Berth

UX case study · 2026

The one thing you need right now, on a long train journey.

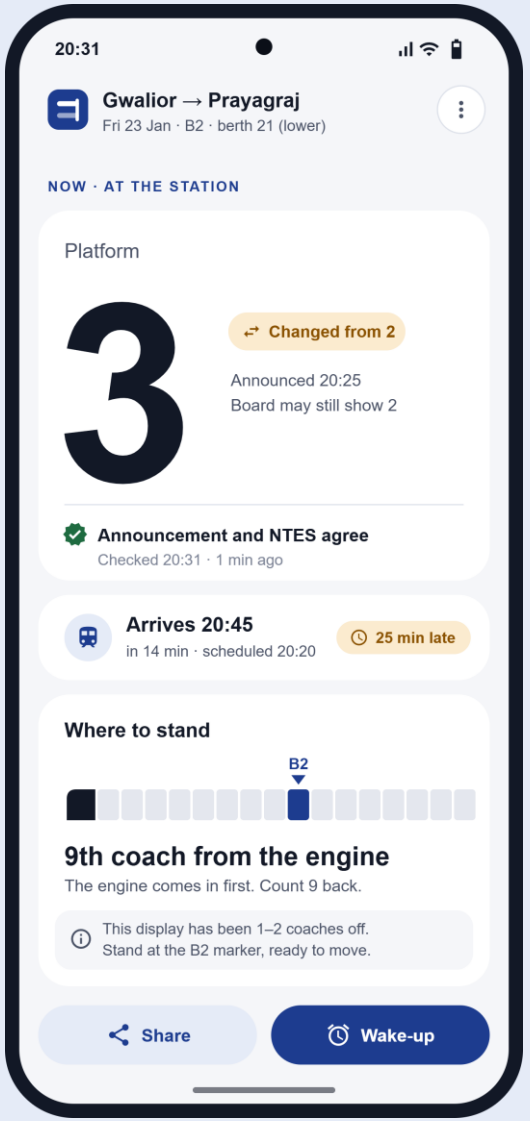
A concept Android app for long Indian train journeys. It shows the platform, where your coach stops and when to wake up, readable at a glance with one hand, and it works offline.

Nabaskar Brahma

Solo researcher and designer

Survey (n = 116) · 8 interviews · station observation · 5 travel diaries

I designed and analysed the study. Its responses were simulated with AI, set in the Jan to Feb 2026 winter travel season.



Travellers don’t lack train data. They lack one number they can trust, at the moment it matters.

01

The problem

Stress peaks on the platform and on the approach to a pre-dawn stop. The board, the apps and other people often disagree.

02

What I did

Designed a 4-method study and ran it as a simulation: a survey (n = 116), 8 interviews, a station visit, 5 diaries. Then analysed it.

03

What I designed

Berth: one sourced answer per moment, also on the lock screen, a widget, and an alarm that follows the train.

> “If the board and app say different things, tell me which one is right.”

P2, student, 20-hour trip home

At 4:50 am the train arrived early, and her father was still planning for 5:15.

4:50 am

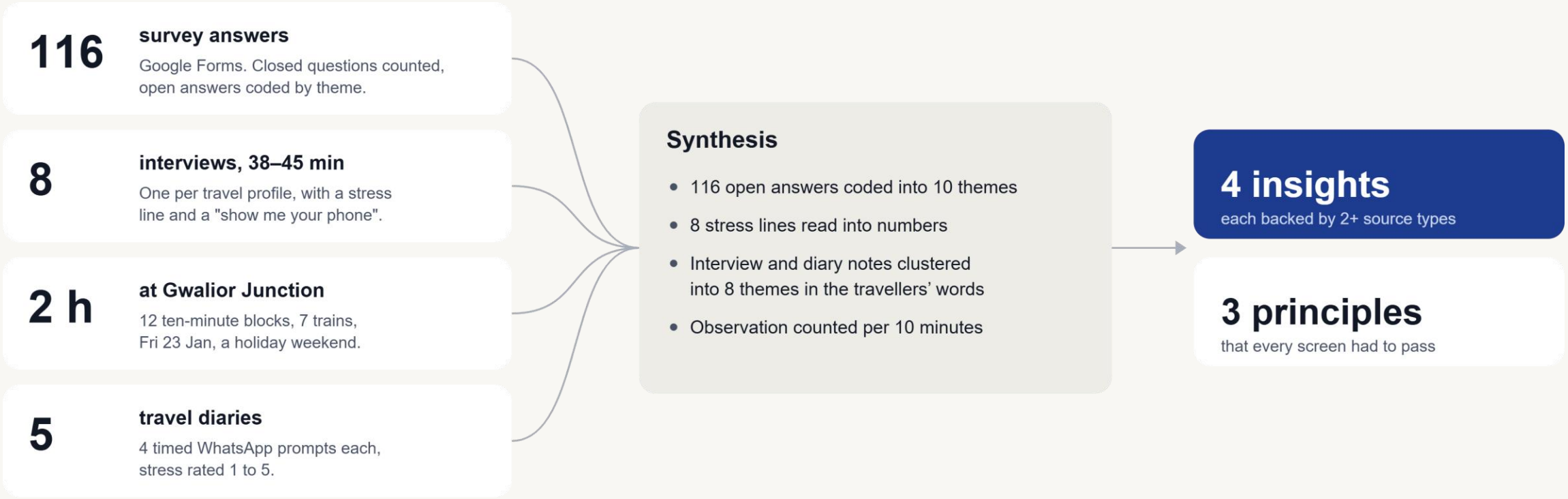
Raipur, still dark. The train had been 40 minutes late at 2:30, then made up time. P5 got down and waited 15 minutes near the stairs, by the light and the RPF booth.

