobility India Conference & Expo 2015
Transforming Mobility for Liveability

City Bus Terminal



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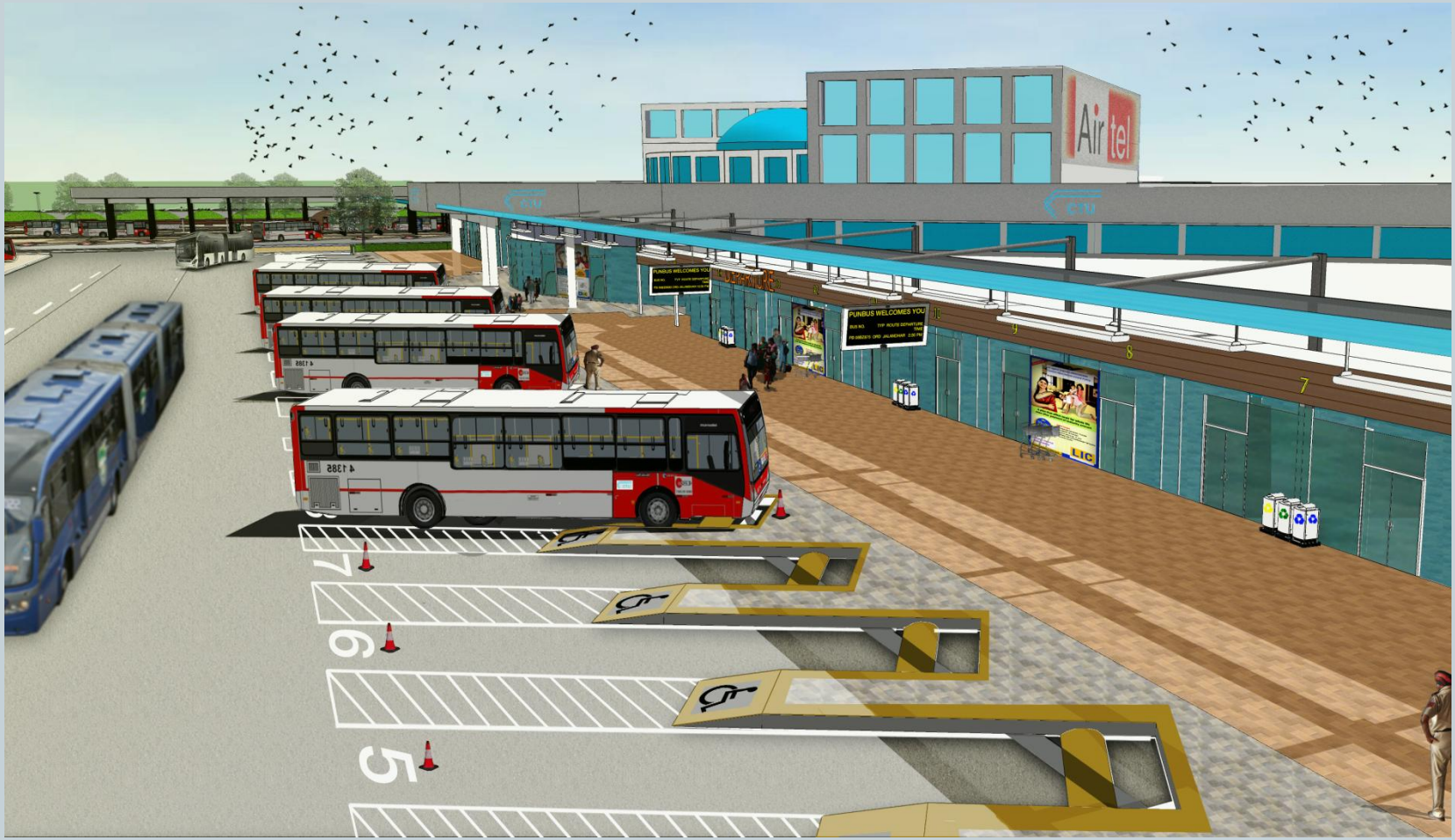
Desired



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What is the problem

- Information regarding bus services not available at one desk
- How does the enquiry work
- Who are those old people sitting and shouting on platforms built in middle of concourse
- Why there is so much clutter and cacophony?
- Can I get ticket online?
- What is the last service available?
- STUs fighting over the passengers/ loading time
- How many bus services to a specific destination operate from my ISBT? What Kind
- Other facilities available (medical/ pharmacy/ timings)

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Why??

