

# Innovative Bike Sharing System for North Bristol SusCom

18 JULY 2017



# Mission

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Reducing congestion and pollution



Promoting a healthier and more active lifestyle through cycling



Helping local authorities build a more sustainable transport infrastructure

# Issues With Conventional Bike-Sharing

## High cost

- High manufacturing cost
- High maintenance cost for moving bikes manually plus maintenance

## Low technology

- Bikes are often quite heavy and cumbersome resulting in a poor riding experience
- Bikes have to be parked to a station

## Inconvenience

- Users have to visit a dock station to pick and return a bike. Often they find an empty or full station that they cannot use
- The number of bikes available are far from enough, hard to reach the density threshold
- Docking stations are only available in central locations. Residents struggle to find a bike near their homes



# Our Solution

## Reduces cost by up to 90%

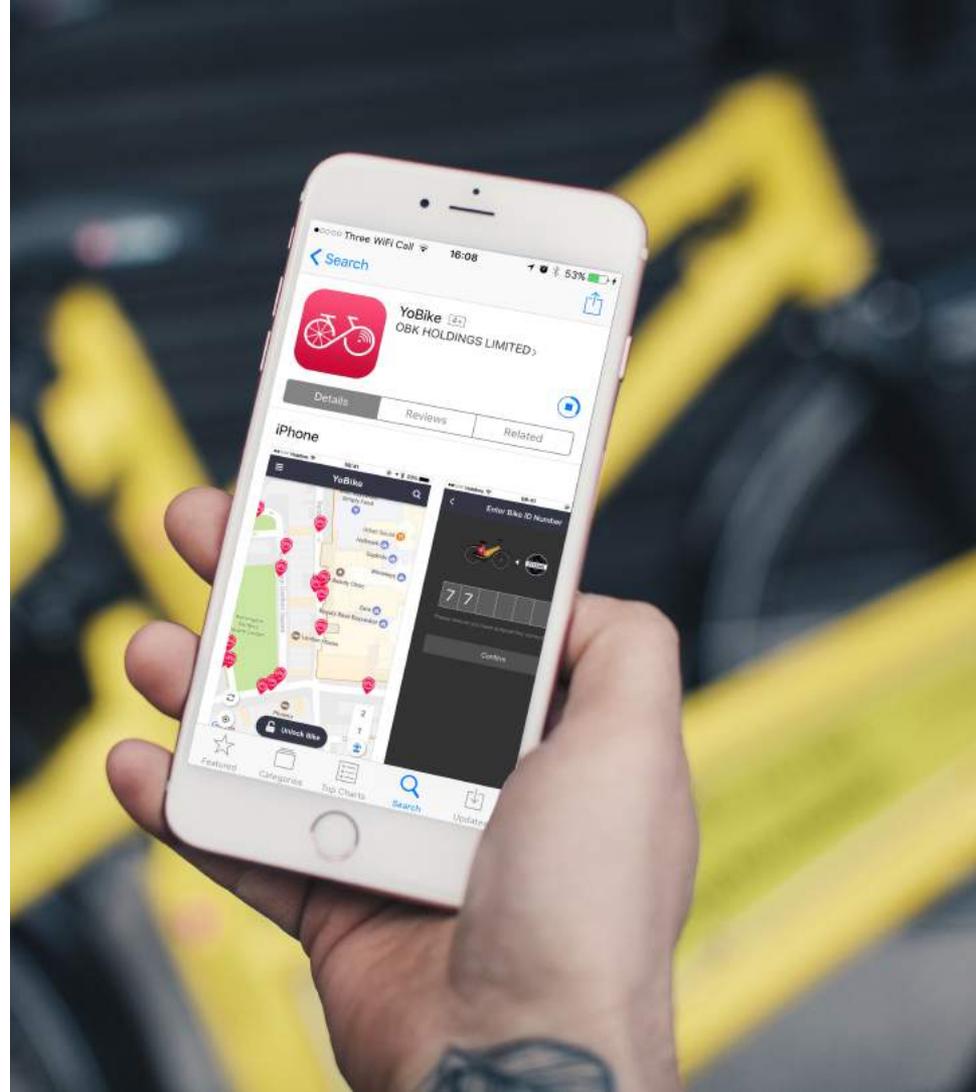
- We collaborate closely with our supply chain
- There is no need for any bike docks and stations
- We do not need extensive labour to move bikes
- Maintenance is kept to a minimum with the quality of our bikes

## Employs cutting-edge technologies in our system

- We developed GPS-based intelligent locks to accurately locate bikes
- With our big-data system to manage all our IOT bikes, we are 10 times more efficient than traditional systems

## Brings convenience to bike riders

- Bike riders can park at more legally allowed spaces, which will eliminate the problems of full or empty stations
- Users can find bikes very close to wherever they are





are designed for European usage



## PARTS & DESCRIPTION

Gears: SHIMANO Nexus 3 Speeds

Frame: Alloy

Wheel size: 26" \* 1.5

Tire: Non-pneumatic Tires

Brake: Caliper Brake (F)