“If I get it wrong, I’m alone on a platform at 4 am for a long time.”

P5, travels alone overnight, 4 to 5 times a year



Four methods, so every insight could stand on two kinds of evidence.



Survey for scale, interviews for the why, observation for what people do rather than say, diaries for the moment itself.

How I ran it: I wrote the study plan, used AI to simulate responses to it, then cleaned, coded and analysed every file myself.

8 interview profiles, each chosen for a different way of travelling.

P1

Frequent student

Home 6 times a year. Gwalior to Basti, 14 h, Sleeper; 2-min halt at about 5 am.

P2

Student, another route

Gwalior to Secunderabad, 20 h, 3AC. Boards near midnight.

P3

Rarely takes long trains

One 34-hour trip in the last year. A first-timer.

P4

Travels with family

Spouse, a 5-year-old, sometimes his parents. 13 h, 3AC.

P5

Woman, alone overnight

Gwalior to Raipur, 16 h, 3AC. Arrives at about 4:35 am.

P6

Often waitlisted or RAC

Gwalior to Darbhanga, 22 to 26 h, Sleeper, festival trips.

P7

Young professional

Delhi to Lucknow, about 20 round trips a year, weekends.

P8

Aged 55 to 60

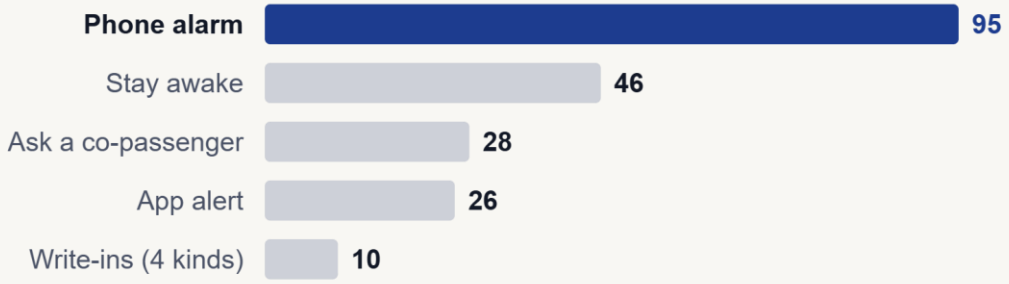
Travels alone to Indore. Older phone, large font; WhatsApp and calls only.

One simulated participant per profile I defined, plus 5 diarists, D1 to D5. Codes only, no names.

Travellers juggle 3.3 sources each, yet 95 of 116 still wake up to a fixed phone alarm.

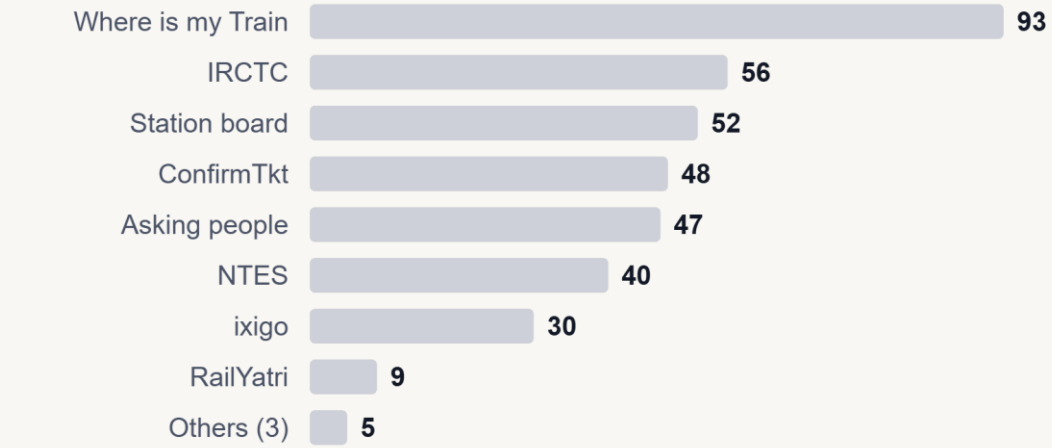
How do you make sure you wake up before your station?

Multi-select · n = 116



Which apps or sources do you use to check train status?

Multi-select · n = 116



70 of 116

check train status 6 or more times on a typical trip

38 of 116

often lose network when they need it (4 or 5 out of 5)

51 of 116

have missed or nearly missed a stop or a train

In 2 hours at Gwalior Junction, 85 people asked someone where their coach would stop.

85

asked a vendor, coolie or stranger where a coach stops. Peak: 12 in the 10 minutes after a platform change.

