



PANDA POST

42 BANGKOK



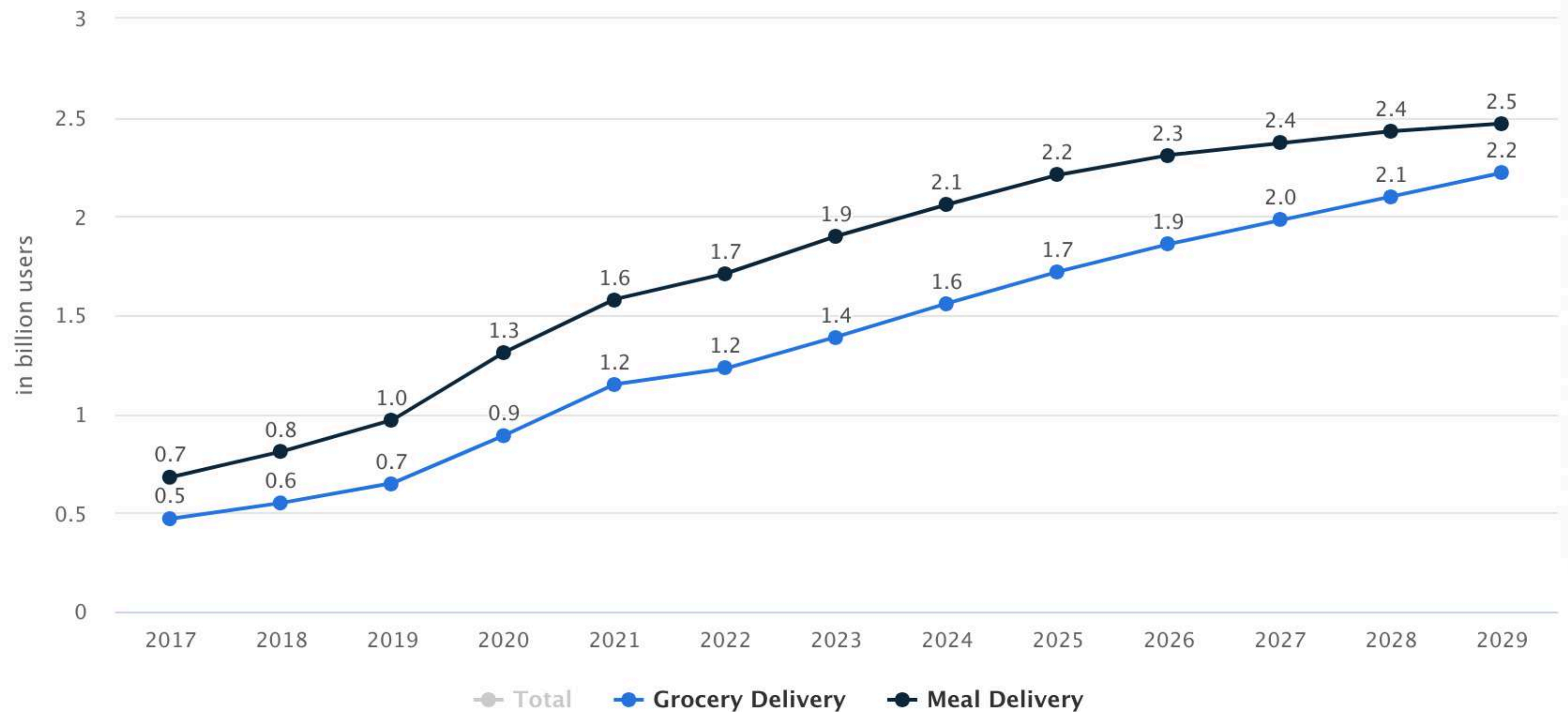


PROBLEM STATEMENTS

Sustainability in Food Deliveries

- **Food deliveries contribute to emissions** particularly in cities with dangerous roads.
- **Sustainable options would be preferable** as usage of food deliveries increase.
- **Food delivery users growth is slowing** mainly due to pricing and consistency.

FOOD DELIVERY USER GROWTH WORLDWIDE





ISSUES

- **One-to-one model** - convenient but produces carbon emissions.
- **Private transportation** - expensive, heavier and more environment impact.
- **Food deliveries will grow** - extra orders add extra vehicles on the road.
- **Customers willing to change** - willing to tradeoff for sustainable alternatives.

PANDA POST

Key Features

- **Scale** deliveries like a postal service.
- **Use public transit** infrastructure as distribution points.
- **Transportation hubs** have dedicated drop-off boxes.
- **Customers pick up** orders at the designated time.
- **Encourage bulk/delayed orders** allowing optimization for deliveries to the same destinations.

