# GLOBAL MOVEMENT

## ESTᴰ 2014

# CYCLEHACK

## PRODUCT OF CYCLEHACK

### CYCLEHACK.COM

**A GLOBAL MOVEMENT MAKING THE WORLD MORE SUSTAINABLE THROUGH REDUCING THE BARRIERS TO CYCLING**

EDITION 2014

# "I WANT TO CYCLE BUT...... IS AN ALL TOO FAMILIAR PHRASE."

**CYCLEHACK TEAM**

## CYCLEHACK IS A GLOBAL MOVEMENT THAT IS ON A MISSION TO MAKE THE WORLD MORE SUSTAINABLE BY REDUCING THE BARRIERS TO CYCLING.

CycleHack focuses on bringing people and their places together to discuss and generate solutions to barriers that stop or inhibit people from successfully cycling.

Through a range of activities, we bring together a range of people with different skill sets and experiences to look at cycling in a new way.

We believe that through empowering individuals, organisations and governments to collaborate, share skills and prototype new ideas around cycling, we can build a healthier, more active and sustainable world.

CycleHack began as a conversation between Jo Holtan and Sarah Drummond over a coffee. The pair wanted to find a mechanism to bring people together to positively address issues in cycling and bring something different to the cycling world over and above conversation about infrastructure. Matthew Lowell who is a keen cyclist and designer joined the team and together they set up CycleHack which has grown to become a global movement and organisation offering design thinking to the cycling industry.

The problems we seek to solve differ between cities. Some barriers are specific to a location, like troublesome street corners or intersections, while others are larger macro issues such as changing the way we market cycling to different audiences, such as women.

By using methods affiliated with the design process and creating multi disciplinary teams with a focus on the end user, we can create solutions that reduce barriers to cycling and make it more accessible, safe, and fun.

## WE'VE GOT A LONG RIDE AHEAD. WE'RE TAKING A VARIETY OF APPROACHES TO REDUCE BARRIERS TO CYCLING.

### STARTING A GLOBAL MOVEMENT

Our route starts with catalysing a global movement of CycleHackers. Through our global CycleHack Events we provide CycleHackers with the opportunity to gain a new perspective on the experience of riding a bike, and give them access to the tools to pro-actively design solutions that improve the overall cycling experience.

### RUNNING AN OPEN-SOURCE CATALOGUE

We operate an online catalogue where all CycleHack Ideas are shared. Each catalogue entry includes information on the barrier, the solution and supporting files that tell the story about how the idea was developed. Prototyping is an essential part of the CycleHack process, which means that all ideas are tested in the real world.

### OFFERING NEW SKILLS & TOOLS TO THE CYCLING WORLD

We bring a design-thinking approach to the cycling experience. We focus on user needs which allows us to take a holistic perspective to problem solving. In addition to complementing familiar conversations about cycle lanes, path networks and road conditions, the CycleHack approach encourages a wider perspective on other barriers to cycling which often receive less exposure. CycleHack takes small barriers and transforms them into opportunities which collectively can make a big difference.

## ANNUAL GLOBAL CYCLEHACK EVENTS

Our annual global CycleHack event takes place over 48 hours and is run by our partners in cities all over the world. Each event is unique to the cycling culture in the host city, but holds true to the CycleHack aim of bringing together a diverse range of people to share skills and knowledge, prototype and test ideas that make a real impact to those that make journeys by bike in their communities.

In 2014 we ran the first CycleHack event in three cities - Beirut, Melbourne and at our CycleHack HQ in Glasgow where we collectively produced over 30 CycleHack Ideas.

With 35 cities around the globe already signed up for our 2015 event, we expect this number to continue to grow and to reach at least 50 cities.

## CYCLEHACK DESIGN TANK

Our Design Tank supports organisations by using a human-centered design and innovation process to develop new road experiences. We take cycling issues and help reframe them as opportunities while working with you to solve them. This could be re-designing the service behind a cycle scheme, opening up a new market segment, or developing a new cycling product.

Our global network of CycleHack Associates makes us unique. Participants from each event feed into our network of Associates which help out in various initiatives, including Design Tank activities. We collaborate with cyclists from San Francisco to Melbourne, Jordan to Berlin and Glasgow to London. We work with people in your area and act as strategic managers to help shape and guide your project through our design process.

## CYCLEHACK EDUCATION

We offer a variety of education and training workshops to help people learn the skills associated with being a CycleHacker.

From one-day sessions to weekly modules, we help people develop a wide range of thinking and making skills including; design thinking, place-based innovation, civic hacking, urban prototyping, sketching, prototyping, 3D modelling, 2D graphic design and training on fabrication machines including 3D printers and laser & vinyl cutters.

This programme is run in collaboration with Maklab, Scotland's first open access digital fabrication studio, and is ideal for schools, educational institutions, communities and organisations who run cycling initiatives.

**sustrans**
JOIN THE MOVEMENT

"Cyclehack is an exciting, innovative movement, bringing the principles of design thinking and rapid prototyping to the world of cycling. Sustrans Scotland recognise the benefits Cyclehack brings, in addressing barriers, stimulating innovation, and building support for cycling initiatives. We look forward to seeing the product catalogue growing as participation and popularity grows!"

**Matt MacDonald**
**Senior Business Development Officer**
**Sustrans Scotland**

## WE USE DESIGN THINKING TO PUT PEOPLE AT THE HEART OF NEW IDEAS AND STRATEGIES, MAKING SURE EVERYTHING WE DESIGN WORKS FOR PEOPLE.

Our CycleHack Design Tank is here to help you approach challenges in a new way. We can support you in rethinking problems and develop innovative opportunities for new services, products, brands, and policy in the cycling world.