3 of 4

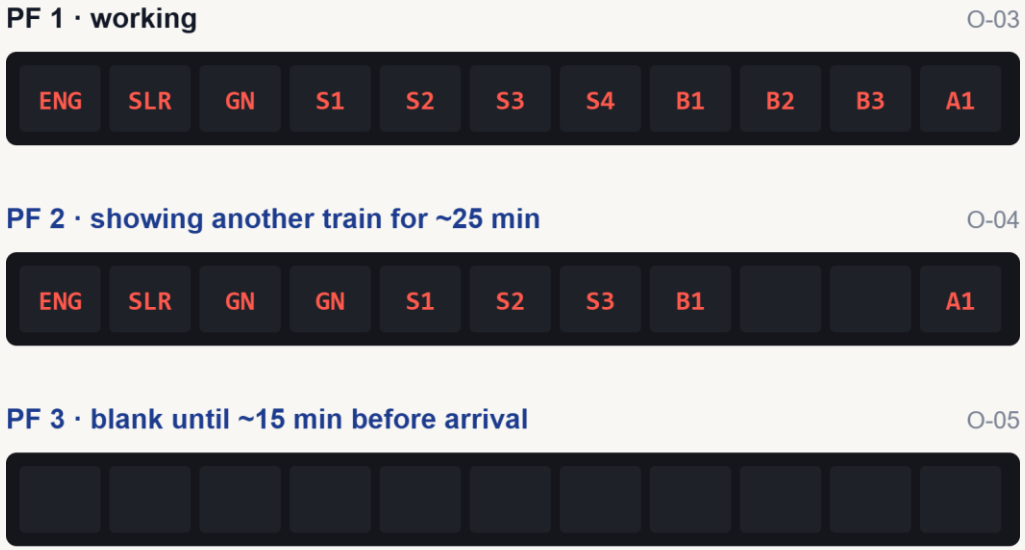
trains watched closely stopped 1 to 1.5 coaches away from the display marker.

220

times someone used a phone with the other hand full: a bag, a trolley, a child.

~40 s

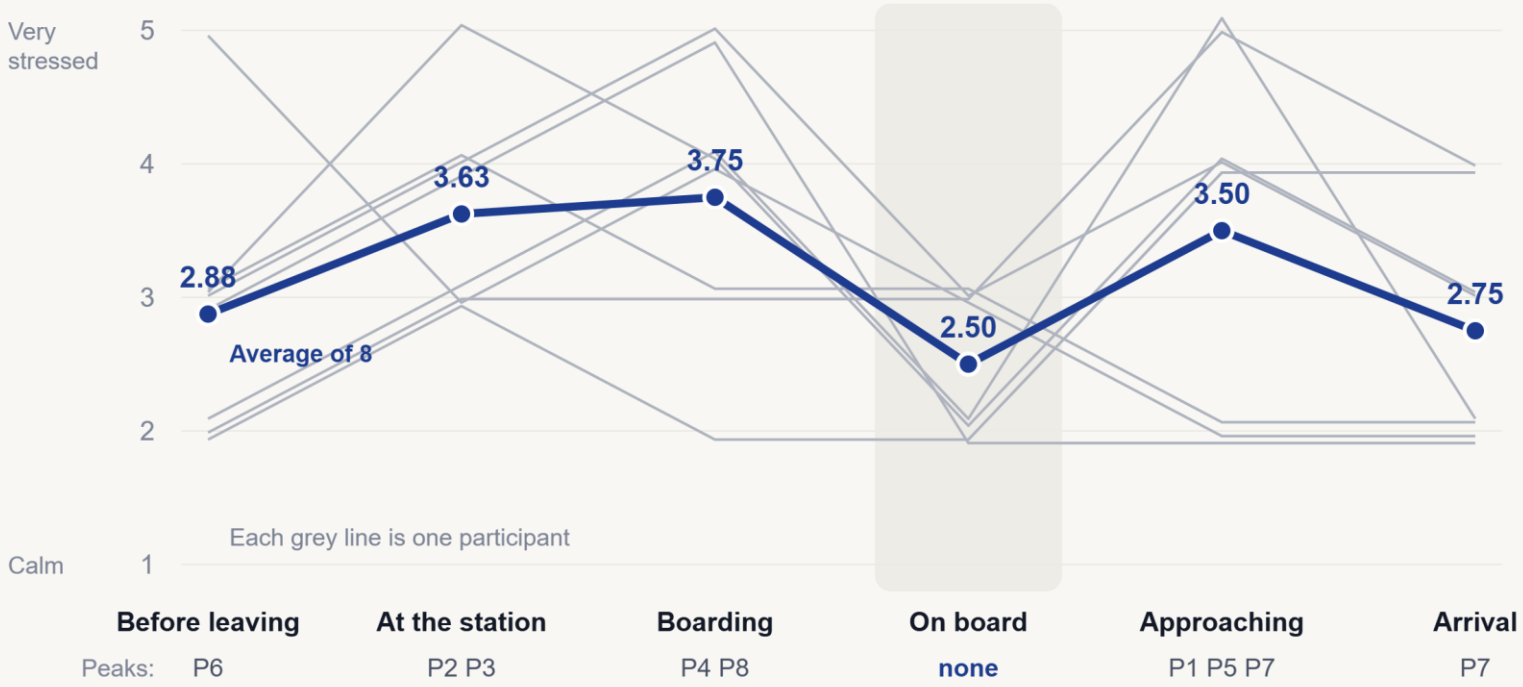
the board lagged the announcement of a platform change. At least 3 apps still showed the old one.



Coach-position displays, redrawn from the photo log. No people were photographed.

> “The chai guy on the platform knows better than the app.” P1, on finding his coach at Gwalior

Nobody’s stress peaked on board. It peaked on the platform and on the approach.



