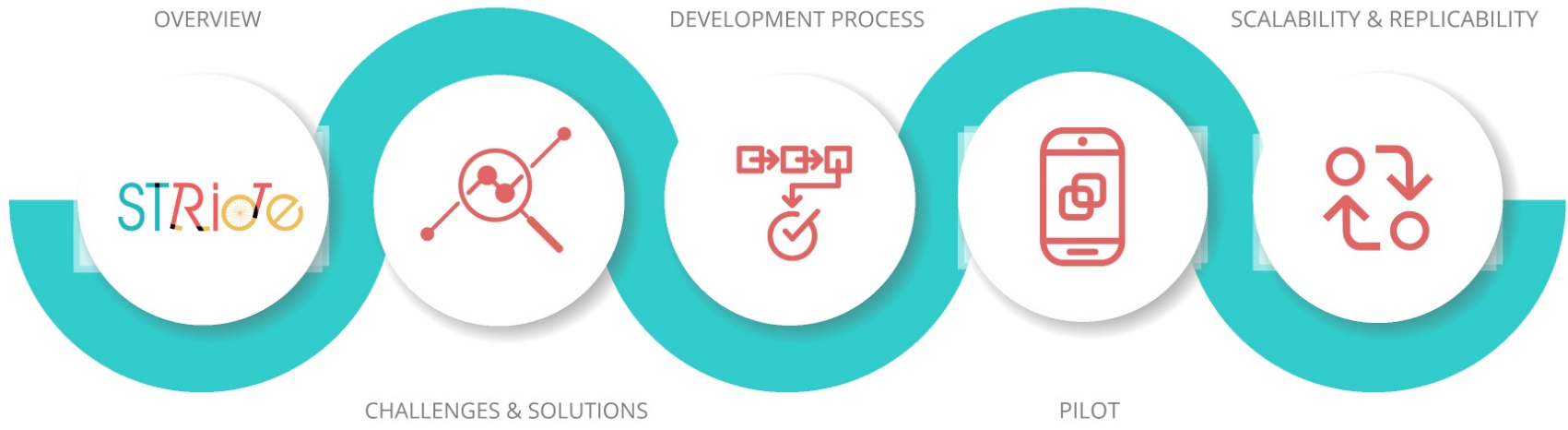


Project Stride

Culmination Presentation



STRiOTO

Towards Walkable and Cyclable Chennai





Sustainable **post-pandemic** future in urban mobility



National Challenges for **Walking and Cycling**



Streets for People

CHALLENGE

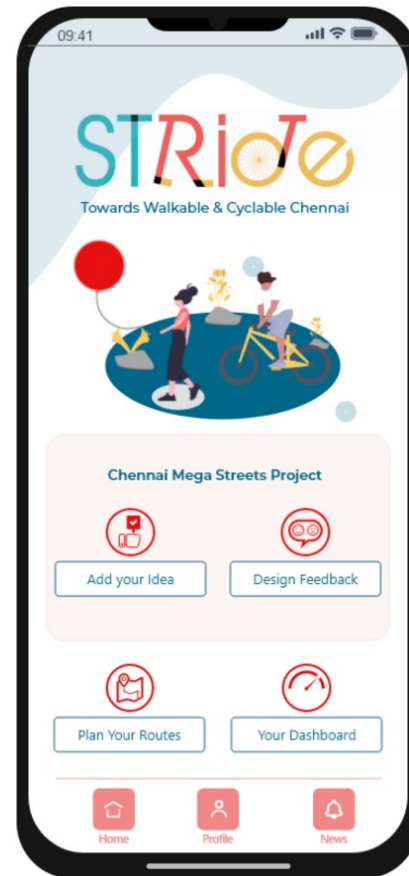


Digital Tool Components

- 1 Citizen App**
- 2 City Dashboard**



Citizen App

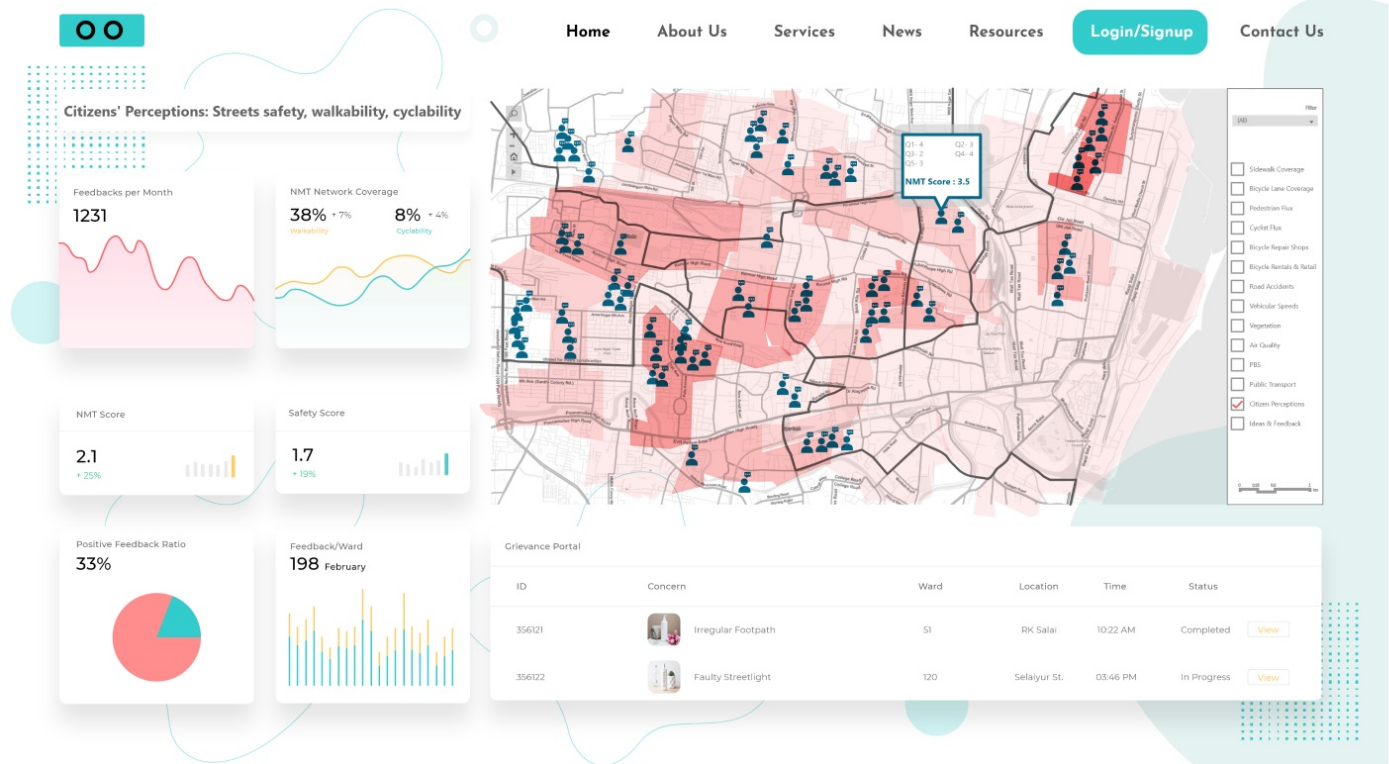


Digital Tool Components

- 1 Citizen App**
- 2 City Dashboard**

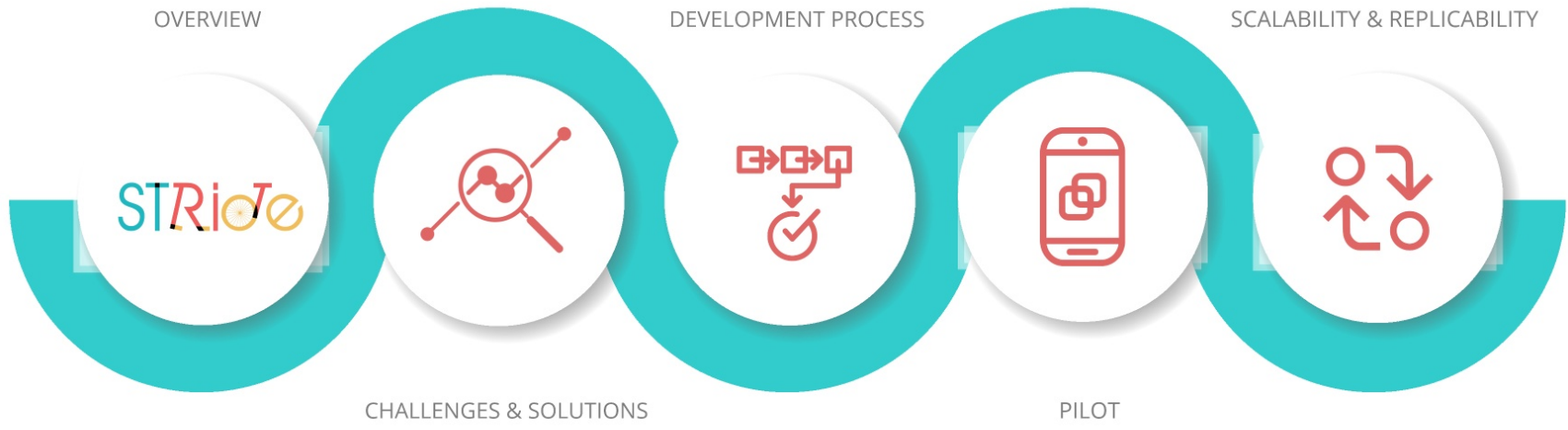


City Dashboard

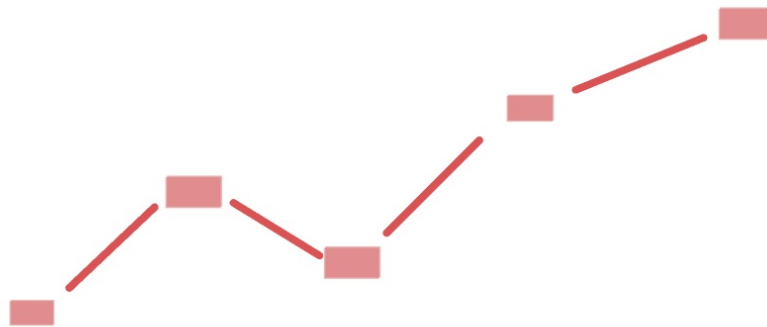


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Challenges & Solutions



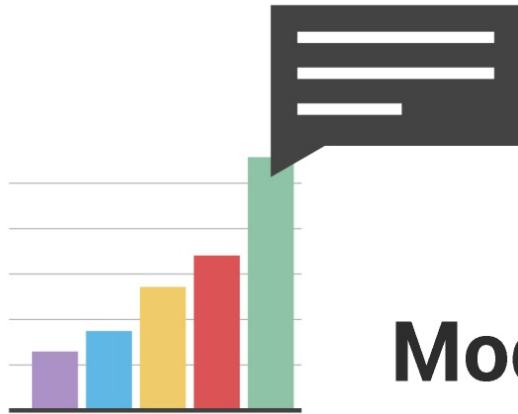
Walking and Cycling **Unsafe**



Crowdsourced safer, shorter and greener routes for walking and cycling

Optimised routes based on safety,
greenery and distance

Tactical Urbanism pilot (C4C) to provide
dedicated cycle lanes to the people