Our background includes working closely with urban planners, government, and local authorities in identifying strategies for urban development that centre around how people use places and spaces. We use a human-centered design approach to ide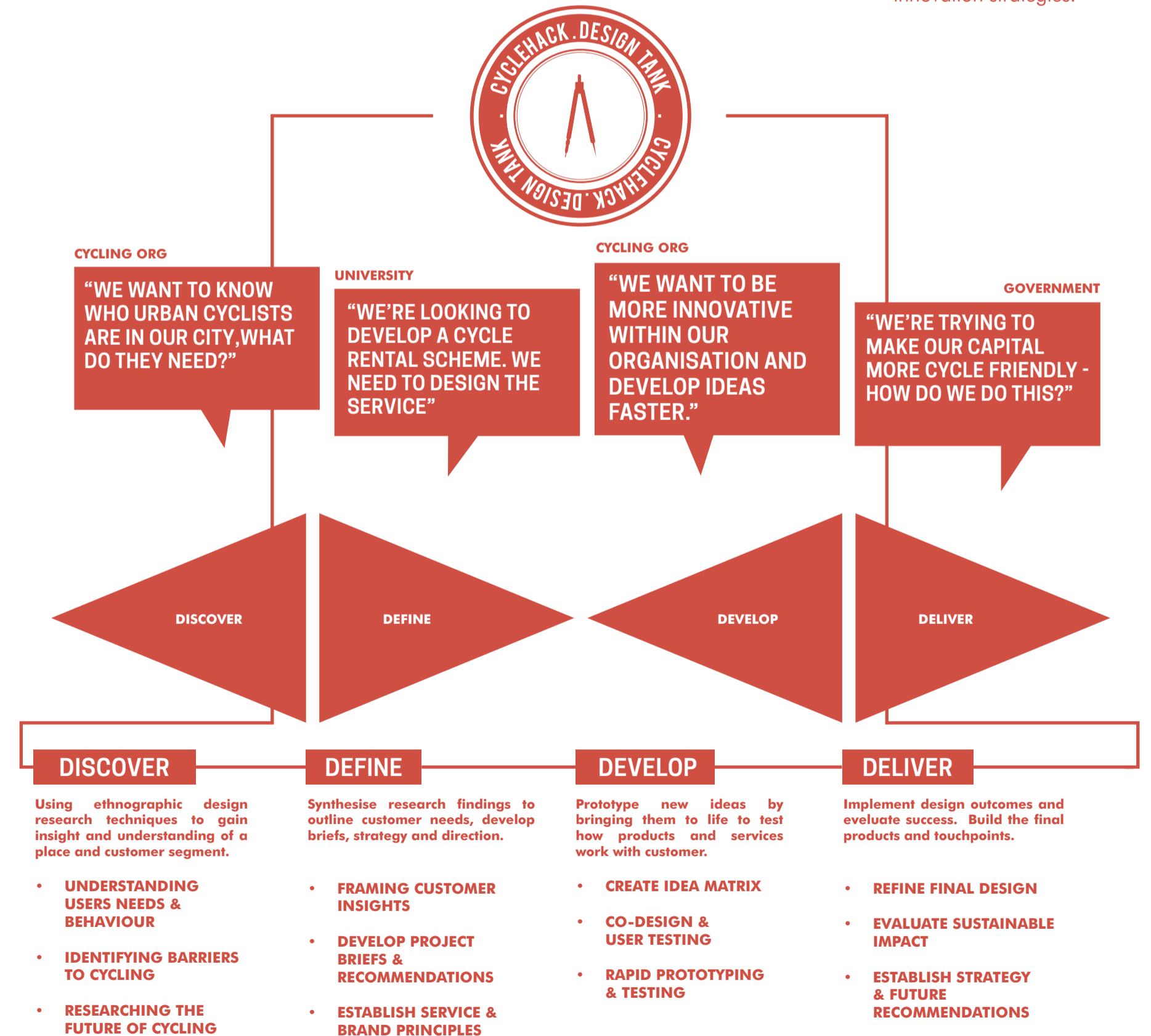ntify and solve barriers to cycling. We start by framing an issue and defining an approach to tackling it; whether it is overcoming a local, place-based barrier to cycling, developing a new product or re-designing how people experience a service.

We help people and organisations work strategically to transform ideas into implementable solutions with people and place at the centre of our process, along with a mix of design expertise and rapid prototyping.

Using quantitative data mixed with ethnographic research methods to understand people's behaviours and motivations, we believe our approach gives us a solid foundation for the identification of strategic direction and development of ideas.

We are partnered with Snook, an award winning design agency specialising in developing brands, campaigns, services and experiences for the public and private sector. Snook work on projects that cover the design of digital platforms, the development of community initiatives, customer research programmes, product and service design and social innovation strategies.

**CYCLING ORG**
"WE WANT TO KNOW WHO URBAN CYCLISTS ARE IN OUR CITY, WHAT DO THEY NEED?"

**UNIVERSITY**
"WE'RE LOOKING TO DEVELOP A CYCLE RENTAL SCHEME. WE NEED TO DESIGN THE SERVICE"

**CYCLING ORG**
"WE WANT TO BE MORE INNOVATIVE WITHIN OUR ORGANISATION AND DEVELOP IDEAS FASTER."

**GOVERNMENT**
"WE'RE TRYING TO MAKE OUR CAPITAL MORE CYCLE FRIENDLY - HOW DO WE DO THIS?"

DISCOVER          DEFINE          DEVELOP          DELIVER

### DISCOVER
Using ethnographic design research techniques to gain insight and understanding of a place and customer segment.

- UNDERSTANDING USERS NEEDS & BEHAVIOUR
- IDENTIFYING BARRIERS TO CYCLING
- RESEARCHING THE FUTURE OF CYCLING

### DEFINE
Synthesise research findings to outline customer needs, develop briefs, strategy and direction.

- FRAMING CUSTOMER INSIGHTS
- DEVELOP PROJECT BRIEFS & RECOMMENDATIONS
- ESTABLISH SERVICE & BRAND PRINCIPLES

### DEVELOP
Prototype new ideas by bringing them to life to test how products and services work with customer.

- CREATE IDEA MATRIX
- CO-DESIGN & USER TESTING
- RAPID PROTOTYPING & TESTING

### DELIVER
Implement design outcomes and evaluate success. Build the final products and touchpoints.

- REFINE FINAL DESIGN
- EVALUATE SUSTAINABLE IMPACT
- ESTABLISH STRATEGY & FUTURE RECOMMENDATIONS

# SPREADING CYCLEHACK THINKING ACROSS THE GLOBE THROUGH TRAINING.

CycleHack Education is aimed at young people in communities and schools and our training modules are suitable for corporate business, cycling charities and local initiatives. We teach the basics of undertaking design-led research to uncover cycling issues and the skills of

taking an idea into a working prototype and implementing this into the physical environment. We offer this in a variety of models from workshops to full training programmes lasting over several modules.

We can provide training at an executive level and part of a CPD programme for cycling agencies. Our other branch is a social enterprise for young people. We work with schools and community groups to teach young people about craft, place making, design thinking and how to design solutions to cycling barriers they uncover.

We do this in partnership with Maklab which allows young people to try laser cutting, 3D printing and other machinery. We have a suite of models for CycleHack Education including two-hour workshops, full-day sessions, and a 8-12 week module for schools.

| | SUITABLE FOR | TIMING | FORMAT |
|---|---|---|---|
| **CYCLEHACK TRAINING FOR COMPANIES** | - Companies who want to engage staff in cycling<br>- Cycling organisations who want to develop products and services<br>- Charities who are looking for innovative approaches | - One day workshop<br>- Four half day modules | - Group working sessions |
| **CYCLEHACK EDUCATION FOR YOUNG PEOPLE** | - Schools, colleges and universities<br>- Community groups and initiatives<br>- Existing cycling initiatives that engage young people | - 2 hour workshop<br>- One day workshop<br>- 8 to 12 week training module | - Group working sessions<br>- Placement in Maklab<br>- Online tutorial |

# WORK WITH US & OUR GLOBAL PARTNERS.

We are a networked agency that keeps growing. In our first year we've grown from 3 to 35 cities and we continue to expand.

There are quite a few ways to work with the team, including: Run a CycleHack Event, Work with our Design Tank Team, Sponsor us, Join our mailing list.

We have local CycleHack Global organisers who will not only run their own event, but have also set

up their own networks of makers, designers, developers, cycling organisations. Each CycleHack event attracts up to 50 people on average, with some hitting the 100 mark.

With a central CycleHack Design Tank team, we work closely with our partners to ensure our global design work is relevant to the local community and context by engaging with this local chapter. Through our annual global event we are always uncovering the best CycleHack talent from across disciplines in design, engineering, making, science, planning and business.

In addition to our annual event, we also work online with our global CycleHackers through live challenges.

