PEDALLING INNOVATION

OXFORD'S FIRST CYCLING HACKATHON

5-6 February 2016
The Story Museum, Oxford
Free event

Cycling in this city could be a better experience for all. We want to be part of a process of improving it – but to make it better, we first need to understand the current experience and challenges more fully. And for that we need information, 'data'.

Join us and help to answer these questions:

- How do we capture data about cycling in Oxford?
- What do we want/need to know about cycling here?
- And how can we put this data to practical use?

Book your free place at:
http://pedalling-innovation.eventbrite.co.uk

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Pedalling Innovation: Oxford's first cycling hackathon

INVITATION

Cycling in this city could be a better experience for all. We want to be part of a process of improving it – but we need to understand the current experience and challenges more fully. For that we need 'data' and we need your help.

Join us for this innovative cycling hackathon, bringing people together to develop ideas to monitor and improve cycling for all in Oxford and beyond. Come with an interest in delving into a problem and designing diverse and creative solutions in a new and exciting way.

The event is open to anyone who is interested: you do not need to be a cyclist to come along, and you do not need to know about data. Perhaps you have an innovative idea for the shared economy; perhaps you find the collection of and application of data fascinating; perhaps you want to cycle but fear for your safety and would like to help to improve our city's transport network; perhaps you're just curious about the hackathon process and want to come and find out more. Whatever your reason, you're very welcome to join in the fun.

Why are we doing this?

Building on discussion at our event in the summer ('Can you see the future of cycling in Oxford?', 18 June 2015) , it has become clear that there is a knowledge or data-gap around cycling in the county, and this is holding us back from taking effective action to improve the experience.

For example, have you ever had trouble finding a good place to park your bike? Bike storage can seem like a challenge in the city, and it is something which we could take practical action to improve. However the fact is we don't actually currently understand *how much* of a challenge it is. The same can be said for cycling safety. We simply lack the data to truly understand the depth of the problem (if it is in fact a real problem at all).

How you can help

To enable us as a city to take constructive and targeted action to make cycling in Oxford great, we want **YOU** to help us answer the following questions:

What do we want/need to know about cycling in Oxford?

How can we capture the information that we need?

And how can we put this data to practical use?

Before we can support behaviour change, we need to understand behaviour. Examples of projects and results which the data could help us realise in future include: bike sharing schemes; improved bike parking across the county; new education initiatives, including more targeted bike buddying; improved safety and infrastructure; fewer abandoned bikes; a better understanding of congestion and real-time journey planning for bikes; innovative research…

So, how do we go about collecting data? This is where you come in. How would you go about designing a programme to collect this data?

Perhaps you have an interest in the technical side of the process and want to explore how we go about collecting the data. Ideas might include a smartphone app; a cunning gadget attached to each bike; or maybe you have a completely different idea…

For those more interested in the thinking about the questions and type of data we want to collect, what do we really want to know? What information do we need? What might we use it for?

For example, if the data we collect tells us where people are parking their bikes and how long they stay, could this help us develop new, more space efficient ways of allocating bike parking? Could connected data sensors fixed to bikes be used to improve safety through real-time information on congestion hotspots, reporting road defects and dangerous driving? Could they be used to warn connected vehicles or form part of a smart bike sharing programme? Could bikes also be collecting data which is useful for other things – for example, for monitoring air pollution in the city?

The format

The following is a preliminary agenda. The event is free. Meals and refreshments will be provided.

Venue: The Story Museum, Rochester House, 42 Pembroke Street, Oxford OX1 1BP www.storymuseum.org.uk

Date: 5 – 6 February 2016

Friday, 5pm-9pm

- ➢ Introduction to the challenge and context
- ➢ Food and team formation
- ➢ Initial team work period

Saturday, 9am-5.30pm

- ➢ Team work supported by facilitators
- ➢ 3pm: wrap-up
- ➢ 3.30 pm: presentations and panel judging – come and be part of the 'Dragons Den' panel
- ➢ 4pm awards for 'best….'
- ➢ Drinks reception and close

Rewards

On the Saturday, teams will be judged by the panel for what they have come up with during the hack. The successful team(s) will receive a number of rewards, including goody bags and the opportunity to pitch their ideas to MobOx and other interested parties. This may open up opportunities to bid for external funding streams to support delivering ideas generated by the hack.