4 of 8

peak at the station or while boarding

3 of 8

peak on the approach to their stop

0 of 8

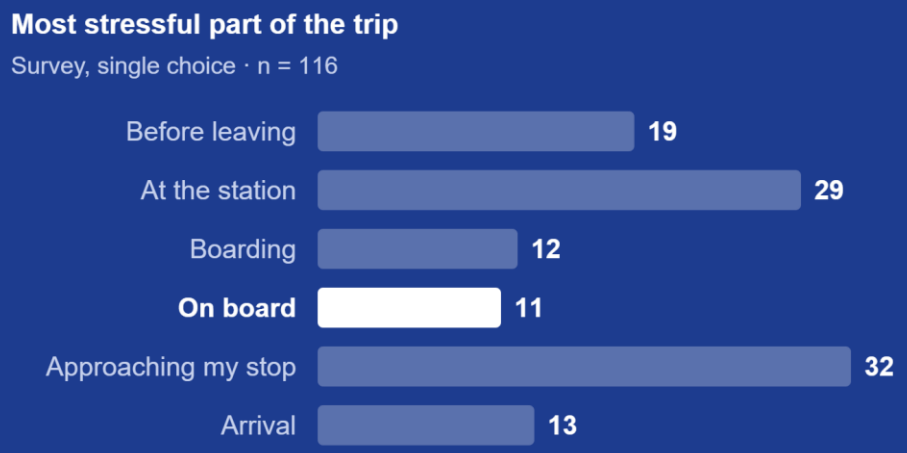
peak on board, the calmest phase

I set out to design for the long offline night. The night was the calm part.

The brief: an offline-first companion for the on-board stretch.

2.50

average stress on board, the lowest of six phases (8 stress lines)



What changed

Berth now targets the platform and the approach. Offline still matters, but at night near the stop, not mid-journey. And the station problem isn’t missing data: it’s conflicting data with no source and no age.

The display shows one place. The coach stops at another.

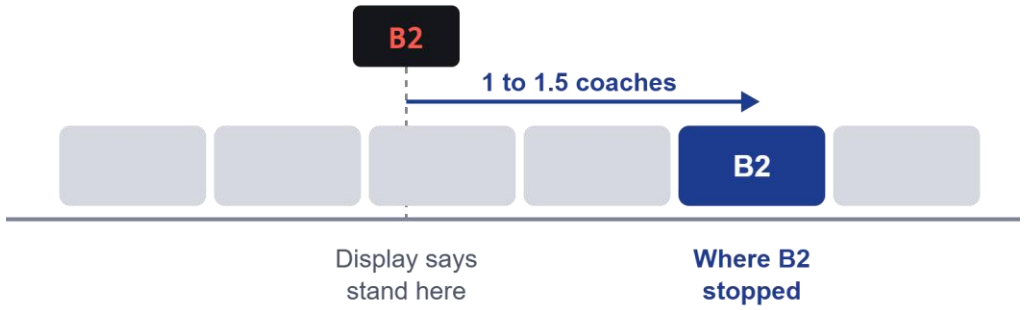
“Tell me where to stand. Honestly that’s it.”

P3, first long trip in years

5 of 8 interviewees struggle to find their coach (P1 to P4, P8)

85 people asked where a coach stops in 2 hours (OBS)

3 of 5 diarists hit a blank display, a wrong one, or two answers (D1, D3, D5)



Seen on 3 of 4 trains watched closely (OBS)

Three sources, no single truth: people trust a number only when two agree.

“If the board and app say different things, tell me which one is right.”

P2, student, 20-hour trip home

5 of 8 cross-check two sources before they trust a number

3.3 sources used per survey respondent (n = 116)

3+ people’s apps still showed the old platform after a change (OBS)



Five students compared three phones after the platform change (OBS)

Alarms follow the timetable. Trains don’t.

“Something that wakes me based on where the train really is. Not based on the timetable.”

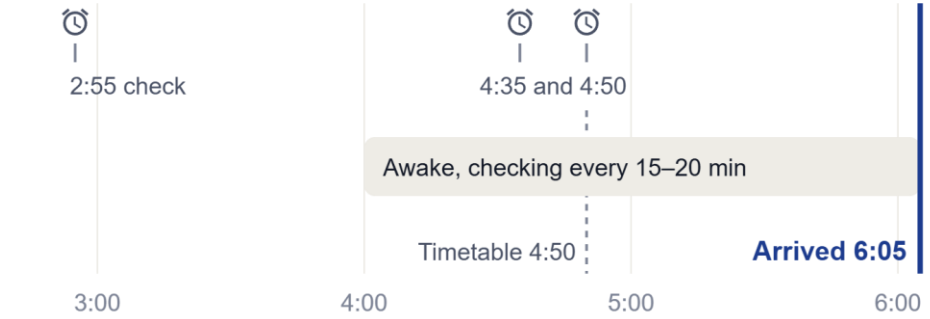
P1, 2-minute halt at about 5 am

95 of 116 wake up with a phone alarm; 26 use an app alert

23 of 43 near-miss stories are about missing the stop

2 of 2 interviewees with a pre-dawn stop rate the approach 5 of 5

P1’s last trip home: alarms set by the timetable



Source: P1 interview and his alarm-list screenshot

An honest early estimate beats a precise late one, because someone at home acts on it.