Our CycleHack Open Source Catalogue allows citizens across the globe to work together on CycleHack challenges which we work with you to frame a brief, engage an audience of CycleHackers, and produce actionable ideas.

www.cyclehack.com/catalogue

**GLASGOW HQ**

| | | |
|---|---|---|
| LONDON | ATLANTA | GHENT |
| BANGALORE | MEXICO CITY | QUERÉTARO |
| ISTANBUL | MILAN | SAN FRANCISCO |
| SEATTLE | BEIRUT | KRIMPEN |
| TORONTO | GENEVA | ANTWERP |
| MELBOURNE | OXFORD | BELFAST |
| CHESTER | HAMBURG | MILAN |
| DUNDEE | BRUSSELS | CAPE TOWN |
| CAPE TOWN | NOTTINGHAM | GLASGOW |
| BREMEN | EDINBURGH | VANCOUVER |
| BERGEN | AMSTERDAM | |

**VANCOUVER INTERNATIONAL OFFICE**



## SARAH DRUMMOND

### SERVICE DESIGNER AND STRATEGIST

Sarah is a Google Fellow and the co-founder of award winning design agency Snook in Glasgow. Sarah has led over 100 projects in the design and innovation field. Her skills and expertise cover product design, service design and business model innovation. Sarah has a particular interest in how the start up model of lean thinking can be applied to the development of an organisation's capacity to innovate in-house and loves getting ideas out into the real world as urban prototypes. Sarah has experience of working on new services and digital agendas for Smart Cities and is looking forward to the future of how open data will change our experience in cities. Her clients over the past 5 years have included: Edinburgh, Stirling and Glasgow Council, Scottish Government, Edinburgh University, Nominet Trust, NHS Greater Glasgow and Clyde, Design Council, Young Scot, STV.

## JOHANNA HOLTAN

### EVENTS AND GLOBAL INNOVATION

Johanna has spent the past 10 years working on development projects in Scotland, America, Jamaica, Mexico, and the country Georgia leading in various capacities from project design and fundraising to volunteer management and communications. She has pioneered a number of new initiatives such as the first Race for the Cure in Tbilisi, TEDx University of Edinburgh, Edinburgh University's Gather Festival, the award-winning international education project EUSA Global, and Trade School Edinburgh. She values opportunities to bring different individuals and communities around a table in meaningful ways. She is passionate about the bike as a tool for empowerment, especially for women, and started Bikeable Jo to capture the stories of cyclists in Scotland and beyond.

## MATTHEW LOWELL

### PRODUCT DESIGNER AND MAKER

Matt is a user-centred designer with a passion for using design as a tool for social change. His skills and expertise lie in the areas of product and service design. He is interested in how design thinking can be used to give form to the experiences, interactions and systems around us, making them more accessible, intuitive and meaningful. He has worked as a designer on various projects and with a range of multi-disciplinary teams in as far away places as Beirut, where he took part in the first ever Beirut Design Week. As a user-centred designer he is experienced in conducting in-depth user research and engaging with people to gain insight into project areas. Prototyping and testing plays a big part in his design process and he is excited to see the ways in which digital fabrication is empowering citizens to make their mark in the world that surrounds them.

## CYCLEHACK ASSOCIATES

We work with a wider network of CycleHack associates and teams around the globe.

CycleHack Associates are a global network of individuals with keys skills and expertise relevant to our overall aims. Recruited through CycleHack Events, they offer support and can be contracted to contribute to innovation projects, provide local knowledge & feedback and support the implementation of new ideas with their local networks.

### RICHARD CLIFFORD

Maklab is a design and prototyping studio in Glasgow that gives public access to the latest digital prototyping tools, along with expertise and training. Run by Richard Clifford, Studio Director of MAKLab, he is growing a network of locations throughout Scotland and the UK, and is working internationally on socially driven projects taking technology into the hands of a wide demographic. MAKLab gives people access to a vibrant network of professionals and opens the door to technology, design, engineering, coding and other making skills. Maklab's network spreads globally through the FabLab network and is a core partner of CycleHack.
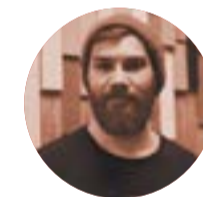
### ALEC FARMER

Alec Farmer is a designer, maker and entrepreneur. Based in Glasgow, he is the founder of Trakke, a luxury outdoor lifestyle brand. Trakke has grown organically from a basic concept, with bags made in the living room of a student flat, from freely available recycled materials, into a premium outdoor lifestyle brand. In 2013, he was awarded a Smarta 100 award for British made goods. In addition, he has a background in graphic design, public speaking, micro-architecture, sustainability and is skilled at taking products from concept to market.
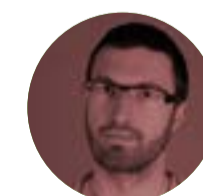
### JAMES VALE

When James was three he had a Raleigh Husky with stabilisers, from which he progressed through BMX, racer, various mountain bikes, a fixed gear city bike, and a cyclo-cross commuter. There was a 10-year cycling hiatus when he became an Edinburgh-base skateboarder, studying computing and electronics, followed by 5 years working as a software engineer in the electronic payment industry. Gaining a degree in Product Design Engineering from the Glasgow School of Art, James has gone on to work in a Scottish tech consultancy designing a range of consumer, medical and imaging products from concept to manufacture.

### RORY GIANNI

After graduating from University of Strathclyde's MSc. in Environmental Entrepreneurship, Rory became a self-employed software developer.

He often works with start-up companies helping them take concept to market.

In early 2013, Rory founded 'Cleanweb Scotland', one of a growing number of global communities interested in applying internet technologies to sustainability problems. Cleanweb communities regularly meets for talk nights and networking events.

### ELLEN MCDERMOTT

Ellen has 4 years solid CAD experience using Solidworks which she uses to model mechanical shapes, 2D layouts and detailing on products. Usability is an important part of any project for Ellen and she places a particular emphasis on co-designing with stakeholders throughout her design process. Ellen takes a key role in supporting the understanding of user needs by running surveys, questionnaires and ethnographic methods to profile end users.