- Picture of Chaos and confusion
- Target: How to enhance Public convenience?
- To pick up customer delight
  - Easy access to information
  - User friendly modes
  - Easy processes
  - Ease of doing business
- Highest impact of a change in a city; 50000 commuters land up

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Conceptual design : How to Do it

- Information Collation
- Information Dissemination through various means (User friendly design);
- Using the information; availing services in hassle free manner (online booking, smart phone app reservation, decent staff , receptive reception)
- Putting up new systems; kiosks, display panels, web-portal, mobile app, guides, new signage, better facilities
- Process re-engineering; SOPs to be redefined and fresh ones created

Applying IT: How to Do it

- Intervention of IT
  - Information Management
  - Ease of business/ easy transaction
  - Interactive applications
  - Optimum Use of resources (Dynamic scheduling of bus bays, Analysis of peak/off-peak traffic load)
  - Process automation (Self-service machines, information kiosks)

Terminal Management System

- Two Components mainly
  - Ticketing Window and Passenger Information System
  - Gate Management (Entry/Exit control and automation of parking fee (adda fee) charging)

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Ticketing Window and Passenger Information System

- Unification of timetable of all STU/ Private buses originating at ISBT 43
- Opening of Ticket window, reception cum enquiry desk/Information kiosks
- Passenger Information displays
- Online booking, Mobile application
- Removal of obstructive platforms from concourse

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Databases Required

- Allocation of Bays (Static Currently)- Available
- Total No of Services (STU –wise Timetable)-Available
- Staff Deployed by each STU –Available
- Fare Tables (Destination wise)- Available
- Joint Time Table of All STUs to be collated- Prepared already
- Service specific data –Destination/ list of stopovers- yet to be obtained from STU
- Individual Bus Characteristics (AC/Non-AC, No of seats, Luxury/ semi-deluxe/ ordinary)- Yet to be captured

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Gate Management (Entry/Exit control and automated charging of parking fee (adda fee)

- Linking the unified Database with Entry/Exit Management System
- Putting up toll gates equipped with video analytics camera to read number plate
- Pickets at the gates
- Putting up Fastags additionally for unhindered Entry/Exit with hassle free automatic payment deduction

Desired Outcome

Economic Benefits:

- Replacement of staff (Approx 120 personnel deployed by various STUs/private operator)
- Reduction in transaction cost
- Closing of enquiry counters (different STUs maintain separate enquiry counters

Operational Benefits:

- Aesthetics: More public space and reduction in chaos on concourse; Enhanced customer delight
- Reduced interaction enhances operational efficiency
- Dynamic Bay scheduling possible

Desired Outcome

- Reduced Pilferage in Parking Fee (collection of about 13 Cr as Adda fee)
- Correct information/Data about incoming/outgoing vehicles (Enhanced Reliability)
- Ease of doing business
- Reduced queue at gates (time factor, smooth operation)
- More flexible charges for parking of buses possible

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Other Benefits

- Improved Aesthetics (comfortable and clear access to facilities)
- Tab on operations- check on aberrations
- Checking leakage of revenue; Checking Pilferage
- Improvement in Public Service delivery (enhancing image of public facilities; branding of CTU)
- Optimum utilization of resources (better allocation of manpower, bays etc) ; Enhanced operational efficiency
- Reduced transaction cost and time
- Reliability of information (missing service/ changed bus/ changed bay) in real time basis

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THANKS