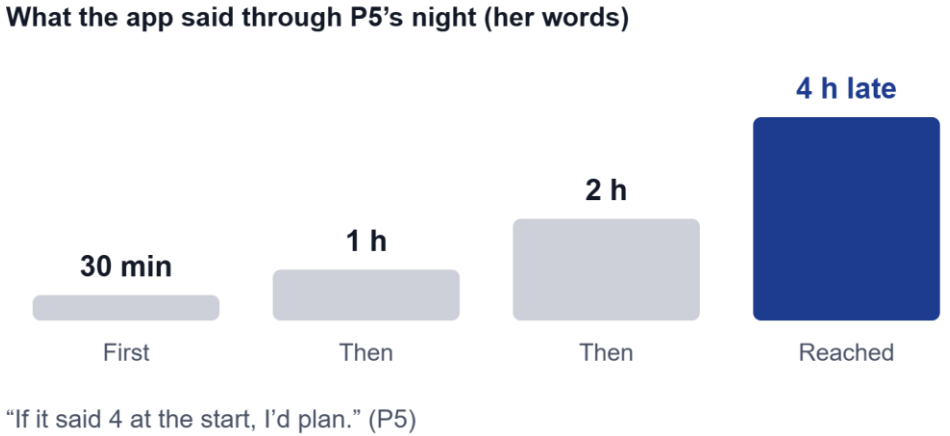
“An honest arrival time. Early. Even if it’s bad news.”

P5, travels alone overnight

5 of 8 have family whose plans hang on the train’s status

15 survey stories are about a delay that kept changing (n = 116)

P7 the calendar shows the scheduled arrival, “which is a lie”



The trip has two hard moments: the platform, and the approach to a pre-dawn stop.

	Before leaving	At the station	Boarding	On board	Approaching	Arrival
They need	Will my ticket clear? When do I leave?	Which platform, really? Where does B2 stop?	Family and bags in, in a 2 to 5 minute halt	Charge, rest, keep family posted	Wake at the right time. Is this my stop?	Someone is waiting. Get down safely.
They do today	Refresh 2 apps and a WhatsApp group (P6)	Ask a vendor or coolie (P1, P8; 85 asks in 2 h)	Scout alone, then move everyone (P4; 9 min)	Battery saver; tell family "no network" (P1, P2)	3 alarms, GPS dot, stay awake (P1, P5, D1)	Fixed messages: "Gonda nikal gaya" (P1)
Stress (avg of 8)	2.88	3.63	3.75	2.50	3.50	2.75
	19 of 116 say worst	29 of 116 say worst	12 of 116 say worst	11 of 116 say worst	32 of 116 say worst	13 of 116 say worst
Berth does	Out of v1: starts once the chart is out	**Platform with source and age; where to stand**	**"Train in 14 min" and a coach count**	Offline estimate, low-power mode	**Alarm by position, honest arrival range**	Share status in one tap

Three rules every screen had to pass.

1

Every number shows its source and its age.

From insight 2

“Platform 3 · announcement and NTES agree · 1 min ago”

2

Run on the train’s real position, and say it early.

From insights 3 and 4

An alarm 40 minutes before the real arrival; arrival shown as a range.

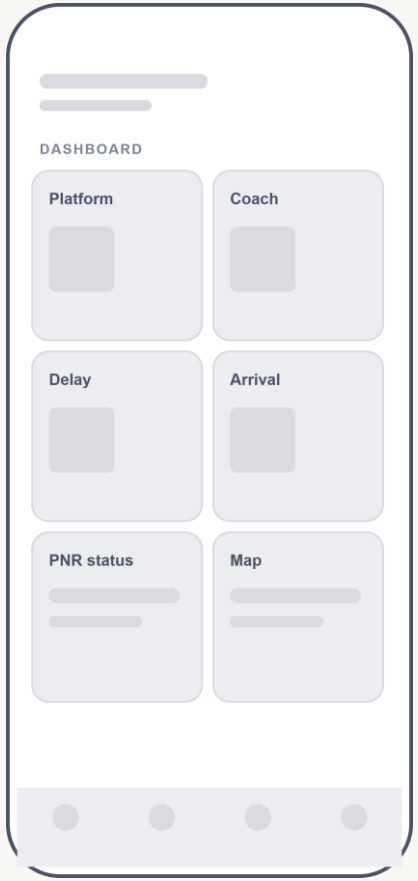
3

Readable at arm’s length, with one hand, in plain words.

From OBS, P3 and P8

Signage-size numbers, codes always decoded, Hindi station names.

A dashboard showed everything. One answer per moment won.



A · Dashboard

Six equal tiles. In a 2-minute halt the eye has to hunt for the one that matters.



B · One answer now

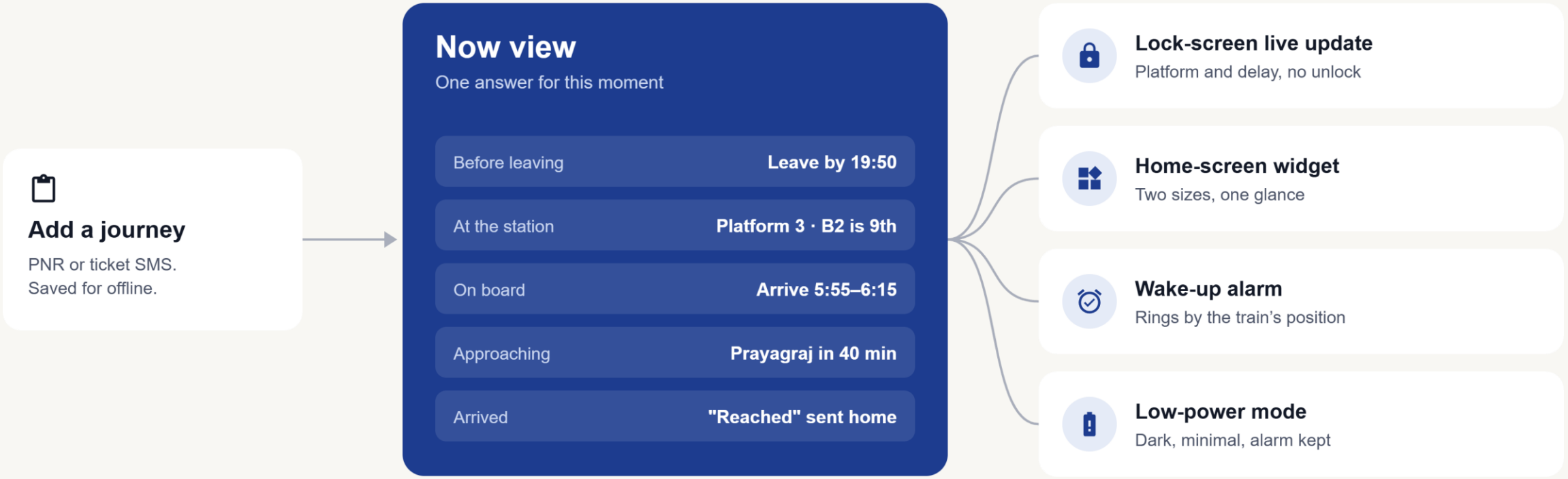
The answer for this phase fills the screen. Everything else is a scroll away. Chosen.