Ellen is a serious road cyclist, (Lycra clad and proud), competing in road races around Scotland.
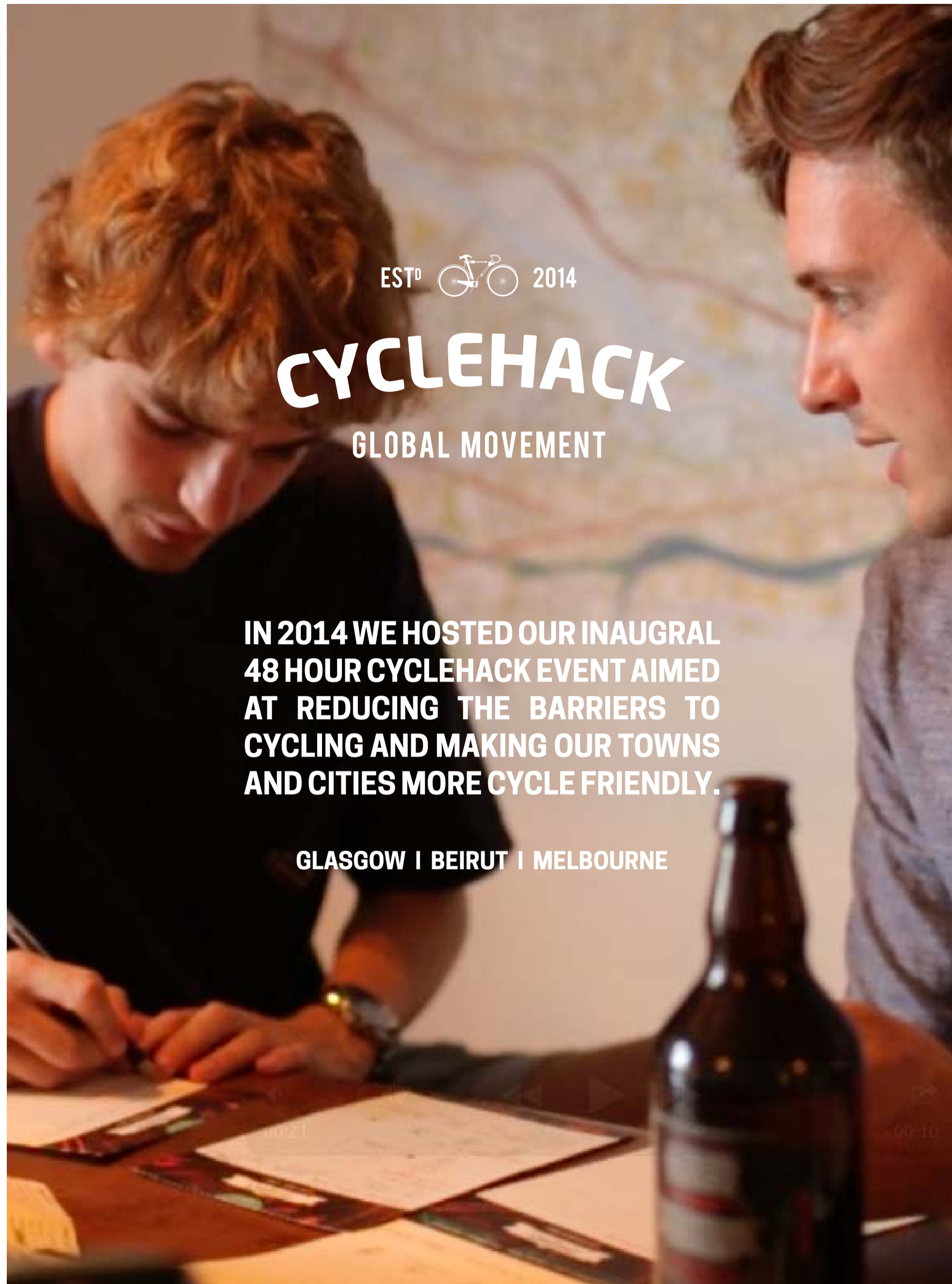
ESTᴰ 2014

# CYCLEHACK

## GLOBAL MOVEMENT

IN 2014 WE HOSTED OUR INAUGRAL 48 HOUR CYCLEHACK EVENT AIMED AT REDUCING THE BARRIERS TO CYCLING AND MAKING OUR TOWNS AND CITIES MORE CYCLE FRIENDLY.

**GLASGOW | BEIRUT | MELBOURNE**

GLASGOW

BEIRUT

MELBOURNE

"For me, Cyclehack is about bringing together lots of heads who all equally have their own experiences and ideas, and bridging this with design talent to make ideas become a reality."

Sarah Drummond, Glasgow

"In a city with no infrastructure for cycling at all, a few cycling enthusiast are braving the multiple barriers and opting for their bicycles. Beirut CycleHack is a much needed initiative to offer the opportunity to strengthen the cycling community and give them a space to create their own solutions and expand their efforts."

Public Interest Design Levant, Global Partner, Beirut

"It was a wonderful experience to assemble some of Melbourne's cycling enthusiasts, entrepreneurs, designers and decision makers under a one roof for 48 hours. Throughout the weekend we identified barriers to cycling, and we were extremely honoured to see all participants working together for a common goal, a bike friendly city."

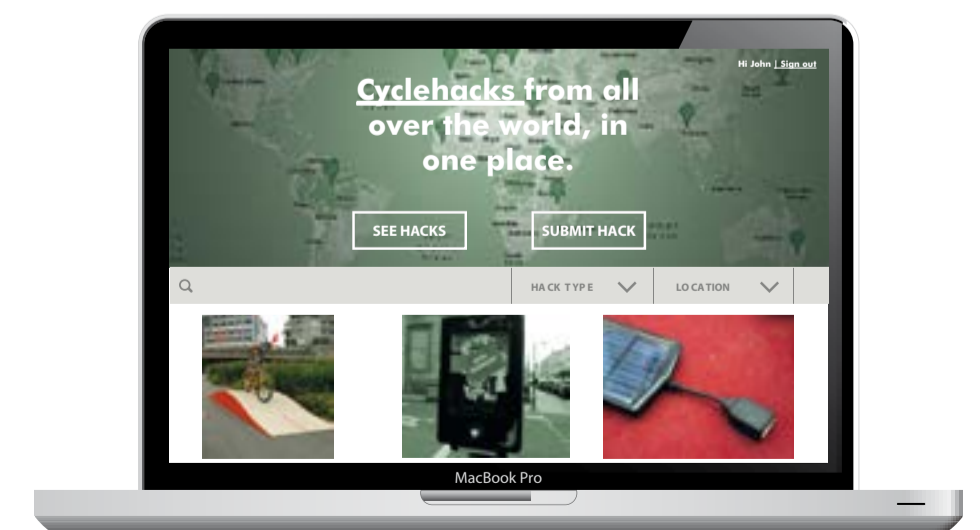Jani Modig, Global Partner Melbourne

**"WE LOOK FORWARD TO SEEING THE PRODUCT CATALOGUE GROWING AS PARTICIPATION AND POPULARITY GROWS!"**

Our inaugural CycleHack Event was held in three locations: Glasgow, Beirut and Melbourne. Kicking off in the East, Melbourne started at 6pm and during the weekend, each city skyped to maintain the global feel of the event.
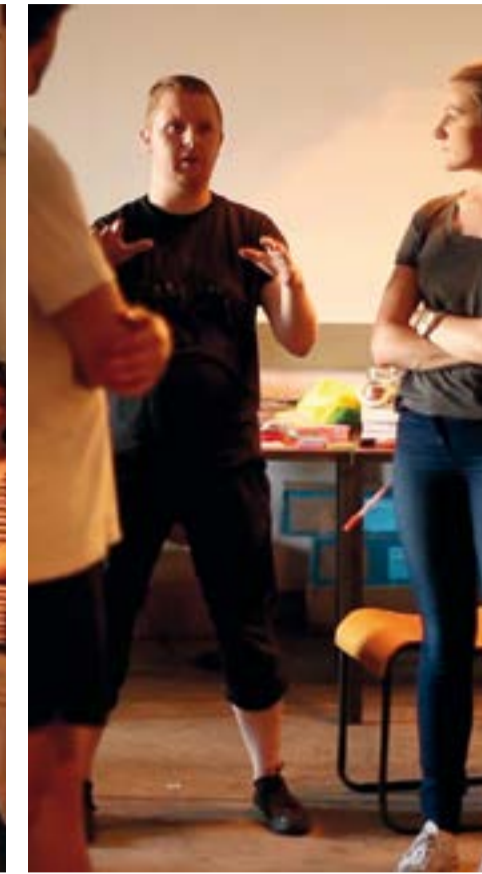
At the end of the weekend, each team or individual who created a hack uploaded their idea, working file and images to the CycleHack Open Source Catalogue.

The catalogue now showcases all of the ideas produced throughout the 2014 event and evidences where and how each CycleHack idea is used. These prototypes have a Creative Commons Licence and can be built upon, shared and developed.

**sustrans**
JOIN THE MOVEMENT

Cyclehacks from all over the world, in one place.