PUBLIC TRANSIT



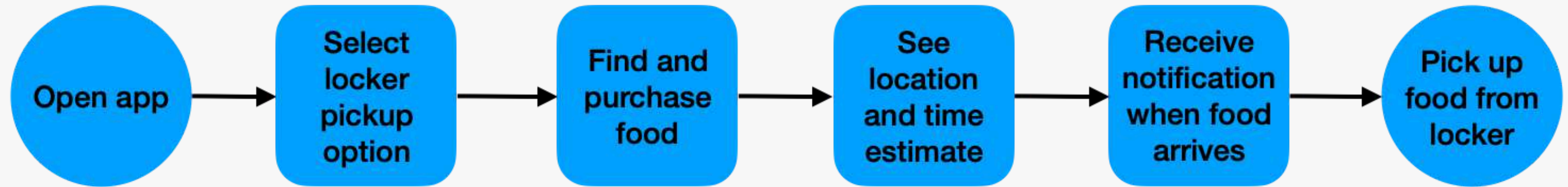
USERS



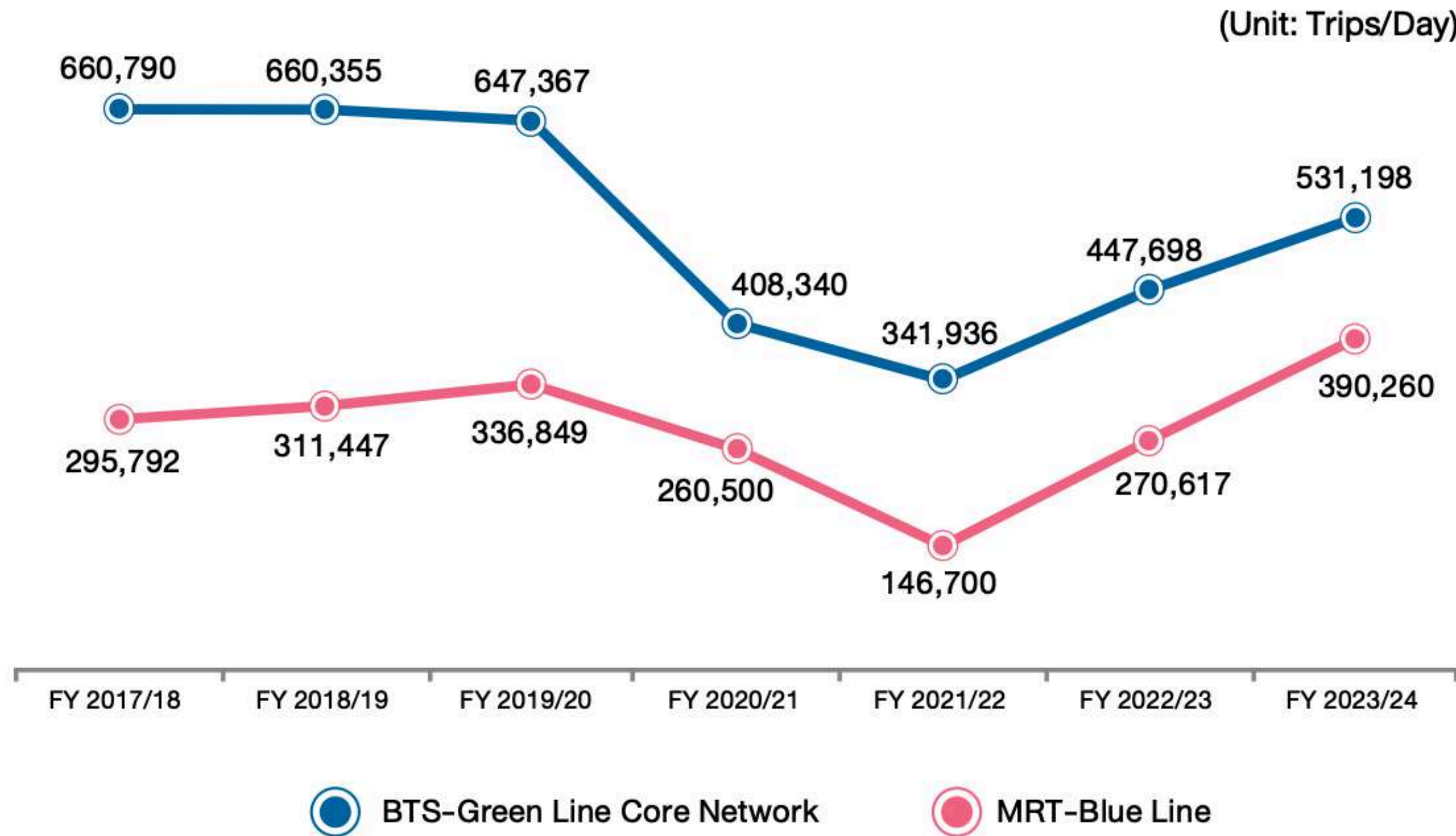
BAMBOO BOX



CUSTOMER WORKFLOW

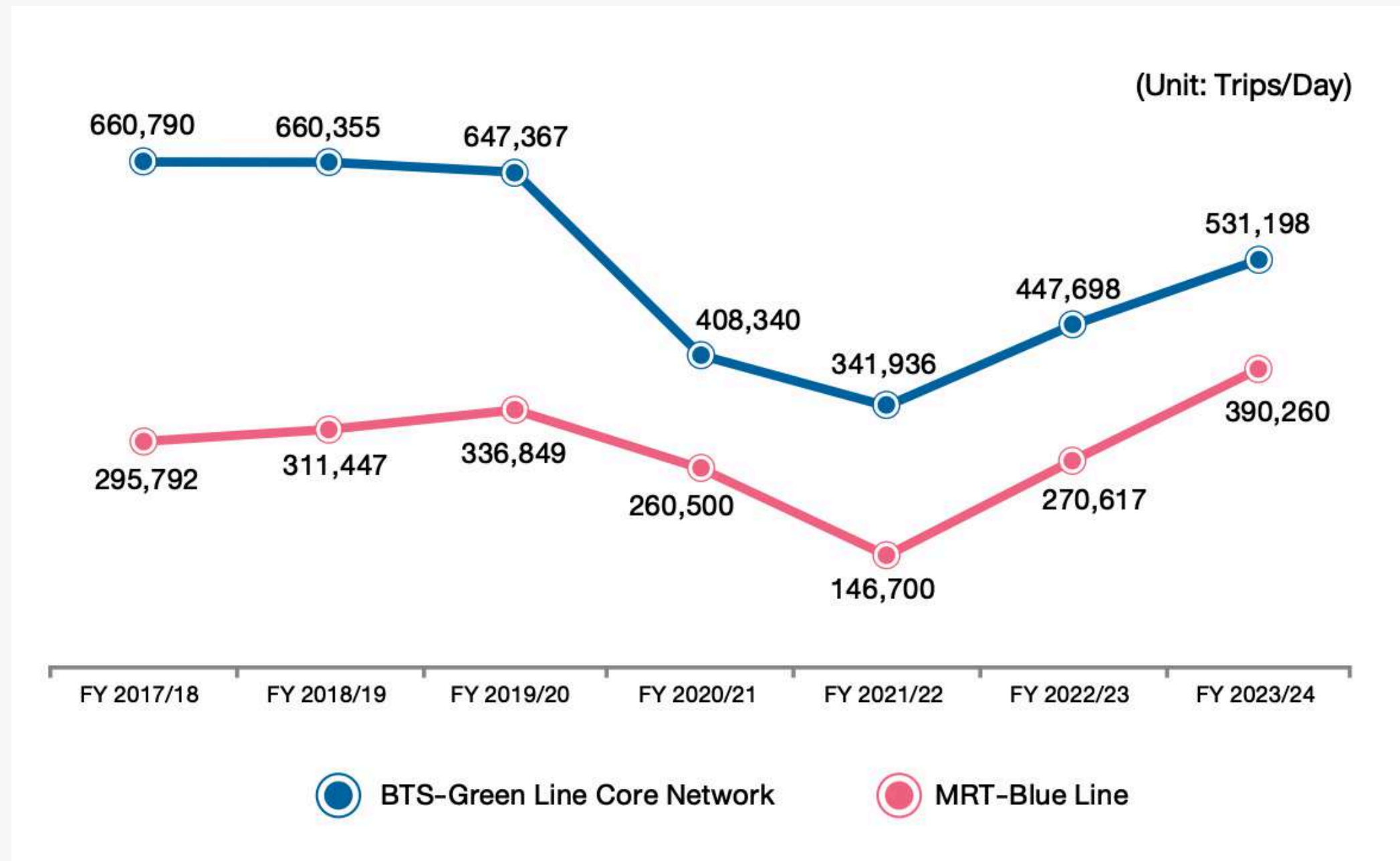


BANGKOK BTS AND MRT TRIPS PER DAY



USERS

- **Commuters** will be the first target.
- **Pick-ups during commute** with consistent pickup times at lower prices to minimise impact from the current system.