> Stress moves from phase to phase (2.50 to 3.75 avg), so the screen should move with it.

> 220 one-handed phone uses in 2 hours: there is no time to scan six tiles.

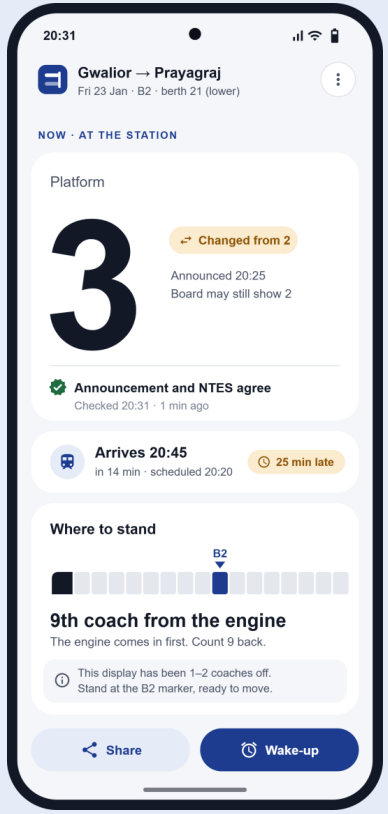
> B won because each phase has one question that matters most.

One Now view, shown wherever the traveller’s hand already is.

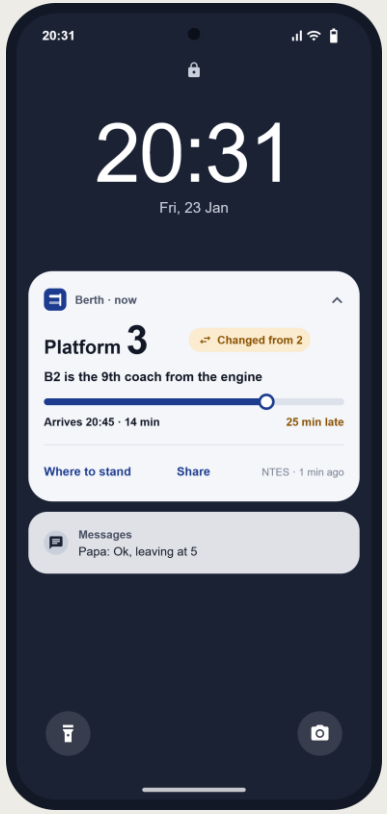


Sample journey: Gwalior Jn to Prayagraj Jn, overnight 3AC. Train data in every screen is illustrative.

At the station: the platform, where the number came from, and where to stand.



Now view



Lock screen, no unlock

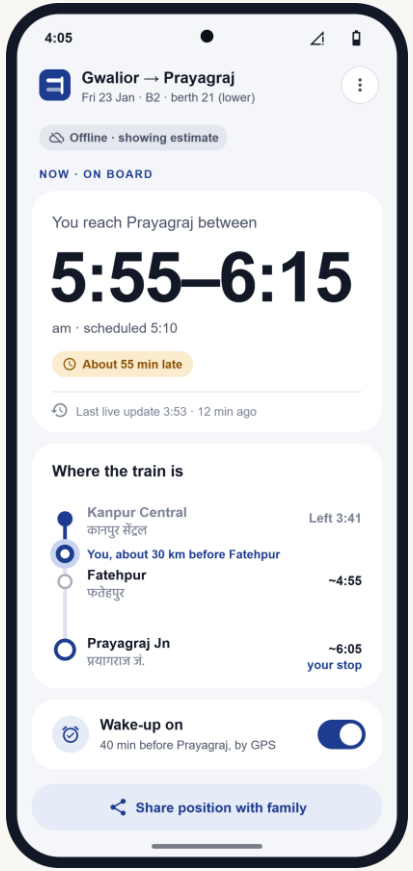
Platform first and huge: in one hour people looked up at the board 236 times (OBS).

"Changed from 2" uses an icon, a word and a colour, never colour alone. The board lagged the announcement by ~40 s.