SEE HACKS   SUBMIT HACK

HACK TYPE   LOCATION

MacBook Pro

# PRE - HACK

# DISCOVER

# DEFINE

## RESEARCH

- Gathering Barriers to Cycling
- Understanding Road Users' Perspectives
- CycleHack Socials

**"We try to build more respect between bus drivers and cyclists, and hopefully that respect comes back to us as a business."**

Andrew Finley, Central Depot Manager, Lothian Busses

## LAUNCH

- Inspirational Short Talks
- Uncovering the Barriers

**"I recently rediscovered cycling and wanted to get involved in improving the local cycling experience."**

Liv, Melbourne CycleHacker

## EXCHANGE

- Discussing Personal Experiences
- Unravelling CycleHackers Skills

**"I wanted to take part to meet people in the cycling world and learn new skills through working with others who are not designers."**

Stewart Gairns, Glasgow CycleHacker

## SKETCH

- Exploring CycleHack Ideas
- Highlighting Hack Opportunities
- Defining Approach

**"I loved the innovative, fast paced approach of a hack weekend on a subject that I am passionate about and really see the need for change in."**

Lizzie Brotherston, Glasgow CycleHacker

# START

MAY / 2014                 FRI - 20 / 6 / 14                 FRI - 20 / 6 / 14                 SAT - 21 / 6 / 14

**DELIVER**

**DEVELOP**

## PROTOTYPE

- Build Sketch Models
- Learn New Skils
- Bring Ideas to Life
- Envision Future Change

"The range of skill sets in the room was amazing. It was great to be able to collaborate with people that had the skills to bring my idea to life."

Jo Holtan, CycleHack Co-Founder

SAT - 21 / 6 / 14

## NETWORK

- Increase Professional Network
- Exchanging Skills

"The people that participated were awesome: regular people that love cycling. There were amazing ideas recorded and hacks produced. I want to pick up where some left off!"

Pablo Olmos, Glasgow CycleHacker

SAT - 21 / 6 / 14

## TEST

- Implement into the Environment
- Gaining Feedback
- Documenting Hack in Action
- Evaluating Impact

"I feel all of these skills are becoming evermore important as we enter an age when the opportunity to tackle problems and communicate ideas is opening up to everyone."

Donnacha, Glasgow CycleHacker

SUN - 22 / 6 / 14

## PRESENT

- Telling the Story
- Adding to Open Source Catalogue
- Sharing with the World

"Its been amazing to watch how the story of the hack ideas have spread. Now that we have sucessfully carried out our first CycleHack Event, and have it to demonstrate what its all about, I am really excited for next year and to see where it will go."

Matt Lowell, CycleHack Co-Founder

SUN - 22 / 6 / 14

**FINISH**

# THE

# HACKS

## 2014

WWW.CYCLEHACK.COM/CATALOGUE

**DIGITAL**

**PHYSICAL**

**CAMPAIGN / EVENT**

**POLICY**

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## CYCLE BEIRUT
-
Encouraging the use of cycling as a mode of transport, Cycle Beirut offers a visual language for cycling within the city.

## DIY BIKE LIGHT
-
A completely open source bike light based on the bike light circuit board that can be built using common household items.

## GO BIKES
-
A bike share model that is easily implementable by individual companies.

## PENNY IN YO PANTS

GLASGOW

-
### A SUPER SIMPLE PRODUCT THAT CAN TRANSFORM ANY SKIRT AND MAKE IT BIKEABLE.

Using a coin and a rubber band, Penny in Yo' Pants makes it possible to secure the front and back of your skirt together, ensuring it doesn't fly up in the wind or leave you exposed when getting on and off your bike.

This is a simple, yet great example of a physical hack which can make a big difference to women's journeys. Anyone can be a cyclist no matter the occasion or their attire.

In addition to its simplicity, we love this CycleHack Idea because of its wider aims and global reach. The video detailing how the hack works has gone viral with over 2.5 million hits in 15 days and the team are now selling Penny in Yo' Pants kits to raise money for the Afghan Women's Cycling Team.

www.pennyinyourpants.co.uk

GLASGOW
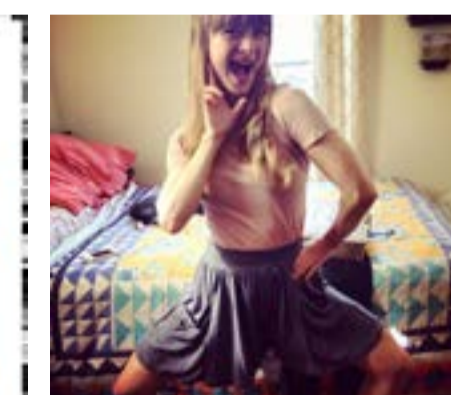
**OVER 2.5 MILLION VIEWS IN 15 DAYS AND FEATURED AROUND THE GLOBE.**

# BLIND SPOT VINYL WRAP

-

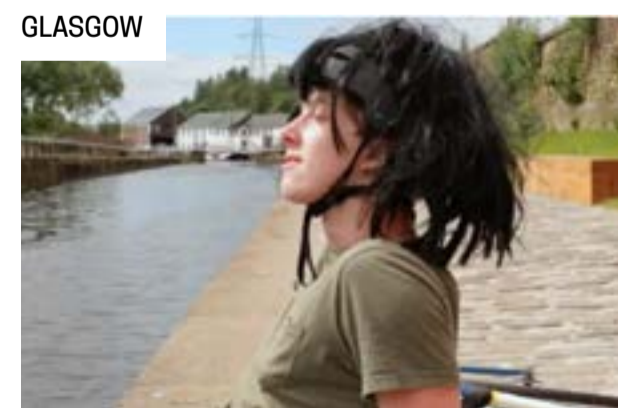## CREATING MORE EMPATHY BETWEEN ROAD USERS.

This CycleHack tackles the issue of blind spots on large vehicles that prevent drivers from seeing cyclists. Acting as a campaign tool, this vinyl wrap aims to inform cyclists of the areas that they cannot be seen in, and put the onus on them to position themselves correctly on the road.

Through visually communicating this issue and promoting a collaborative approach between road users to solve it, this idea aims to create more respect and empathy on our roads. This CycleHack idea was formed from a barrier that was highlighted by Lothian Buses during our research and demonstrates the journey and distance an idea can take in 48 hours.

We enjoyed watching the process that this team went through of learning through making from the word go, and this way of working fits well with our CycleHack values.

Mark Irwin
@SDEGlasgow
Bus livery that shows cyclists the drivers Blind spots. I think this is genius! #cyclehack
6:20 PM - 22 Jun 2014 · Glasgow, United Kingdom
1 RETWEET 2 FAVORITES

### DINKLAGE
-
The world's first hairy helmet that aims to highlight the danger of drivers not giving enough room to cyclists.

### CYCLE FASHION ALLIANCE
-
A Twitter account which aims to connect cycling and fashion communities to help develop practical yet fashionable cycling apparel.

### REFLECTIVE WAGGLERS
-
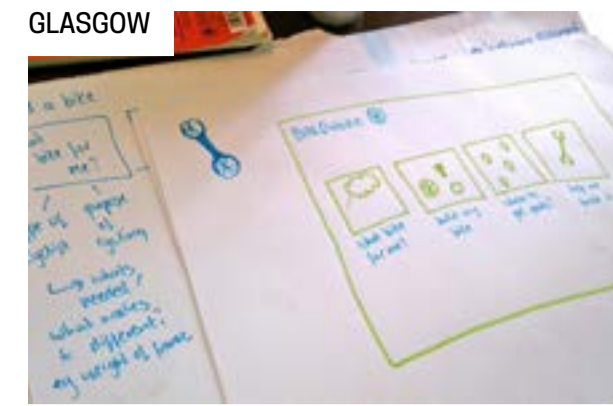A series of bike tags that can be tied from reflective paracord.