Modal share of active mobility declining

App to **incentivise** walking and cycling through points, coupons

Events and Campaigns related to walking, cycling and public spaces displayed on the app

Personal dashboard feature on the app displaying number of km walked or cycled, etc., to nudge behavioral change



App to **incentivise** walking and cycling through points, coupons

Events and Campaigns related to walking, cycling and public spaces displayed on the app

Personal dashboard feature on the app displaying number of km walked or cycled, etc., to nudge behavioral change





Many local **NMT amenities** and services exist, but are **not mainstreamed**

The citizen app to display local cycling amenities and services and provide routes within a walkable range

The citizen app to display local cycling amenities and services and provide routes within a walkable range

Lack of accurate city-level data to show trends, demand points, amenities and services for walking and cycling in cities

A **web dashboard** to aggregate and visualise NMT-related data, generate trends and insights and identify the service levels

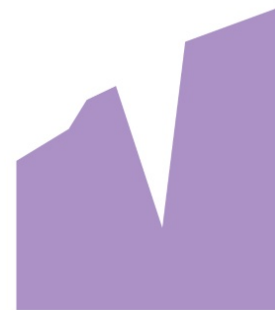


Lack of accurate city-level data to show trends, demand points, amenities and services for walking and cycling in cities

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NMT Trends



Lack of accurate city-level data to show trends, demand points, amenities and services for walking and cycling in cities

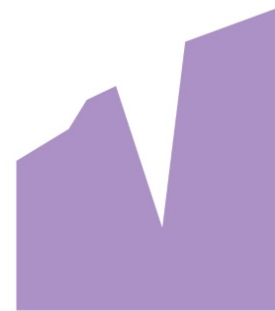
A **web dashboard** to aggregate and visualise NMT-related data, generate trends and insights and identify the service levels



NMT Trends



Service Levels



Lack of accurate city-level data to show trends, demand points, amenities and services for walking and cycling in cities

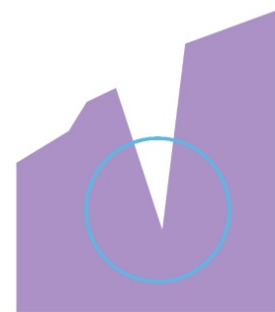
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NMT Trends