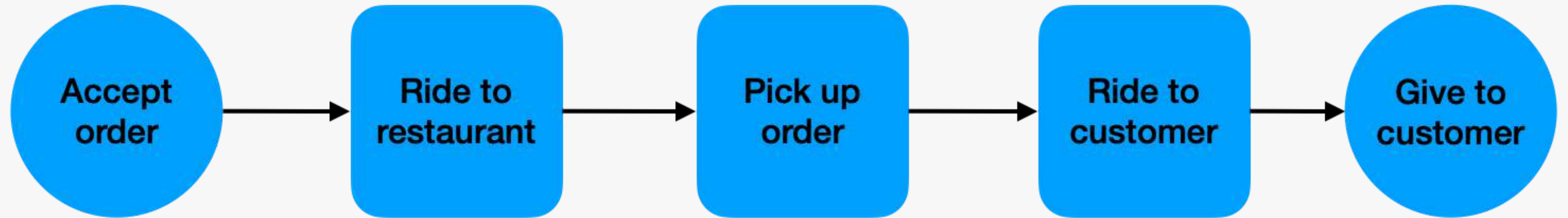




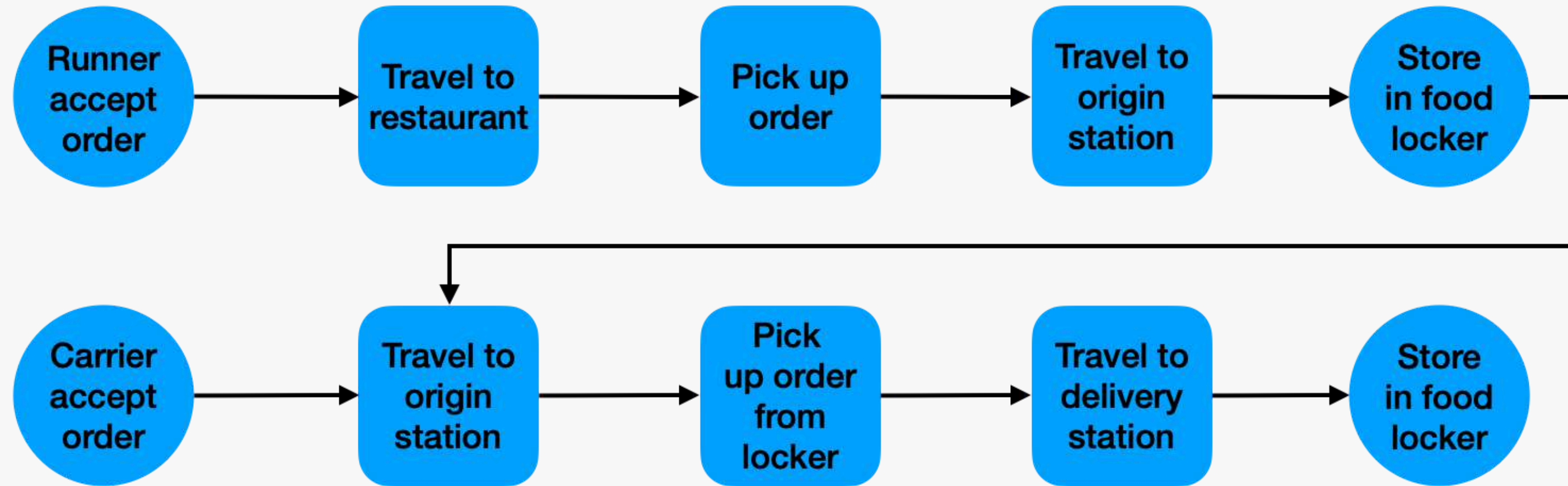
DELIVERY

- **Increase earnings for riders** due to multiple orders going to the transport hub
- **Safer and less stressful** pre-planned orders for riders and restaurants, increasing effectiveness and quality of service while allowing
- **Keep motorcycle riders** for flexibility but move part of the trip to train
- **Allow growth** without adding many extra vehicles on the road

CURRENT DELIVERY WORKFLOW



PROPOSED DELIVERY WORKFLOW





OPTIMIZATIONS

- **Incentivize planned/bulk orders** by gamifying the ordering processes.
- **Gamification** to optimize deliveries according to restaurants' locations and destinations.
- **Offer promotions** that are on existing delivery order routes.
- **New opportunities** for walkers who stay near a station and walk from restaurants to station.
- **Increased stacking** due to distribution hubs.

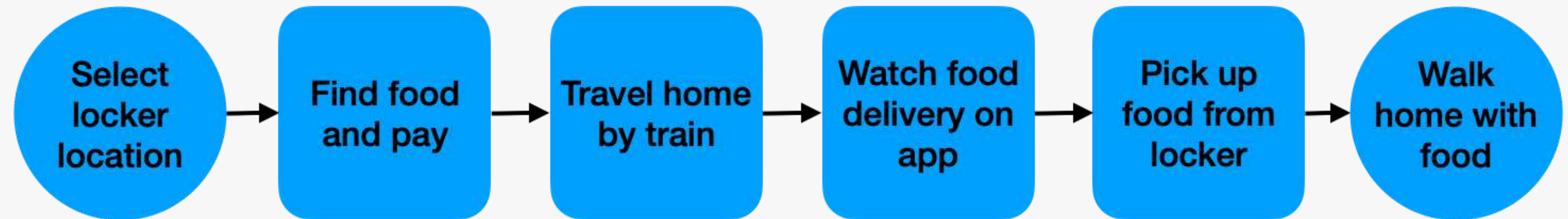


OPPORTUNITIES

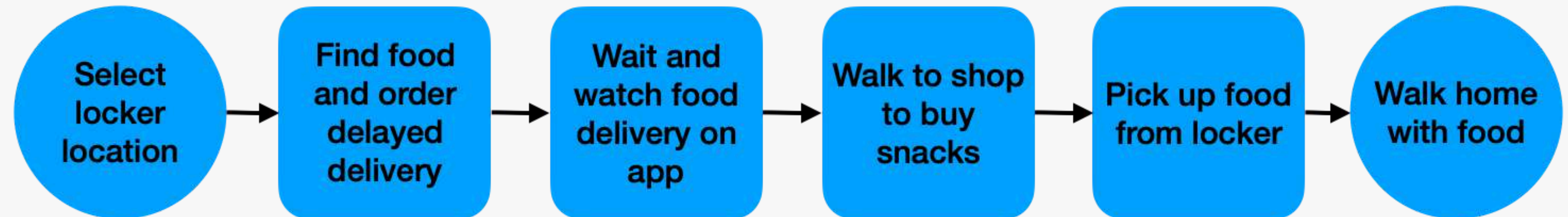
- **Expansion** to more transit systems (buses, trains, etc.)
- **Increase awareness** of public transit and encourage more investments into public infrastructure
- **Shift behavior** for new and existing users for more pre-planning and reduce instant gratification to benefit society