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### EXCEPT / EXPECT CYCLES
-
A signage campaign that looks to encourage greater equality for cyclists on the road.

### THIS IS OUR SPACE
-
An incentive program which aims to incrementally shift the focus of road layout away from cars and towards cyclists.

### BUILD A BIKE
-
An online one-stop-shop for beginner cyclists that want to learn about how to build a bike and maintain it.

# WAYTIPS

-

## HELPFUL TIPS FOR FINDING YOUR WAY THROUGH THE CITY.

While there are many sections of cycle routes and a network of pathways throughout the city of Glasgow, they do not always join up or have sufficient signage to guide you along them, especially at complicated junctions.

This fact means that many cyclists and walkers often find themselves taking a wrong turn or not knowing where to go next.

This CycleHack idea aims to put an end to this through offering an open source sticker template that allow citizens to fill in the gaps within current signage infrastructure.

The WayTips files can be downloaded from the team's public Dropbox folder and simply printed at home on sticker paper, or cut out using a vinyl cutter.

This idea is a good example of how hacking infrastructure can be made accessible and how citizens can influence change in this area.

The Whisky Bond @WhiskyBond · Jun 27
Thanks @MattLowell - what a great idea. Really hope to see it rolled out and out ... @_AndyYoung @weared8 @scottishcanals @cycle_hack
1

The Whisky Bond @WhiskyBond · Jun 27
Nice // We're loving this addition to the @weared8 signage to @scottishcanals. Any ideas who had the inspiration ?

1    2    ...          View more photos and videos
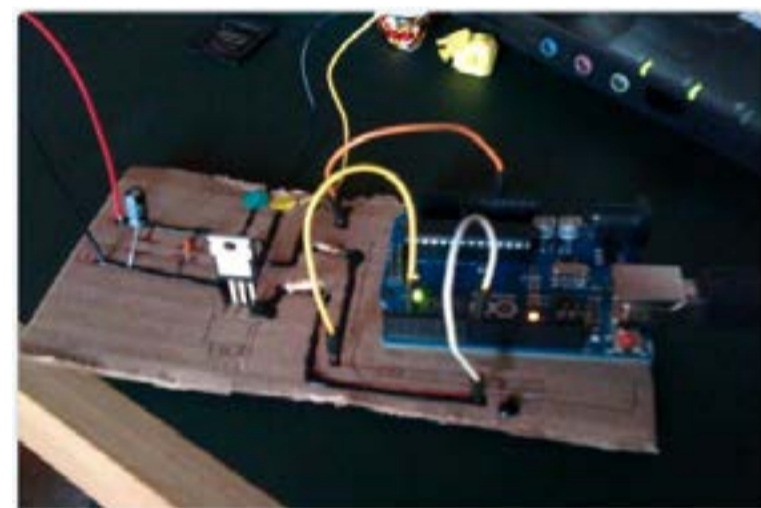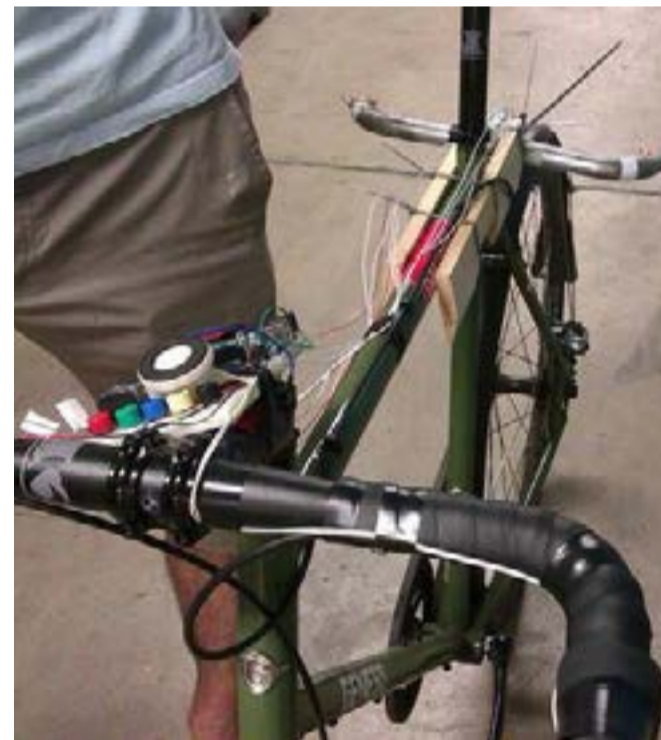
# URBAN SURVIVAL PACKAGE

-

## ELIMINATING THE NEED TO MOVE YOUR HANDS FROM THE BARS AND BRAKES.

Whether you are indicating to other road users, ringing your bell to alert others to your presence or checking your phone or map for the route ahead, these actions require you to take your hands away from your handlebars and brakes. To overcome this barrier, a team of five CycleHacks came together and blurred the line between physical and digital hacks by prototyping the Urban Survival Package. Using the diverse range of skills on hand at the event, they were able to make use of design capabilities and digital tech such as Arduino and Bare Conductive Ink to bring their ideas to life.

Their CycleHack idea broke down into three functions:

- A handlebar mounted arrow which is connected to your phones GPS via Bluetooth that guides you without the need to stop.

- Rear mounted indicator lights that are controlled by self adhesive switches on the side of your handlebars.

- An integrated digital bell that can be programmed to any sound and gets louder the longer it sounds.

This was an impressive challenge and we were amazed by what the team achieved over a weekend.

> **Pablo** @jaguarviajero — *Follow*
> The cookest thing I've done today: work with @BareConductive paint and an Arduino #cyclehack
> 9:05 PM - 21 Jun 2014
> 5 RETWEETS 6 FAVORITES

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## CYCLEHOOD

-

Personalised maps that help individuals locate themselves and explore new areas by bike.

## BIKE WHISKERS

-

Handle bar attachments which alert both cyclists and drivers of close encounters.

## OPEN EVENT CALENDAR

-

An editable calendar for local cycling events, that helps people find great events and enables cycling groups to work together.
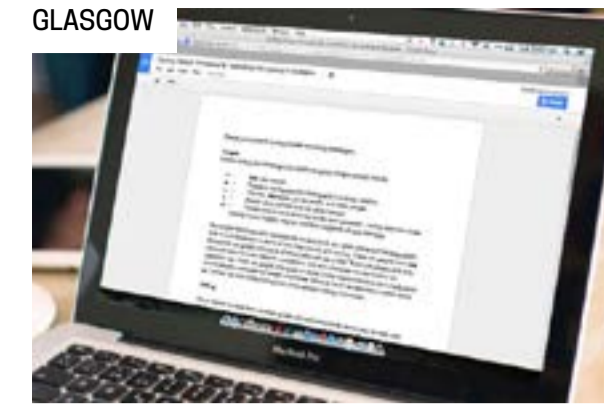
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## #RELEASEYOURINNERTUBE

-

An instagram hashtag which creates connections across the cycling community and gives useful tips on how to reuse old inner tubes.
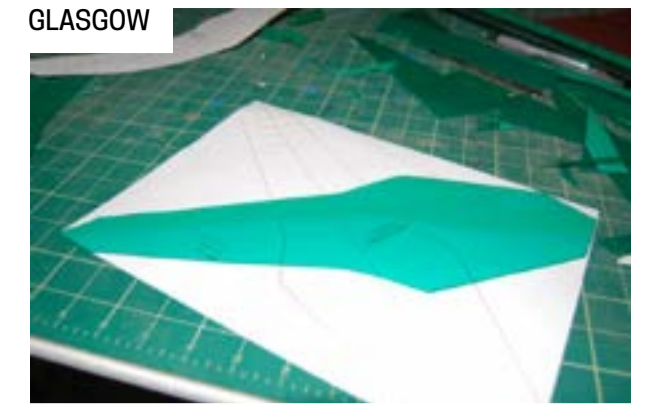
## CYCLING DESIGN PRINCIPLES

-

A series of principles to support organisations who create cycling marketing / material.