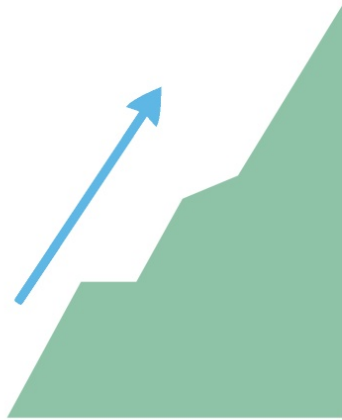


Service Levels

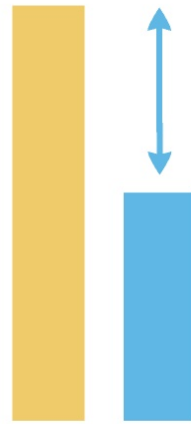


Supply-demand Gap

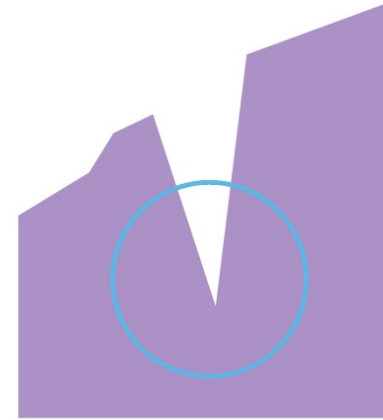
A **web dashboard** to aggregate and visualise NMT-related data, generate trends and insights and identify the service levels



NMT Trends



Service Levels



Supply-demand Gap



City Selection





Stage I

- ▶ Comprehensive Mobility Plan
- ▶ Smart City Ranking
- ▶ NMT Policy
- ▶ City Aspirations & Visions
- ▶ Flagship Project
- ▶ Bicycle Mayor



Stage II

- ▶ Mobility data like NMT modal share, trip length, etc.
- ▶ Accidents and fatalities recorded
- ▶ Core NMT infrastructure present
- ▶ Allied infrastructure support - PBS, ITMS, ICC



Stage III

- ▶ Urban fabric & Compactness
- ▶ Availability of data
- ▶ Presence of Organisations / Think Tanks
- ▶ Participation in Cycles4Change Challenge

Pilot City



Chennai

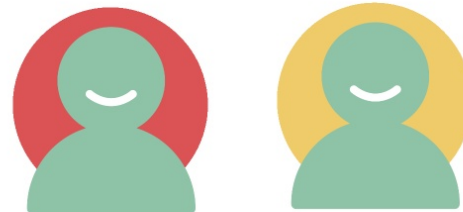


Chennai

Chennai Mega Streets Project

The demand assessment not accurate due to **low citizen engagement** for urban development

Integrating a one-of-its kind **digital citizen consultation tool** in the app, especially for mega streets projects in Chennai