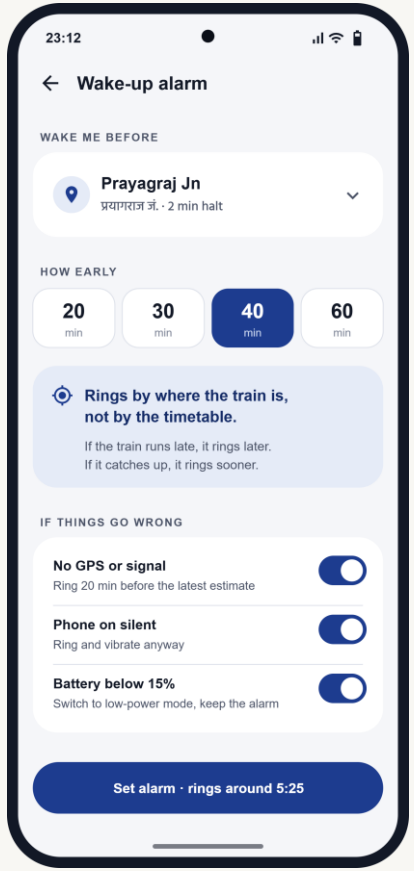
Where to stand admits the display may be 1 to 2 coaches off. It was, on 3 of 4 trains.

Lock screen carries the same answer: 220 phone uses with the other hand full in 2 hours.

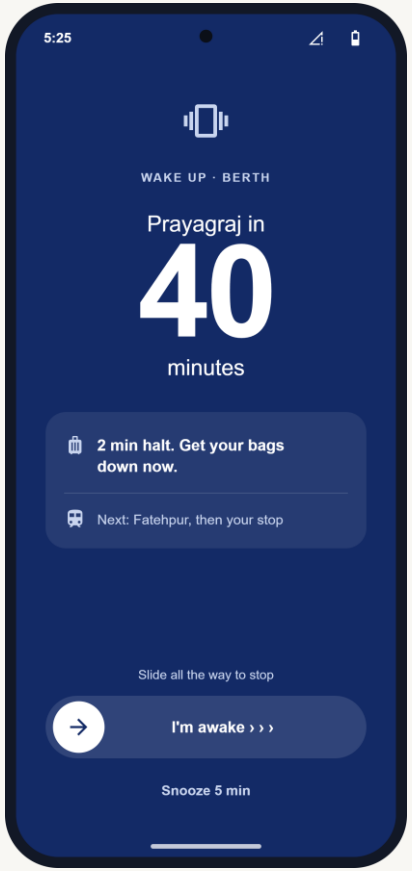
On board: an honest arrival range, and an alarm that follows the train.



On board, offline



Set the alarm



Alarm ringing

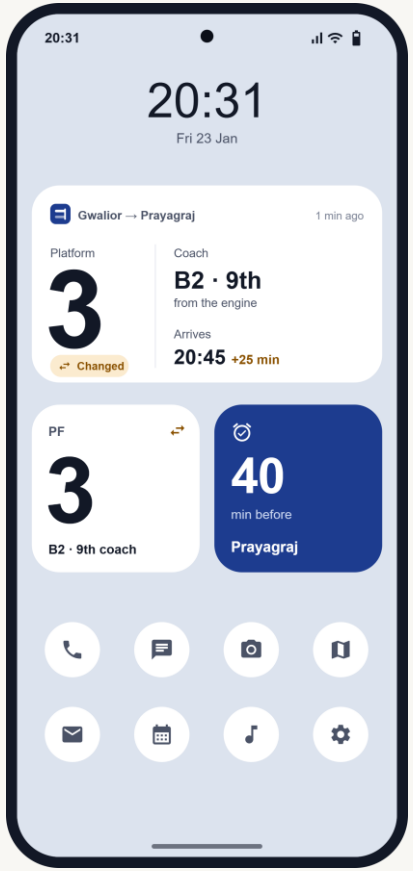
A range, not a minute. "An honest arrival time. Early. Even if it's bad news." (P5)

Offline is stated, with the age of the last update. D2's app said "on time" while 22 minutes stale.

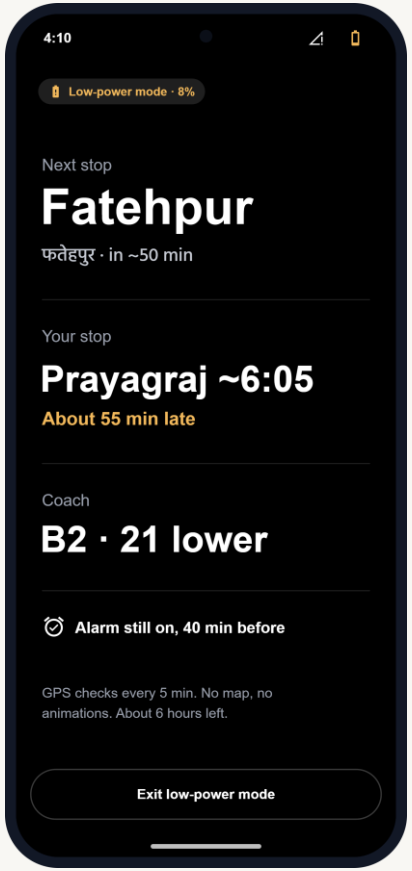
Rings by GPS, with a fallback if GPS is lost. 95 of 116 rely on a fixed phone alarm.

Slide all the way to stop: P1 once woke, saw 4% battery, slept again and woke up past his stop.