## RECGUARD

-

An open source mudguard that can be downloaded and laser cut or made from recyclable materials.

---

# V3LO-SCAPE

-

## HELPING SHAPE THE FUTURE OF CYCLE POLICY.

The winning CycleHack idea in the digital category, V3lo-Scape is a web-based digital mash-up application that allows members of the public to submit their cycling data and work with local authorities to better inform debate on the future of cycling.

V3lo-Scape collects and overlays multiple sources of data in order to visualise them and highlight points of interest.

This CycleHack idea was brought to life through the realisation that there is limited availability of good quality cycling data, and a need for more detailed bottom-up methods of data collection.

At the moment, V3lo-Scape considers various political layers (e.g. local authority and constituency boundaries) to help you understand the quality of cycle infrastructure in your area.

This also makes it easy for users to explore these metrics within the context of those responsible for cycling infrastructure. We found this aspect of V3lo-Scape really interesting as it shows the possibility of what open-data, transparency, and digital hacks can

# PEDESTRIAN BIKE SIGNS

## SUPPORTING PEDESTRIANS AND CYCLIST TO MIX IN A SAFE WAY.

In every city there are points where cyclists and pedestrians cross paths that cause friction and misunderstanding between these two groups. In these instances, it is common for the actions of a few to have a detrimental affect on the stereotype of many others.

This team highlighted some of these friction points within Glasgow and aimed to reduce this barrier through simple signs that draw pedestrian's attention to cyclists when crossing the street.

By placing the signs around the city and observing people's reactions, this CycleHack team learned a great deal through the implementation and testing of their idea. They realised that when the sign is placed directly above the pedestrian crossing button, the flow of pedestrians prevented it from being seen. This is a great example of how producing quick prototypes and testing with users can inform further development.
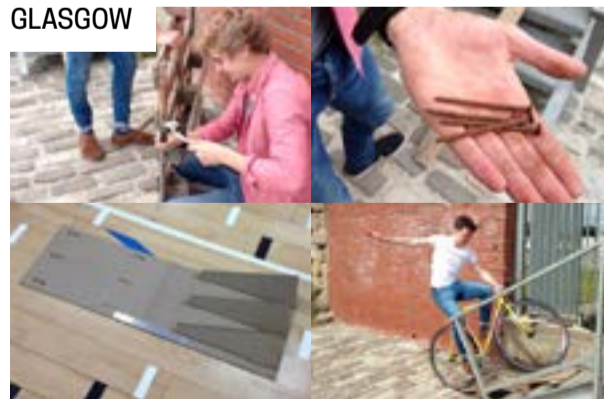
## WE LOVE BIKES

-
A brand which maps and provides a directory of bikeable businesses. Users can submit and review suggested businesses.

## OPEN SOURCE RAMPS

-
An open source ramp kit and community of urban hackers who transform curbs and street furniture to be more bikeable.

## CO- CYCLE

-
A web service and campaign bringing together cycle commuters to ride together and increase their safety collectively.

## CYCLE STORIES

-
A snapshot of Glasgow cyclists and their stories about cycling that help inform cycle marketing.

## BEIRUT B-ROUTE

-
An app-based service that organises custom bike tours to make biking safer and more fun.

## BIKE SKIRT

-
An alteration to make a pencil skirt more bikeable using hi-vis fabric.

# BIKE BEATS

-

## ALERTING OTHERS TO YOUR PRESENCE.

Many of Glasgow's canal underpasses are too narrow for two people to pass at the same time, whether walking or on bikes. This can cause frustration and tension between different path users. To overcome this barrier, this team created playful interactions between those that pass each other on Glasgow's network of paths.
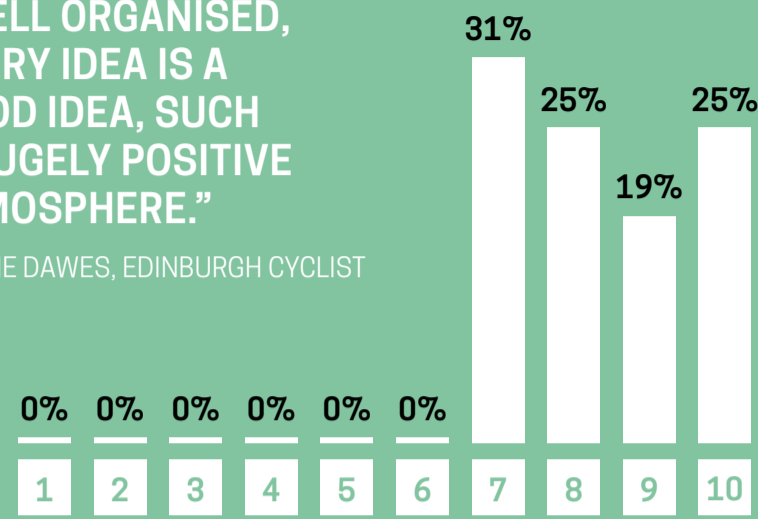
This physical hack used discarded bike parts to build a pull-and-bell system to alert people on the other side of the bridge to their presence.

Focussing on an area where contact between cyclists and others is potentially dangerous and can lead to conflicts, this hack transformed this interaction into something positive and fun.
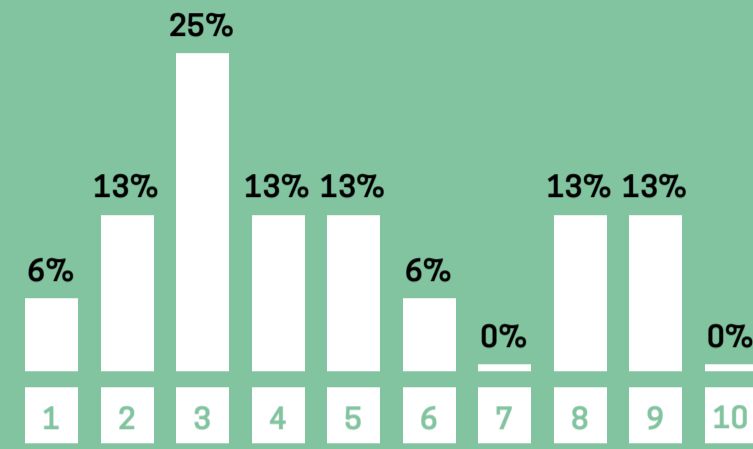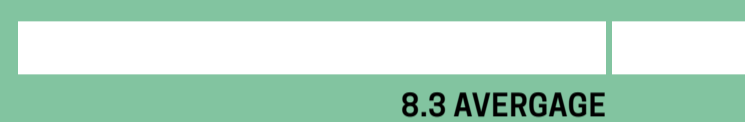
"WELL ORGANISED, EVERY IDEA IS A GOOD IDEA, SUCH A HUGELY POSITIVE ATMOSPHERE."
SOPHIE DAWES, EDINBURGH CYCLIST

**RATE YOUR CYCLEHACK EXPERIENCE OUT OF 10**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| 0% | 0% | 0% | 0% | 0% | 0% | 31% | 25% | 19% | 25% |

8.3 AVERGAGE

**HOW INVOLVED ARE YOU IN YOUR LOCAL CYCLING COMMUNITY?**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|---|---|---|---|---|---|---|---|---|----|
| 6% | 13% | 25% | 13% | 13% | 6% | 0% | 13% | 13% | 0% |

4.6 AVERGAGE

# BBC

**FEATURED ON BBC WORLDWIDE TO AUDIENCE OF**

# 360 MILLION

**ALSO FEATURED IN:**

Slate
road.cc pedal powered
STV
COSMOPOLITAN

"Almost every cyclist I know has his or her own ideas as to how we can improve relationships between cyclists and drivers and make the roads safer for all of us. Now, Cyclehack offers the opportunity to share those ideas, a huge brainstorming event, to help make Scotland one of the most bike-friendly nations in Europe. It's a brilliant idea in itself, so let's all join in and make it a really special event!"