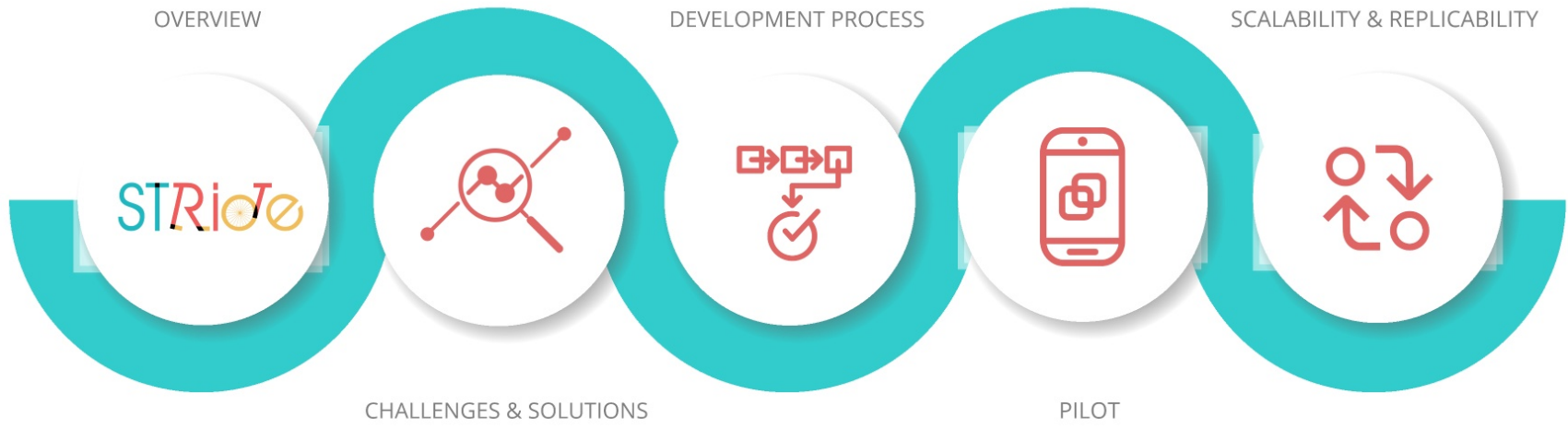


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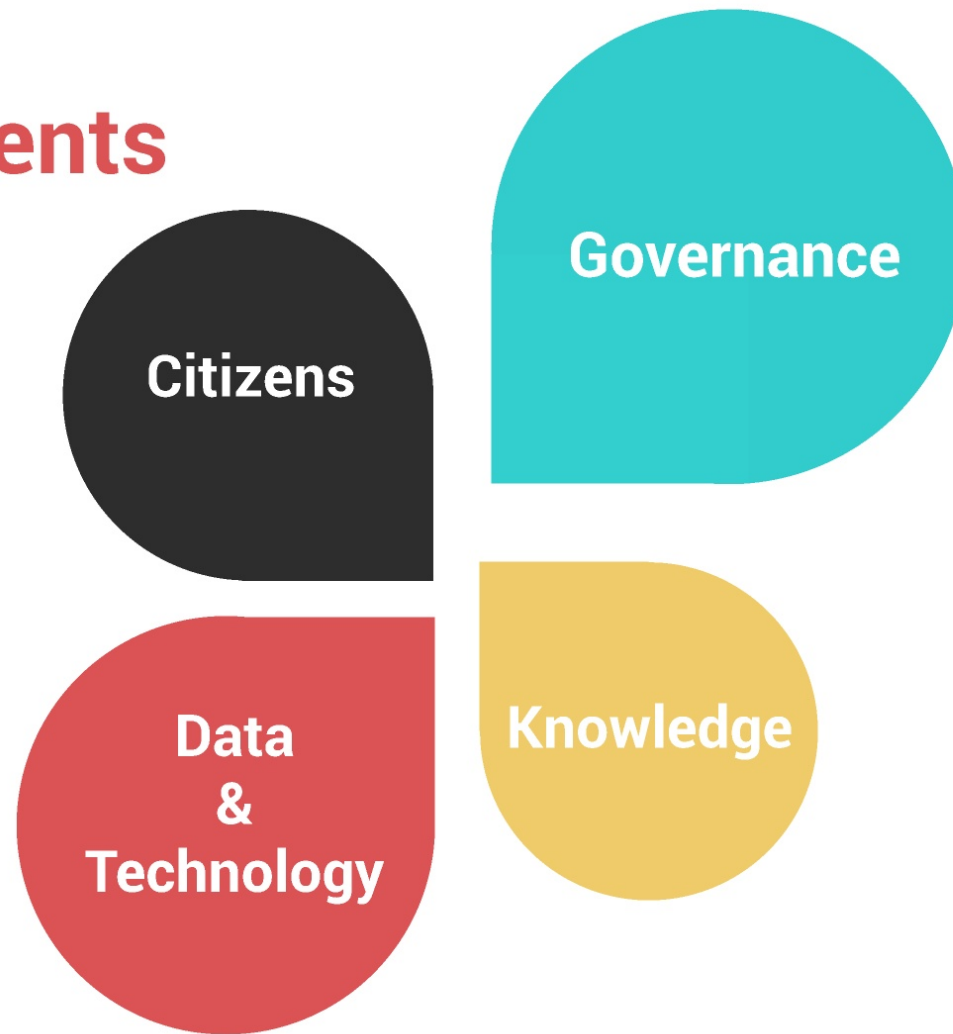


Project Stride

Culmination Presentation



Engagements



Governance

CEO,
CSCL

DC,
GCC

EDP

Special
Projects,
GCC

ICCC

GIS
Dept.

Traffic
Police

ITS
Project

Mega
Streets

Governance



Citizens



Governance

- CEO, CSCL
- DC, GCC
- EDP
- Special Projects, GCC
- ICCC
- GIS Dept.
- Traffic Police
- ITS Project
- Mega Streets

Citizens

- BYCS
- Cyclist Groups
- Students
- General Public

Data and Technology

- IIT M
- IISc Bangalore
- DAM-U
- VivaCity
- SeeSense
- Nippon Koei
- TomTom
- Map MyIndia
- Smart Bike

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- SeeSense
- Nippon Koei
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- Smart Bike

Knowledge

- World Bank
- ITDP
- C40
- GIZ
- DAM-U
- NIUA

Insights from Engagements

Insights from Engagements

1. Crowd source Data

2. Integrate existing Incentives schemes

3. Add Preferred Cycling and Walking Routes as a use case

4. Use readily available Data

5. Start with simple Use-cases

6. Find synergy with Mega Streets Projects

Need Assessment

Need Assessment

89% users would use an app that suggest cycling amenities

Need Assessment

89% users would use an app that suggest cycling amenities

64% had not heard about Mega Streets

Need Assessment

89% users would use an app that suggest cycling amenities

64% had not heard about Mega Streets

82% would use an app to give feedback on development projects

Need Assessment

89% users would use an app that suggest cycling amenities

64% had not heard about Mega Streets

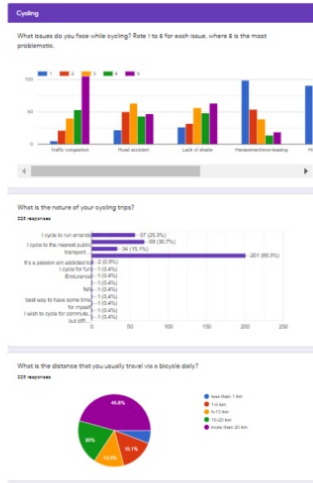
82% would use an app to give feedback on development projects