CUSTOMER EXPERIENCE

Office worker finishing work



Sports fan preparing for game night



PROMOTION STRATEGIES

Partnership with Train Operators

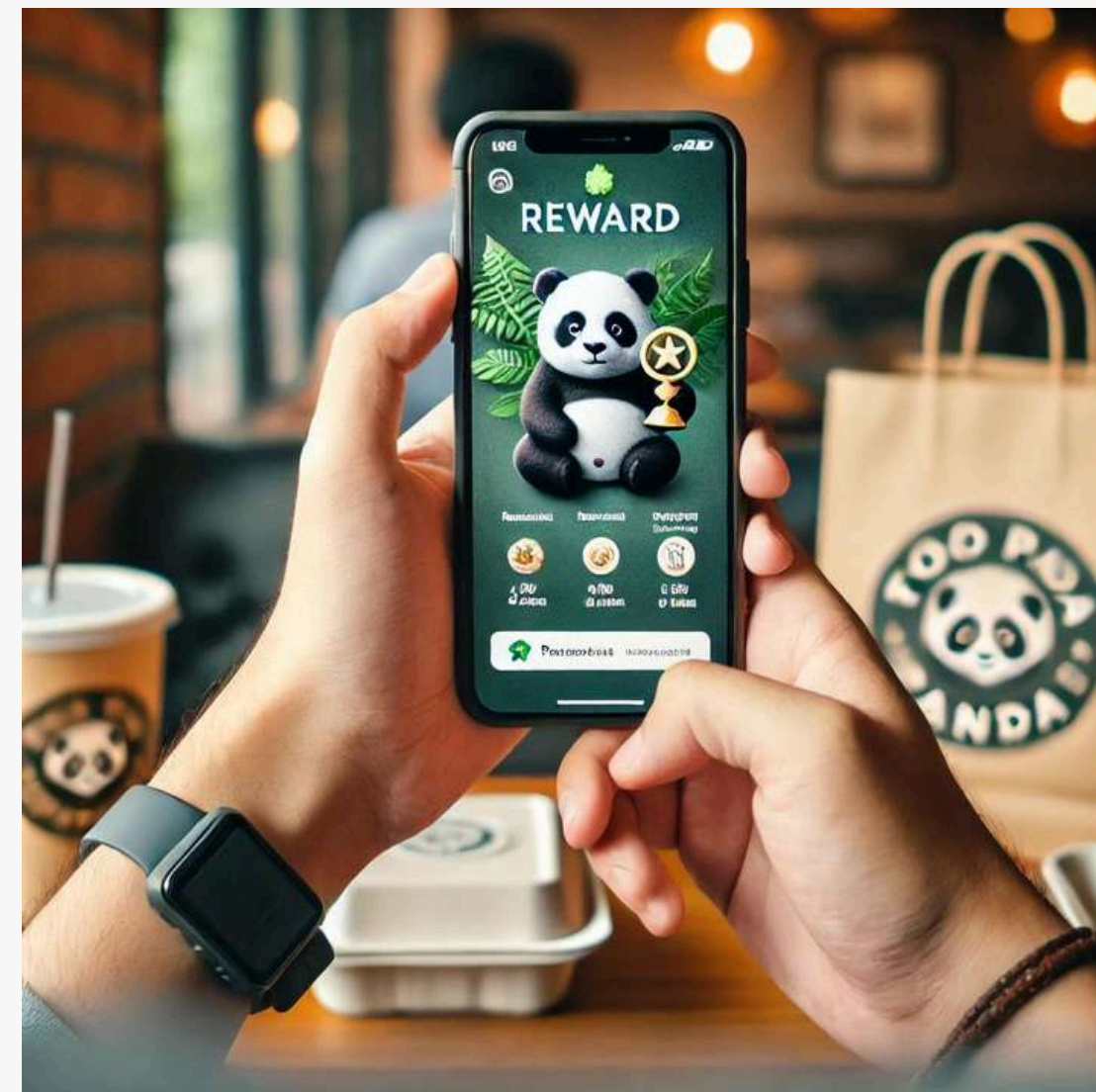
- **FoodPanda X BTS** co-branding so commuters feel they are part of an exclusive club
- **FoodPanda kiosks** at stations promoting the service and show what is available



PROMOTION STRATEGIES

Promote Sustainable Delivery

- **Show CO2 savings** on the app (e.g. motorcycle is 100g/km, train is 50g/km and BTS is carbon neutral)
- **Reward icons/trophies** on the app to reward their choice