How to book your place

Book online at http://pedalling-innovation.eventbrite.co.uk.

FAQs

What is a hackathon?

Hackathons bring together individuals from a variety of backgrounds and sectors to tackle large-scale, topical problems, in a short timeframe, drawing on their considerable expertise.

The hackathon, a port-manteau of the words "hack" and "marathon", is an intensive, problem-solving event lasting typically 24 to 48 hours. Originally hackathons had coding and tech at their core (hence the name); however these days the term is used more widely, to denote the event's nature and format, and focus on innovation at speed. Tech continues to form an important component of many hackathons, but hackathons are no longer the realm of coders alone.

Crucially, the output of the hackathon is not to just generate ideas, but to create demonstrable and viable (commercial and/or social) solutions within the hackathon timeframe.

Hackathons have now entered the academic and corporate mainstreams, with British Airways, for example, holding its STEM-focussed 'UnGrounded' hackathon at 30,000 feet on a flight between San Francisco and London (http://ungroundedthinking.com/tagged/theFlight).

What is data?

Data is information (numbers, words, images) which when collected together and put in context, tells us about something. To give a very basic example, you could record over a week how many times you park your bike in the Oxford station bike rack without a problem, and how many times you try to park but cannot. With analysis, this data could then be used to understand whether finding a parking place at the station is a problem for you, and when combined with information from others, whether parking at the station is a problem more generally.

Do I need to come with a team?

No, team formation is a facilitated process which will take place on the Friday night. For example, you may already know you want to work on an app. When you arrive on the Friday evening, you will be grouped with others who want to do the same, and can take it from there. Teams generally consist of 5-6 people, and once you are part of a team, the expectation is you will remain part of that team for the duration of the event.

Will there be people to help us with the process?

We are currently looking for technical and business mentors to help on the day. Technical mentors are there to provide technical support on access to and use of databases, use and scope of IoT (internet of things); business mentors are there to sense-check the business ideas from each team, making sure that they commercially sound. The mentors will work with the teams on and off throughout the event.

Interested in being a mentor? Great! Contact Mim for more information (mim.saxl@ouce.ox.ac.uk).

What is MobOx?

MobOx is a Community Interest Company which brings together Preston Motorsport, Oxford County Council, DBi (Elisa Interactive Ltd), Zeta Automotive, the University of Oxford and Oxford Brookes University to develop innovative solutions to the city's transport problems. Themes include connectivity, the internet of things and the Smart city, and the idea of using Oxford city as a Living Lab for cutting edge technology.

Further reading

- ➤ An overview from Wikipedia: http://en.wikipedia.org/wiki/Hackathon
- ➤ Highlights from the Launchpad-hosted Ebola Hackathon: https://www.youtube.com/watch?v=oFNcrhAvqTU&feature=youtu.be
- ➤ New Scientist article about the Ebola Crisis Hackathon 'Hackathon develops tech tools to fight Ebola epidemic': http://www.newscientist.com/article/mg22429963.100-hackathon-develops-tech-tools-to-fight-ebola-epidemic.html#.VPQ4LS7LJgs
- ➤ For a nice guide to using hacks in the arts: http://creativeconomy.britishcouncil.org/blog/14/10/05/importance-play-hacking-arts/

Organisers

The event is being organised by the Oxford University Estates Services Sustainability team and agile-ox, in collaboration with SMART Oxford, the Broken Spoke Bike Co-op and Oxford University's Transport Studies Unit.

For any further questions, please do not hesitate to contact Mim Saxl, agile-ox Project Coordinator:

Mim Saxl
Project Coordinator, agile-ox
University of Oxford
mim.saxl@ouce.ox.ac.uk
01865 614913

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