78% would walk and cycle more if an app suggests better routes

Product follows Process

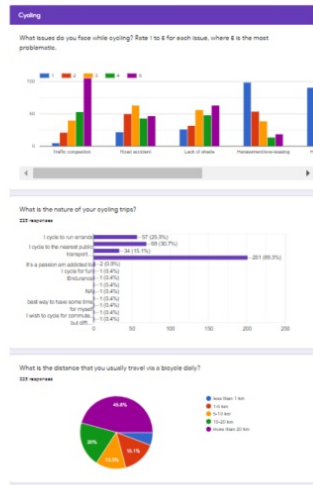
Product follows Process

Need Assessment

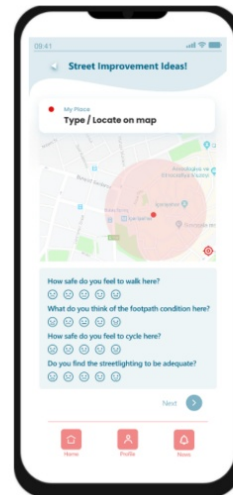


Product follows Process

Need Assessment

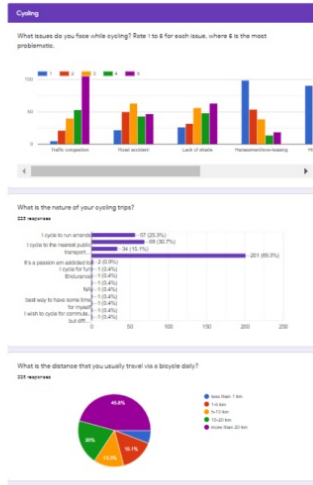


UI/UX Prototype

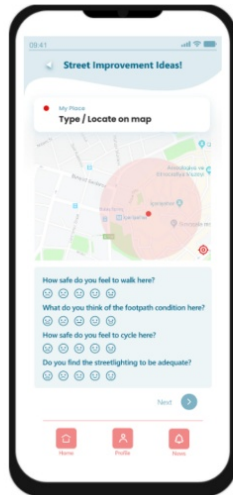


Product follows Process

Need Assessment



UI/UX Prototype



Testing

Public Ideas and Feedback for Mega Streets Project

Name

Gender

Kindly mark the location of your home / hostel / accommodation on the map.

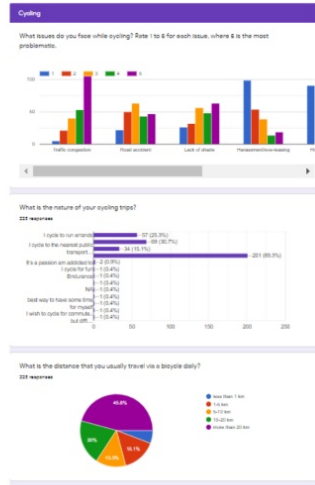
search for place or address

latitude (x,y °)

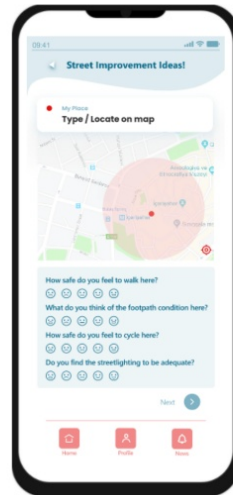
longitude (x,y °)

Product follows Process

Need Assessment



UI/UX Prototype



Testing

Public Ideas and Feedback for Mega Streets Project

Name

Gender

- Female
- Male
- Other

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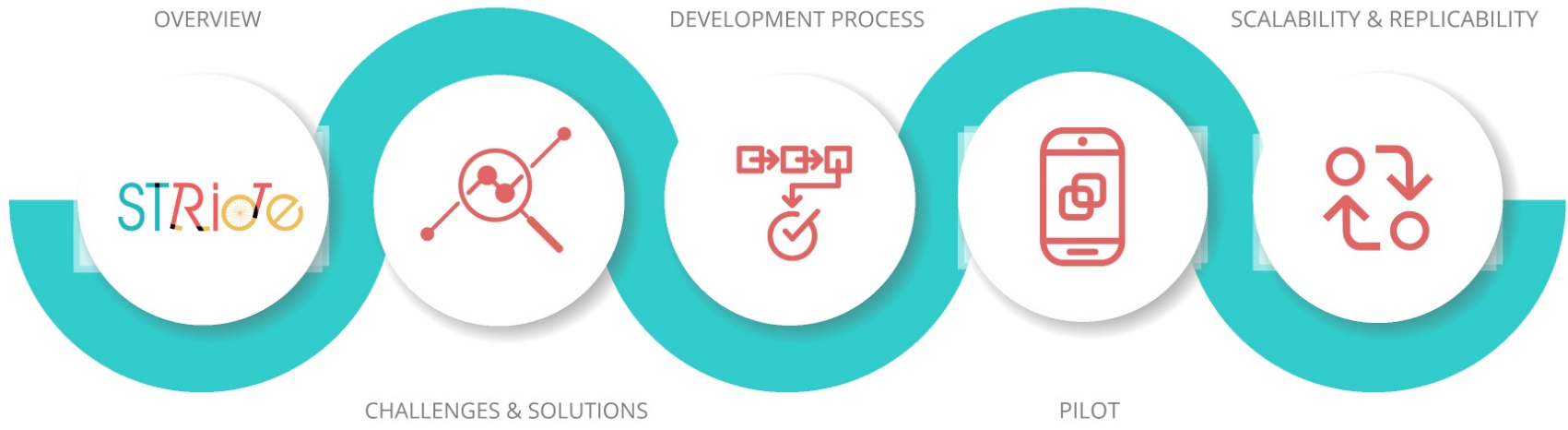
longitude (x,y °)