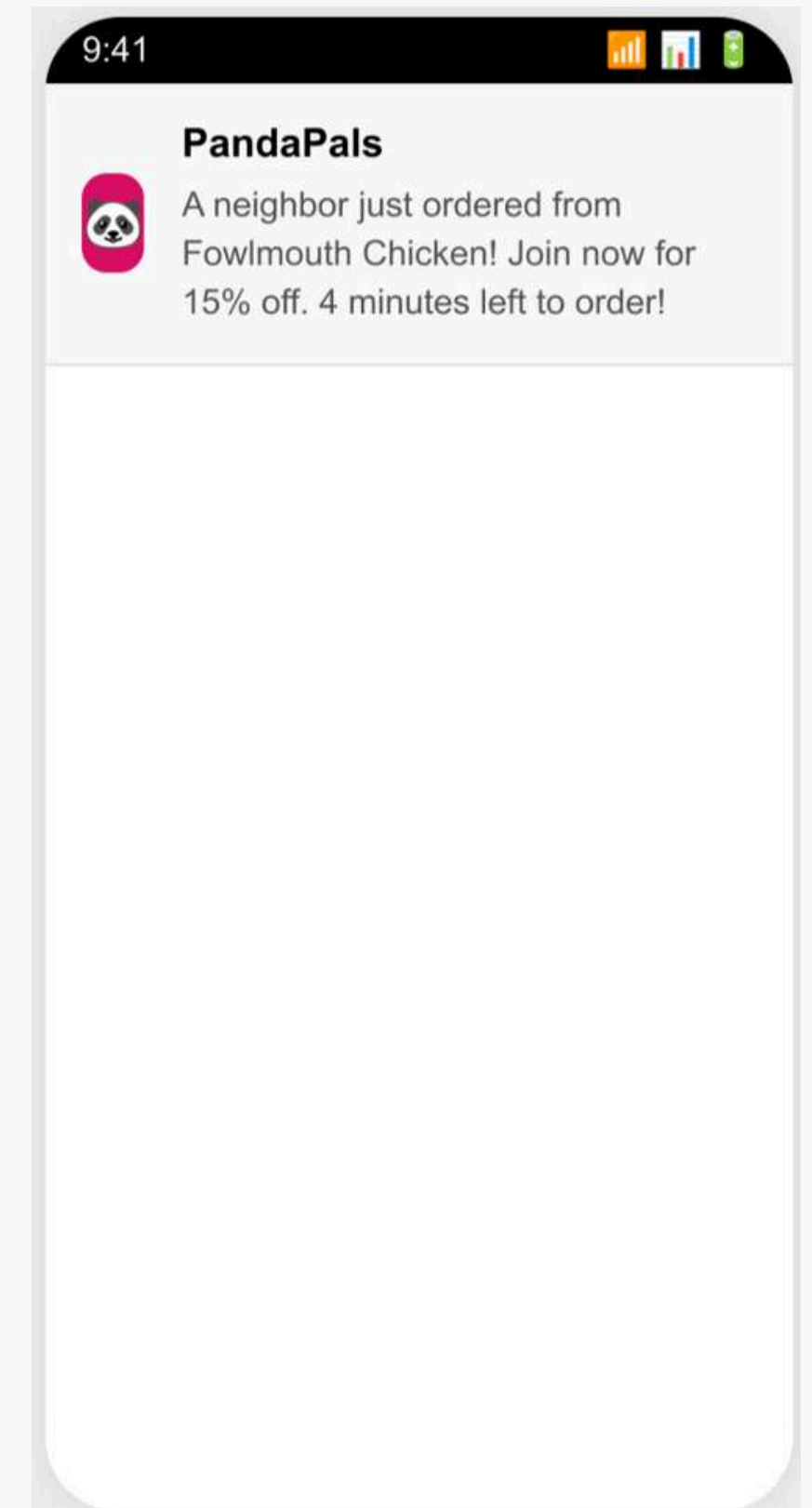
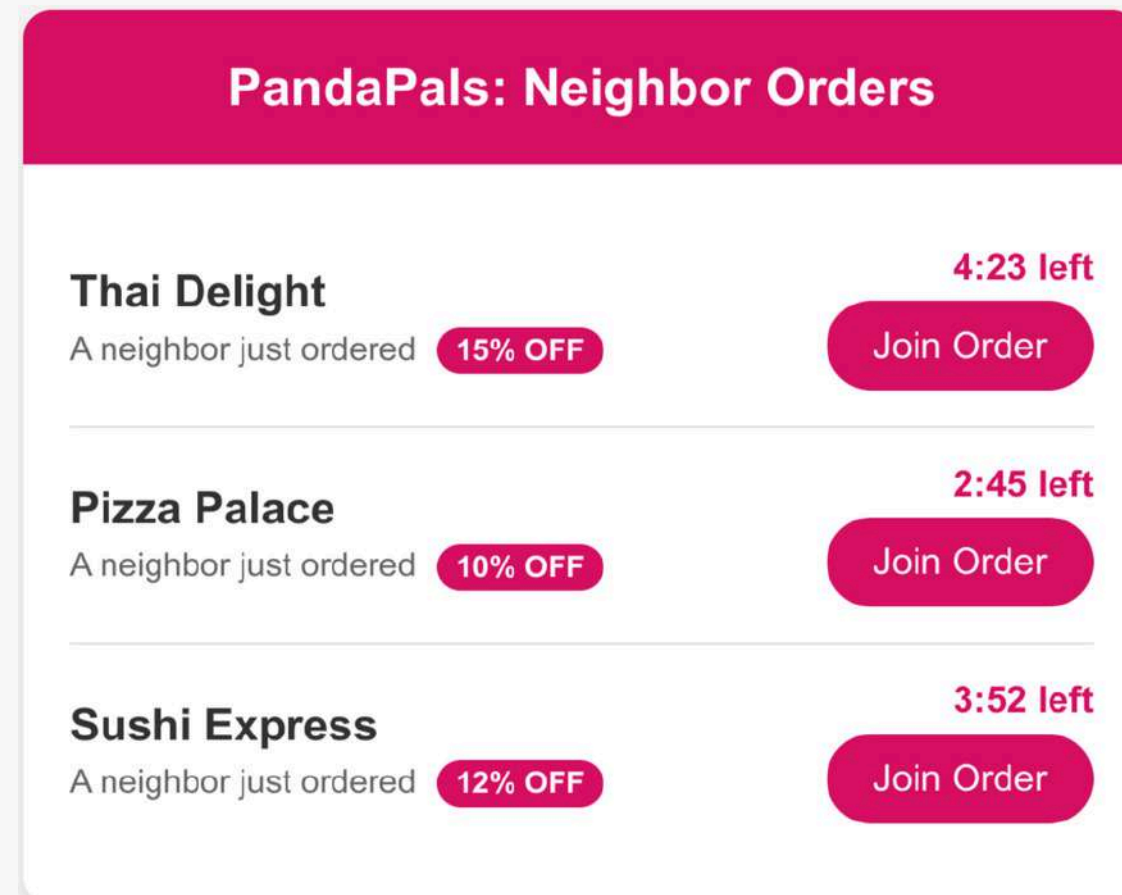
OTHER IDEAS

