

Interconnecting people and
making places

20 Sep 2023

onebite

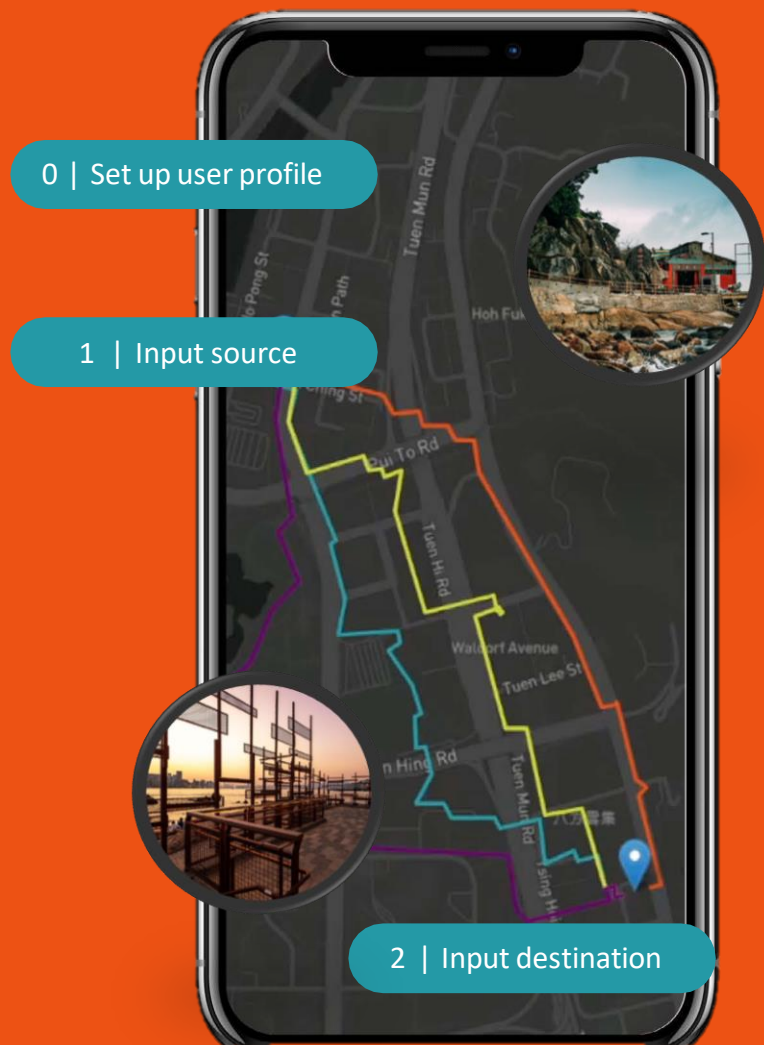
Happy Walk Machine

CSDI Awards 2023

www.onebitedesign.com

Beyond Accessibility...

A Better Alternative for Google Maps



User-defined Walk Route Generation

Not only **distance**

More on personalised indicators

Not only **quantity**

More on qualitative evaluations

Not only **route**

More on added values in the city



To engage **general public** in CSDI



To encourage everyday **Happy Walk** and promote **well-being**



To develop **long-term data platform** of urban planning & design

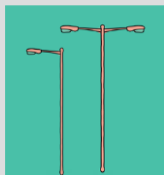
What Elements Make A Difference?

(Fundamental Research)