Demo



Project Stride

Culmination Presentation



STRiote

Towards Walkable and Cyclable Chennai



17.03%
SIDEWALK
COVERAGE

0.28%
CYCLE LANE
COVER

13
SCM NMT
PROJECTS

0.28%
CYCLE LANE
COVER

CITIZEN APP ▾

CITY DASHBOARD ▾

<https://stride2020nmt.wixsite.com/iscf>

Critique



Critique



▶ **Livelihood cyclists?**

Critique



► Livelihood cyclists?



Critique



► Livelihood cyclists?



Collaboration with Mumbai Bicycle Mayor on 'Amenities Mapping' and 'Cycle Chala City Bacha' campaigns in Chennai and Mumbai.



Collaboration with Mumbai Bicycle Mayor on 'Amenities Mapping' and 'Cycle Chala City Bacha' campaigns in Chennai and Mumbai.

Critique



Critique



▶ **NMT infrastructure?**

Critique



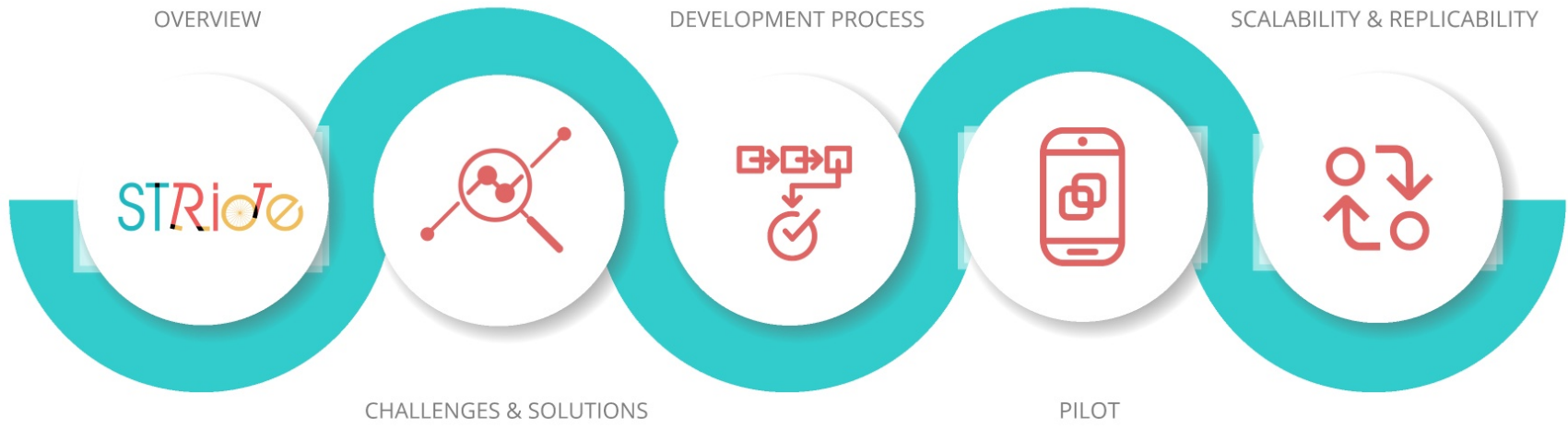
► NMT infrastructure?

Creating a process for better service delivery, citizen engagement and pre-emptive actions.

Creating a process for better service delivery, citizen engagement and pre-emptive actions.