PandaPals

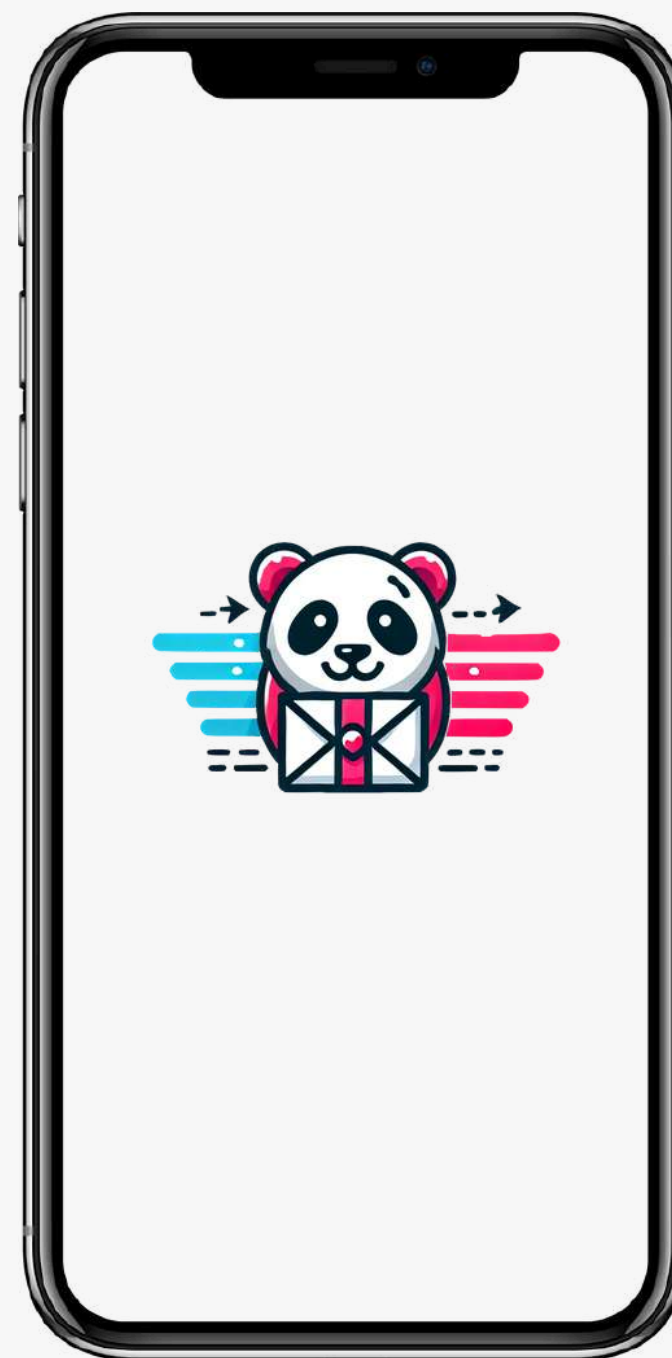
Users get notified when someone in their neighbourhood orders from a restaurant. They then have a short window (e.g. 5 minutes) to order from the same restaurant at a discount.

They also have access to a dashboard showing active order windows for restaurants where their neighbors have ordered.

This promotes order stacking with the same origin and destination.



DEMO





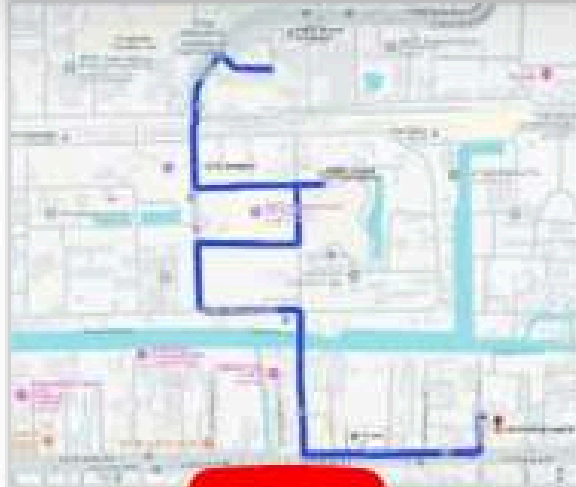
PLAY OUR PROTOTYPE



<https://panda-post.up.railway.app/>

DEMOSTRATION

42hackathon-presentation



Order 01

Location: Location A

Items


Order 02

Location: Location B

Items

Dropoff

[Copy link](#)