**CAMERON MCNEISH
WRITER AND BROADCASTER, MOUNTAINEER AND CYCLIST**

## OPEN GLASGOW

"Over the weekend it felt like I was witnessing a new form of activism, one that is not merely confrontational and critical, but at its heart collaborative and inclusive. Cyclehack showed how design can shape how people experience where they live, how it can create new communities that can collaborate and how it can empower them to make their city a better place. It more than delivered what we asked for, and hoped for. It will be part of this city, and of others, for a long time to come"

**MARK IRWIN
OPEN GLASGOW
& GLASGOW FUTURE CITIES**

53%　47%
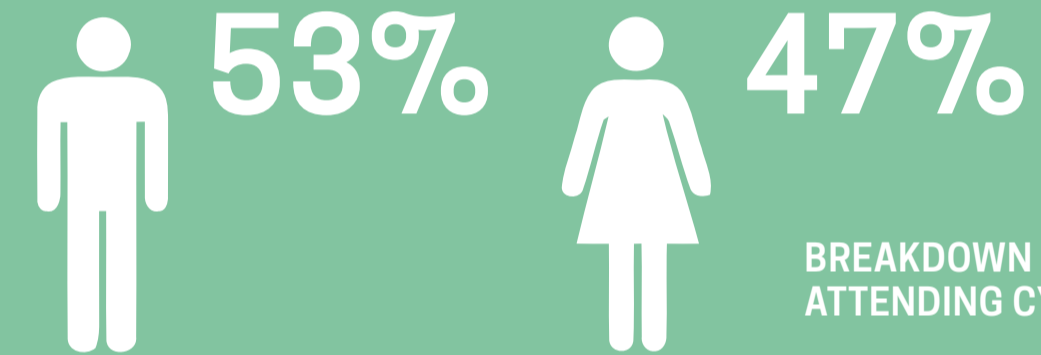
BREAKDOWN OF PARTICIPANTS ATTENDING CYCLEHACK
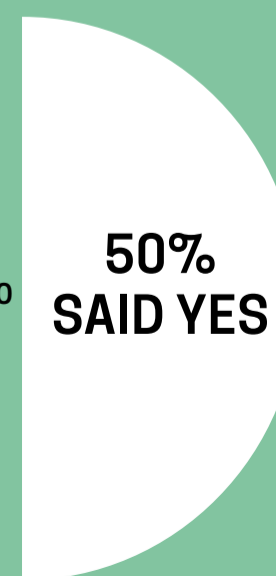
**63% SAID NO**

HAVE YOU BEEN TO A HACK EVENT BEFORE?
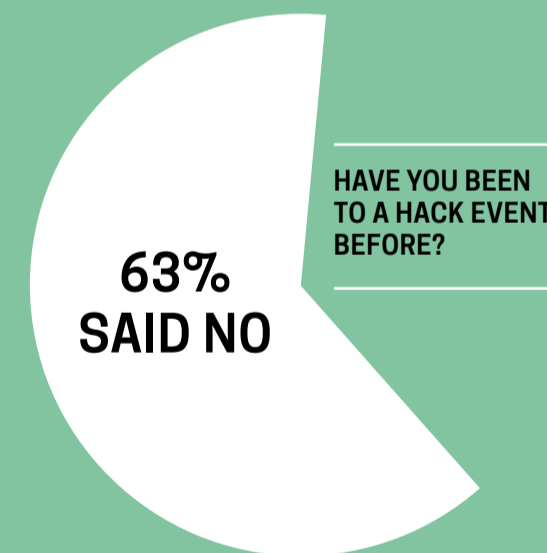
"I'M A LONG TERM FAN OF OPEN SOURCE SOFTWARE, I REALLY LIKE THE IDEA OF BRINGING THAT ETHOS TO CYCLING."
JIM EWING, CYCLING SCOTLAND

**GROWING AROUND THE GLOBE FROM 2014 - 2016**

2014
3 CITIES
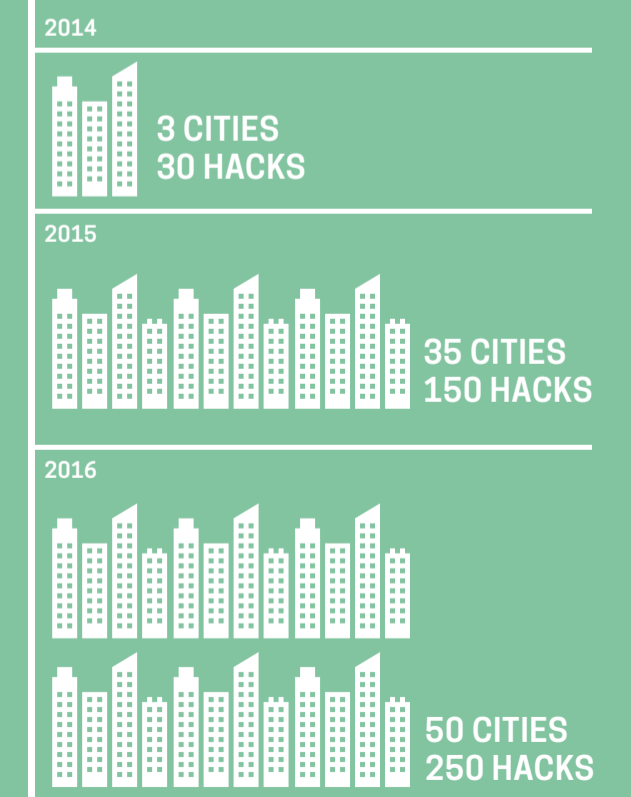30 HACKS

2015
35 CITIES
150 HACKS

2016
50 CITIES
250 HACKS

"THE BEST THINGS FOR ME WERE THE PHYSICAL HACKING AND MAKING THAT TOOK PLACE, THE RANGE OF IDEAS FROM SMALL TO BIG AND THE DIFFERENT TYPES OF PEOPLE WHO ATTENDED."
LIZZIE BROTHERSTON, GLASGOW CYCLIST

DID CYCLEHACK ENCOURAGE YOU TO CYCLE MORE?

**50% SAID YES**

ESTᴰ 2014

# CYCLEHACK

## GLOBAL MOVEMENT

# CYCLEHACK IS A GLOBAL MOVEMENT AIMING TO MAKE THE WORLD MORE SUSTAINABLE THROUGH REDUCING THE BARRIERS TO CYCLING.

We do this by reducing barriers to cycling through a grassroots approach to innovation.

Together, we are tooling up citizens to problem solve, develop and implement their own Cyclehack ideas to make the cycling experience around the world better for all.

Let's work together to get more people on bikes, change perceptions of cycling and improve the overall experience of riding a bike around the world.

**WWW.CYCLEHACK.COM**