Project Stride

Culmination Presentation



Phasing

Phasing

01

Mega Streets (Pre-design)

NMT Amenities

Preferred NMT Routes

Phasing

01

Mega Streets (Pre-design)

NMT Amenities

Preferred NMT Routes

02

Mega Streets (Post-design)

Dashboard for Service-level Benchmarking

Route Optimisation

Phasing

01

Mega Streets (Pre-design)

NMT Amenities

Preferred NMT Routes

02

Mega Streets (Post-design)

Dashboard for Service-level Benchmarking

Route Optimisation

03

Events & Campaigns

Emergency Response

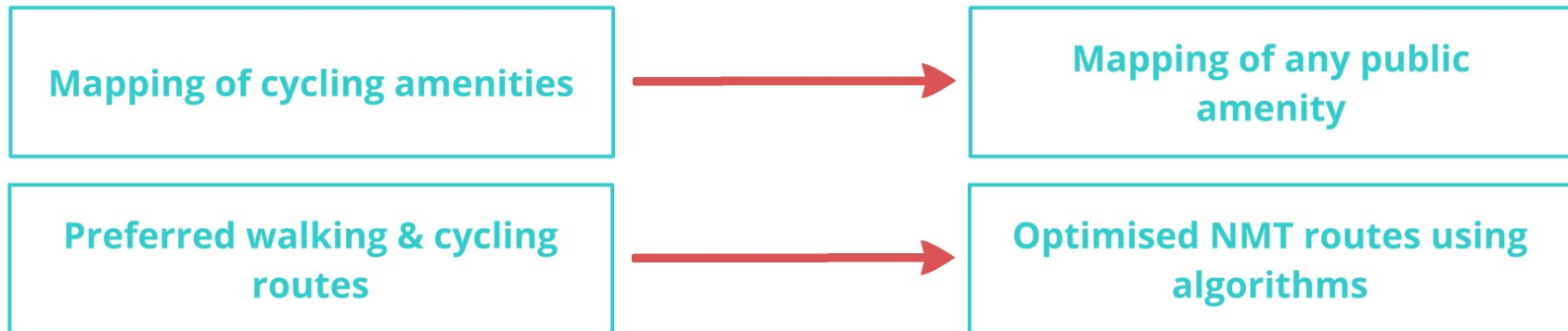
Incentivisation

Scalability

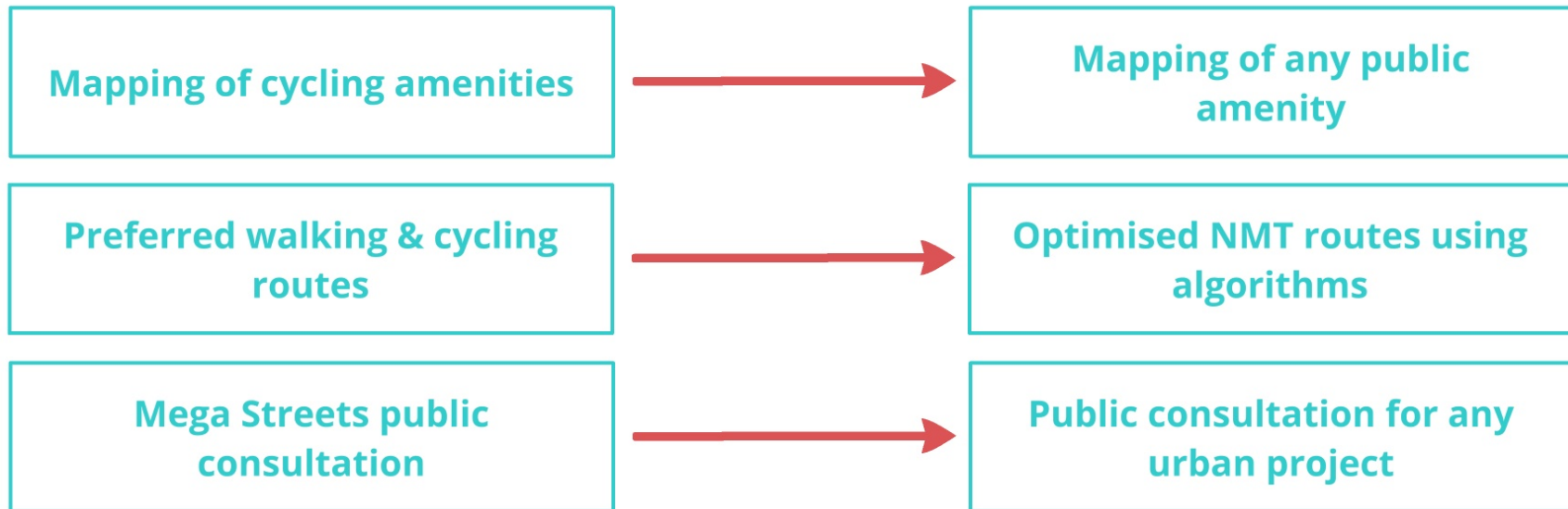
Scalability



Scalability



Scalability



Replicability

Replicability



Replicability



Support

Replicability



Support





STRiO

Towards Walkable and Cyclable Cities!



Akshaya Kudale



Hamza Abdullah



Srinidhi Ravishankar

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