Watch on  YouTube

PROJECT OVERVIEW ARCHITECTURE

PandaPals



NEXT.JS

Full Stack Frontend Web
technology is build by
typescript with react
concept

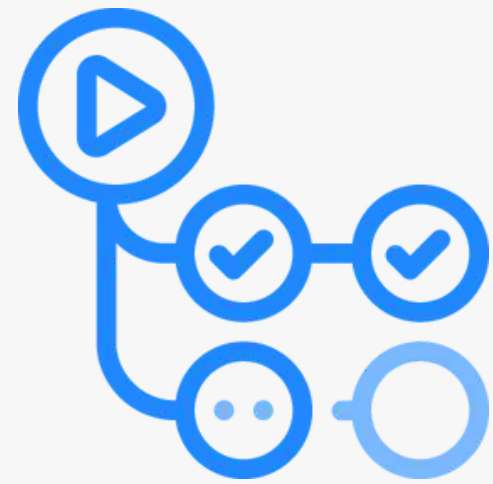


Firebase Realtime Database

Database
is a cloud-hosted. Data is stored as
JSON and synchronized in realtime to
every connected client.

FROM DEV TO OPS

DevOps Tools



Github Actions

CI/CD

(continuous integration and continuous delivery) platform that allows you to automate your build, test, and deployment pipeline



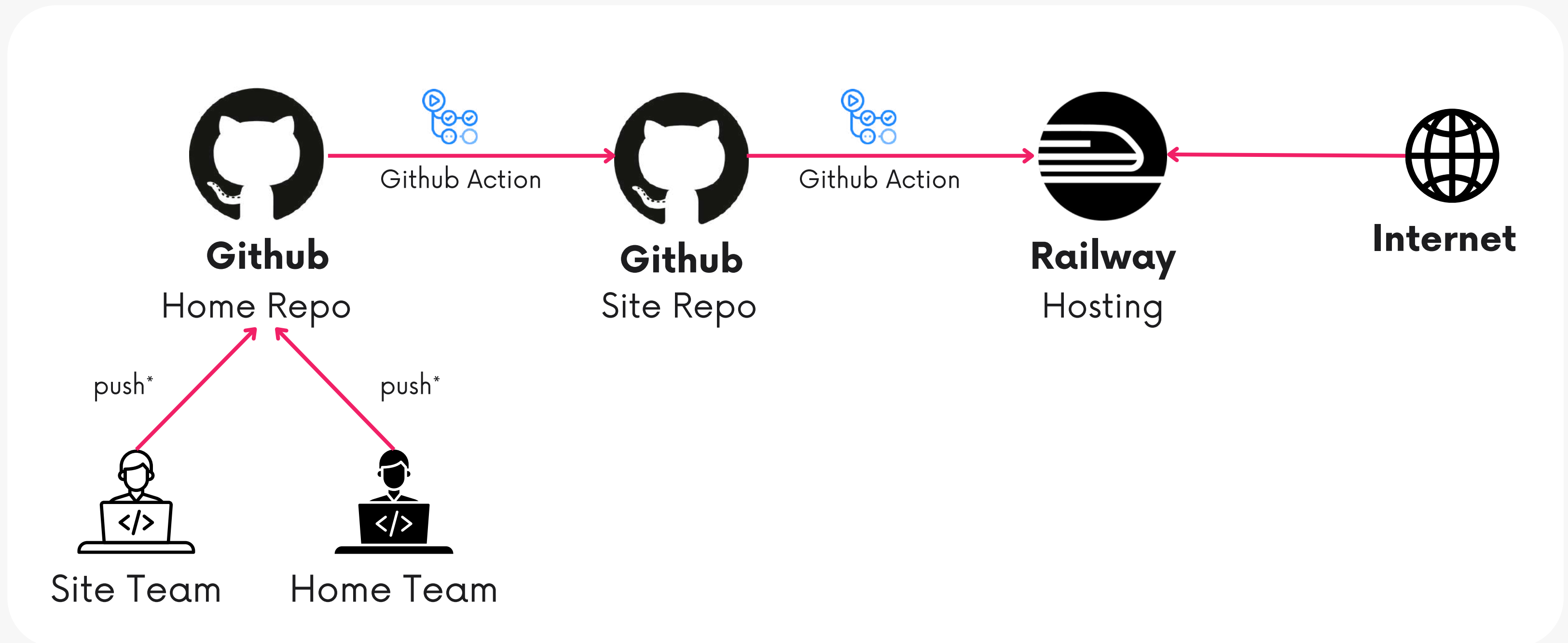
Firebase Realtime Database

Hosting

infrastructure platform where you can provision infrastructure, develop with that infrastructure locally, and then deploy to the cloud.

INTEGRATION

How we integrate dev code and tools to the operation



*follow git concept, branching, pull request and merge

THANK YOU





END

PROPOSED DELIVERY WORKFLOW