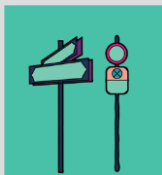
Ingredients to see



Slow drive zone



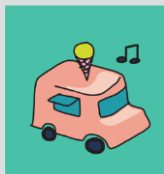
Street lighting



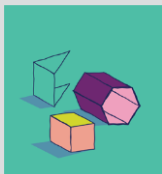
Signage



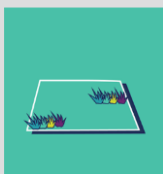
Minimising railing



Unique street character



Movable furniture



Open lawn



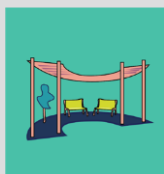
Shading tree



Play space



Open space



Pocket park

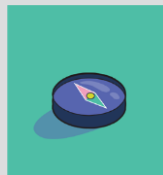


Public furniture

Ingredients to feel



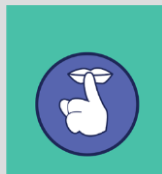
Sense of safety



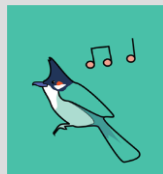
Easy to navigate



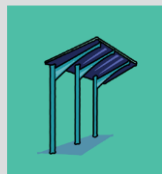
Clean



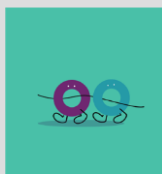
Quiet



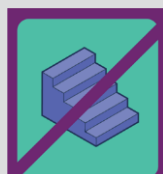
Bird chirping



Shelter from sun and rain



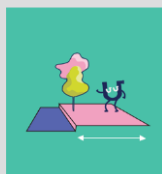
Not too crowded



No slope or stairs

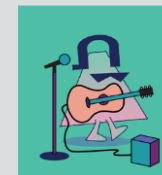


Even road surface with no bump

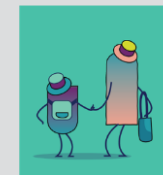


Wider sidewalk

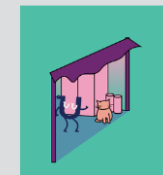
Ingredients to experience



Street activities



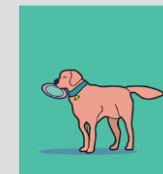
Vibrant populated atmosphere



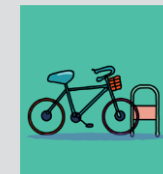
Lively street frontage



Pedestrian-friendliness



Pet-friendliness



Bicycle-friendliness

We have identified 28 ingredients for Happy Walk based on walkability research in Hong Kong (*Civic Exchange, 2016*), and categorised them into 3 types: to see, to feel and to experience.