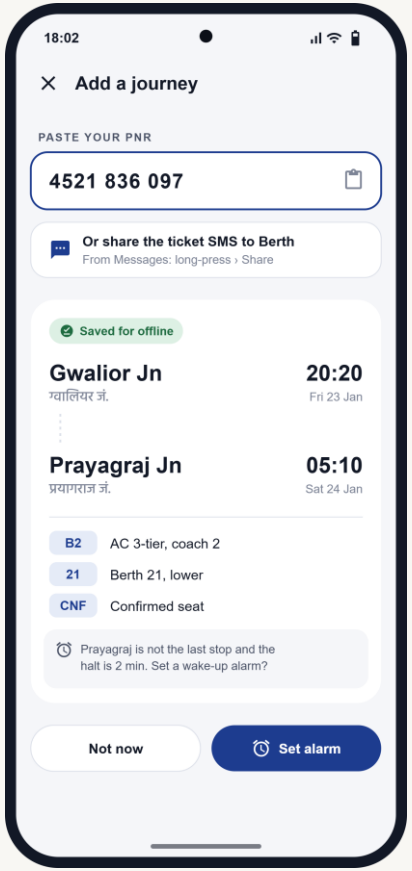
Built for one hand, no signal, harsh light, 8% battery and unfamiliar codes.



Widgets, two sizes



Low-power mode



Add a journey

> One hand: widget and lock screen answer without unlocking (220 one-handed uses in 2 h, OBS).

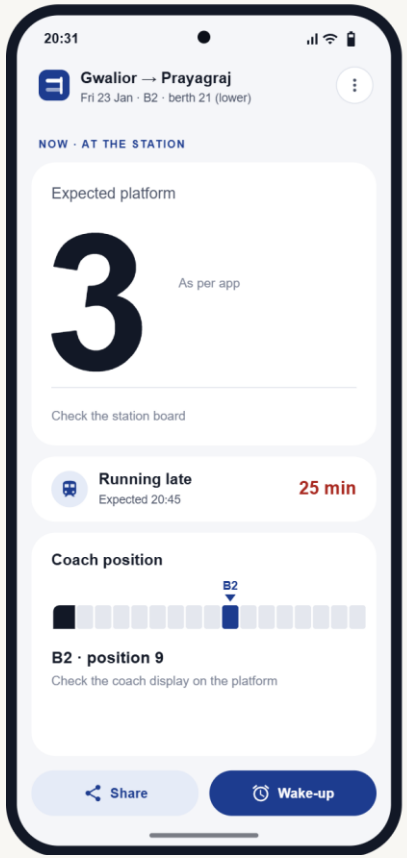
> Harsh light: near-black on white, numbers 100 px and up. Glare washed out D2's photo of the display.

> Low battery: 95 of 116 change how they use their phone. Below 15%: black screen, GPS every 5 min.

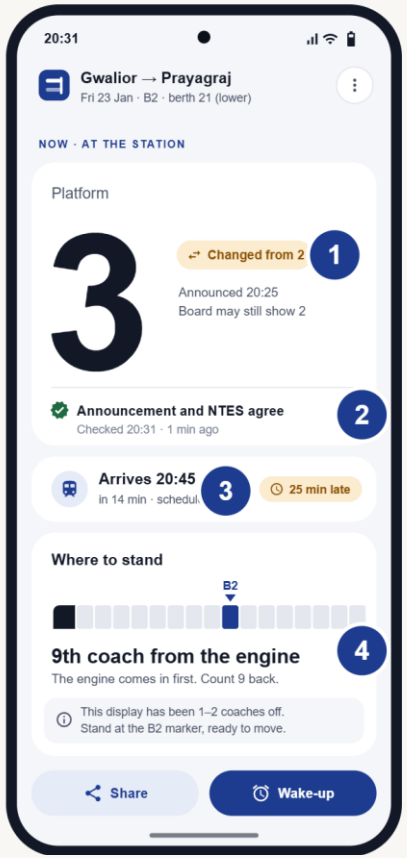
> Saved offline and decoded on day one. P3 thought "SBC" was a typo; 38 of 116 often lose network.

Research turned the platform number from a guess into a sourced fact.

Before: first version



After: research-driven



1 **A change is a state, not a silent swap**

"Changed from 2" with an icon, a word and a colour. At the station, 3 people's apps still showed the old platform.

2 **Every number names its source and age**

5 of 8 cross-check before they trust a number. "Tell me which one is right." (P2)

3 **Lead time, not just lateness**

"In 14 min" comes first: families need "time to move slowly" (P4).

4 **Where to stand, with an honest warning**

Coaches stopped off their marker on 3 of 4 trains (OBS). "Tell me where to stand." (P3)

Success means fewer checks and no missed stops, not more time in the app.

What I'd measure	Today's baseline	Signal of success
Status checks per trip	70 of 116 check 6 or more times	Fewer checks once a journey is added
Missed or nearly missed stops	51 of 116 have missed or nearly missed	No misses among trips with the alarm on
Time from entry to standing at the right coach	A family of 6 took 9 minutes (OBS)	Well under 9 minutes
Trust in the shown platform	5 of 8 cross-check a second source	Fewer users checking a second source

Guardrail: time in the app is not a goal. A good trip is one where Berth was glanced at, not browsed.

Design for the moment, not the journey.

01

Map stress first

My brief said “offline, on board”. The stress lines said “the platform, and my stop”. That one chart moved the whole product.

02

Design for trust

People had plenty of data and no reason to believe it. A source and an age on every number became the core of Berth.

03

Simulation has a ceiling

Simulated responses let me run the whole process, from coding to screens. They can only reflect the questions I knew to ask.

Every number in this deck traces back to a file in the study: the survey, a transcript, a diary or a stress line.

Thank you