SHIMANO Roller Brake

Shifter Lever: SHIMANO

Chainwheel & Crank: PROWHEEL Alloy

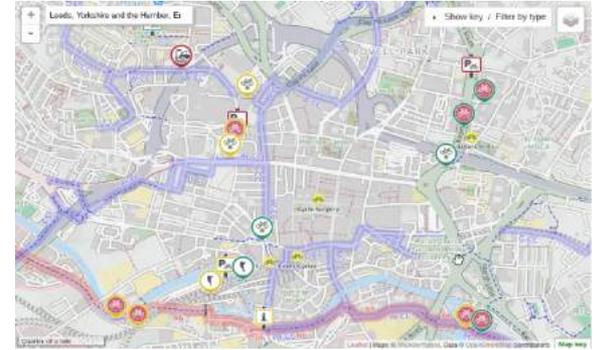
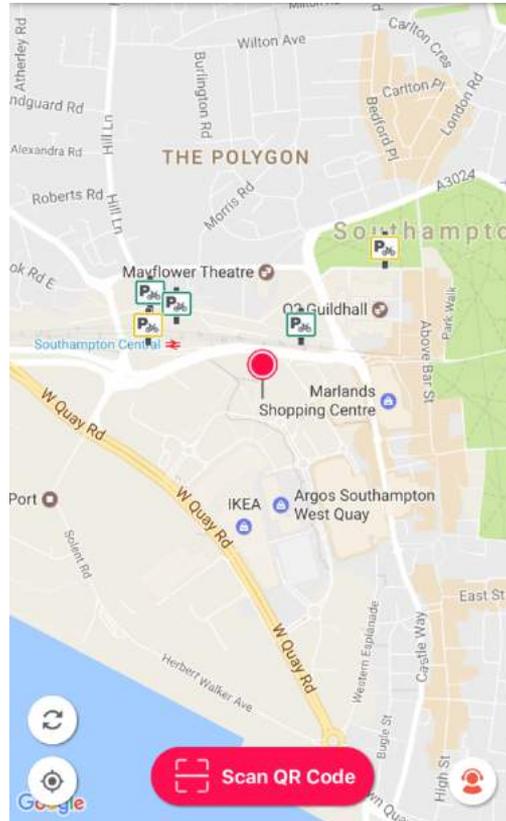
Rim: Double Wall Alloy

Front & Rear Light: Generate Electric Lamp

Whole bike size: 1740 \* 640 \* 1130mm

N/W: 18KGS

# How we manage parking?

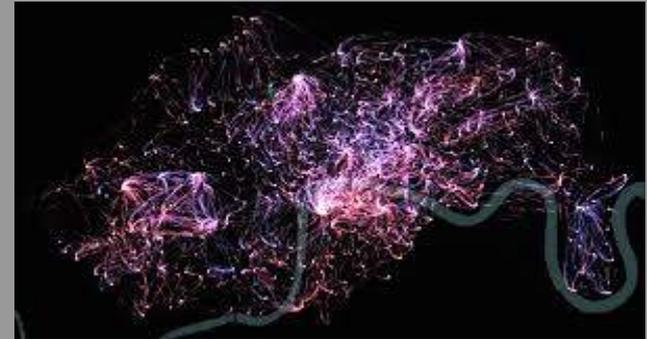


# Our vision for Yobike - safer, healthier and smarter communities

- Plan to employ bio-sensors to detect the heartbeat, temperature, and other medical data to help diagnose and prevent accidents
- Working closely with Data Science Institute, Imperial College, London to better understand how we can use our big data to improve riding experience
- Partnering with the Engineering Department, Cambridge University, to study the use of RFID and wireless network to avoid road collisions
- Working with Drayson Technologies to bring the CleanSpace environmental sensors onto our bikes
- Add game functionalities to encourage more riding activities alone and with friends or strangers



Bio-sensors will monitor medical data and give cautions when the user is unwell or sleepy.



Big-data technologies can help improve user experience, increase efficiency and reduce operation costs.



# How we can support SusCom ?

- ✓ Invest into the local public cycling schemes
- ✓ Help to build more cycling infrastructure and software such as interactive cycling maps
- ✓ Provide free training for novice bicycle users
- ✓ Help bring more people with different demographics into cycling
- ✓ Share data of cycling, other traffic, pollution, etc
- ✓ Collaborate with Universities to develop projects of “smart city” and “Internet of things”



# The YoBike System



**FREE** – No funding is required from local authorities. Our scheme is entirely privately funded and requires no additional customised infrastructure. The colour of the bikes can also be changed to suit local preferences, and their advertising boards offer an excellent sponsorship opportunity



**CONTROLLED** – We will only introduce bikes where there is demand for them, and with the oversight of local councils. Our city management team will redistribute and repair the bikes where required



**SMART** – Our bikes can be tracked by GPS, so they are easy to monitor. We are developing new technology to allow them to fulfil a variety of functions, such as tracking pollution levels and offering advanced safety features. We are also working to become interoperable with other forms of city transport



**RESPONSIBLE** – We are working with local authorities and different cycling organisations to develop a clear code of conduct and set of standards for innovative bike-sharing schemes such as our own. We want to transform the UK's bike-sharing culture, and we want to achieve this responsibly

# Bristol Launch



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**1,800** journeys per day (peak)

**20,000** registered users

**180** people using YoBikes at any one time (peak)

# Our App

Our App can be downloaded through the Apple store or Google Play store. You can download it to see what everyone in Bristol is talking about!



“We’d like to thank YoBike for choosing Bristol to be the first UK city to try out the scheme in and we hope that they will be able to encourage more local people than ever before to take up cycling as part of their daily routine.”

– **Peter Mann, Service Director for Transport, Bristol City Council**

# ADVERTISING & SPONSORSHIP

- Our bike sharing system offers numerous branding and added-value opportunities to enrich brands
- A growing number of businesses are taking advantage of the positive image and public awareness of using shared bikes for their campaigns
- In contrast to billboards, bike advertising transports the message directly to the customer without interfering with a city's surroundings
- Using a bike leverages a campaign's message with aspects like dynamic mobility, environmental friendliness and urban lifestyle
- Online advertising including social media, imbedded codes and in app banners can contribute to powerful cross media promotions



**THANK YOU!**

Let's work together  
to make it happen!