Key Functions

Network Optimisation



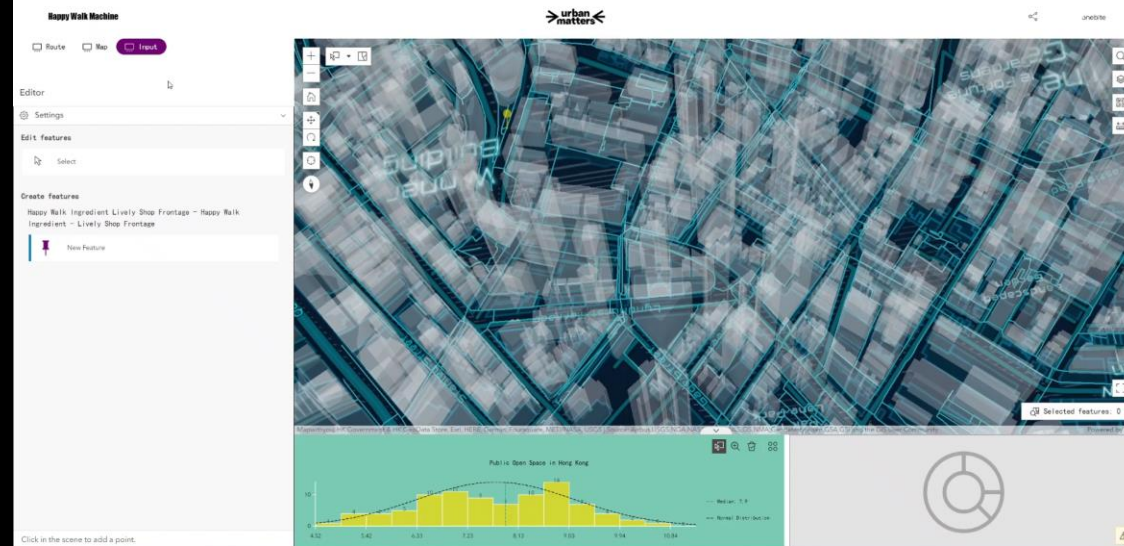
Personalised Walk Maps



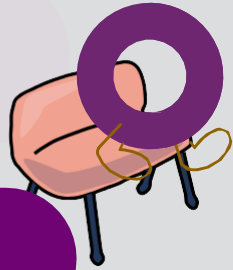
Feature Stories



Urban Data Collection



User Journey Mapping



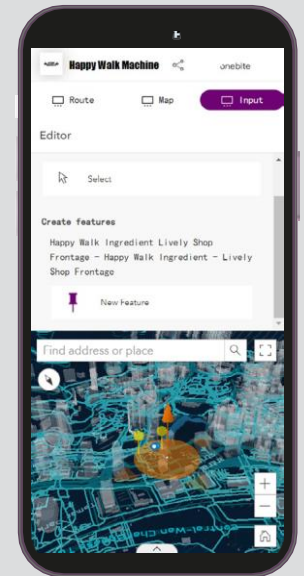
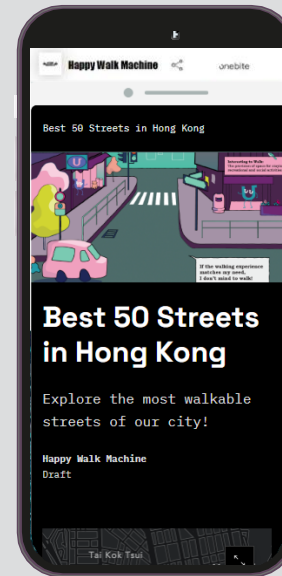
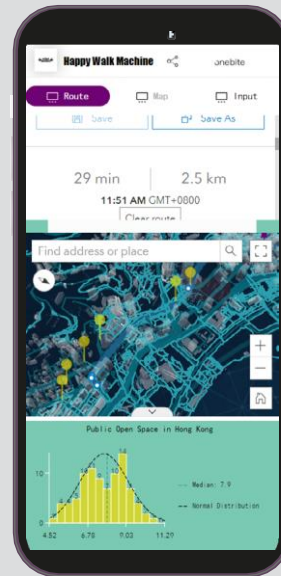
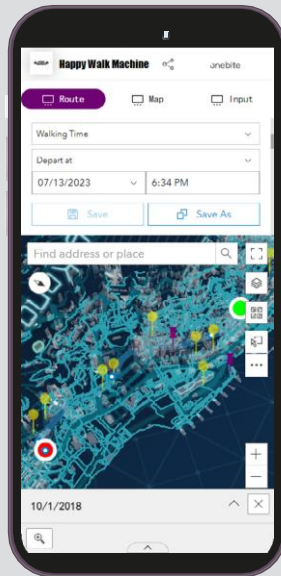
Wheelchair users

Route planner with step-free mode

0 | Set up user profile

2 | Generate personal Happy Walk

4 | Follow feature stories to walk



1 | Input information

Locations, preferences (e.g. no stairs, no bumps)

3 | Explore surrounding wheelchair accessible POS

5 | Input new Ingredients

Who are our Target Users with Specific Needs?

Specific Groups

Elderly Teenagers
Visually Impaired
Baby Strollers &
Wheelchair Users

Different user groups will focus on various barriers preventing them from a Happy Walk.

Physical Barrier
e.g. steps/
bumps

Contextual Barrier
e.g. bad pedestrian links

Perceptual Barrier
e.g. safety

Private Sector

Architecture, Engineering &
Construction Industry Health
& Wellbeing Industry

Public Sector

Housing Bureau
Transport and Logistics Bureau
Development Bureau

Government departments can draw insights and engage the general public in an innovative way to make better decision for a more livable Hong Kong.

Private sectors can be benefited from the solution. For development-related industry, the solution serves as analysis basis and evaluation methods.

For others, the information of walkability can also help decision-making.

Pilot Sites

Kwun Tong
Yuen Long
(District-based)

Data Infrastructure Roadmap

Make the City Evolve!



Happy Walk Database

Long-term CSDI building for urban planning and design

Continuous public engagement on urban data

Objective Ingredients

Subjective Ingredients

Future-oriented Ingredients

Data Collection

Data Application

Further Analysis

Data conversion / Collection through related government departments

City-wide data from academia / Private data source

Collaboration with corporate; Public engagement event; Happy Walk testing event; Data collection from the Machine

Collaboration with academia; Public engagement event; Happy Walk testing event; Data collection from the Machine

Network optimisation

Personalised maps; Urban data collection

Feature stories; Urban data collection

Academia sharing / Public lecture

City-scale analysis: Urban walkability index; Urban planning guidance

District-scale analysis: District / Specific group need; Urban design guidance

Future-oriented analysis: Urban feasibility study

The 28 ingredients are categorised into 3 types from a data perspective. Various forms of public engagement will be applied based on the nature of the ingredients.

Objective Ingredients

Objective ingredients are mostly ingredients to see, to be identified and counted through universal methods.

Subjective Ingredients

Subjective ingredients are mostly ingredients to feel, e.g. safe, which have different evaluation indicators for specific users.

Future-oriented Ingredients

Future-oriented ingredients are several items which cannot achieve in Hong Kong at the moment.