University of Surrey ESRC Impact Acceleration Account (IAA) Post Event Report

We received **£2000** from the **Rapid Response Fund** in July 2020 to run the PetHack—a **100% virtual challenge** for vet professionals, data enthusiasts, students, entrepreneurs and more to collaborate on projects that focus on addressing solutions for the pandemic's impact on companion animals (aka pets). We are very grateful to the support from the Fund, which we used to **award up to three winning entries** (£1000, £700 and £300 to the first, second and third respectively). In this report we cover the main activities and outputs and a brief reflection for the future.

About the event

> "*Since the pandemic started, we've seen a rather crowded space with innovation contests centred around people and human health. Surprisingly, there was nothing on animal health. We decided to do something rather quickly, with very impressive results. We see the Pet Hack as a successful starting point of a growing community of innovators to benefit the industry.*"
> Dr Carla Bonina, Surrey Business School & PetHack 2020 Organiser

The Companion Animal Open Data Hackathon (PetHack) took place from 14-17 July 2020, following a hackathon model conducted fully virtually, given the pandemic restrictions in place. The aim was to **bring innovators around the world** to join us to collaborate through dedicated digital channels to work with relevant open datasets and digital technologies to foster innovative solutions in the field.

This first Pet Hack edition concentrated on **finding real, innovative projects** to monitoring, diagnosing and controlling **Covid-19's impact on the animal health community and industry**. Challenge questions we posed included answering:

- How is information about Covid-19 data being provisioned and shared in relation to animal health?
- How many are now buying solutions for medicines online?
- What are the perceived financial pressures that might influence how pet owners take care of their animals?

- How are big influencers in animal health addressing the needs of their consumers?
- What solutions are there for businesses to continue practice (eg. video-based consultations) and what are the steps needed to undergo business transformation?

The **goal** of the activity was twofold:

- to come up with actual innovative solutions that could be later prototypes or pursued in the industry;
- To ignite an ecosystem of innovators from different backgrounds around the various innovation activities led at the vHive and the University.

The event was a joint initiative of the Surrey Centre of Digital Economy ([CoDE](#)) at Surrey Business School and The Veterinary Health Innovation Engine ([vHive](#)) at Surrey Vet School, and counted with the participation and support from partner organisation Zoetis, Open Data Soft, the University of Exeter, Virtual Recall and Medical Detection Dogs. The **design**, **organisation**, logistics and **management** of the event was led by [Dr Carla Bonina](#) from Surrey Business School and CoDE, and [Travis Street](#), Strategy & Delivery Manager of the vHive. As a team, we benefited from a multidisciplinary support of mentors working in social sciences, computer and engineering science and vet medicine. Three judges from the University of Surrey and Zoetis contributed to select the winners.

Event Timeline

15/06/20: Registration opened https://PetHack.com
12/07/20: Deadline to sign up (23.59 am GMT)
14/07/20: 9:00 AM GMT Opening Ceremony with all the important information to start with prototyping
17/06/20: 5:00 PM GMT Deadline to submit projects (expended to 23.59 pm), including a 2-minute video walk-through
Week of 20/07: Judges select winning entries
28/07: Winners and Highlighted projects announced; feedback sent to submitted projects

Key Results

With help from our partners at Zoetis, we have created an infographic that summarises the main **outcomes generated** from the event.

- **51 applicants** (doubled of our initial target), from **11 countries**
- **5 innovative** submissions delivered (exceeding our initial expected number of three)
- **3 winners and 2 runner ups**

PetHack 2020

ABOUT: A 100% virtual challenge for vet professionals, data enthusiasts, students, entrepreneurs and more to collaborate on projects that focus on addressing solutions for the pandemic's impact on pets.

GOAL: To come up with real, innovative projects to monitor, diagnose and control Covid-19's impact on the animal health community and industry.

1 Website www.pethack.space

1 Data Platform Open Data Soft

1 Comms platform Slack

2 organisers UNIVERSITY OF SURREY vHive

2 PR campaigns Reaching 30K+

8 Partners

UNIVERSITY OF SURREY

UKRI Economic and Social Research Council

opendatasoft Leading solution for data sharing

zoetis

vHive

UNIVERSITY OF EXETER

VIRTUAL RECALL

Medical Detection Dogs

51 Applicants

5 Presentations Submitted

11 Mentors

3 Judges

256,373 unique data points provided

3 Winners...

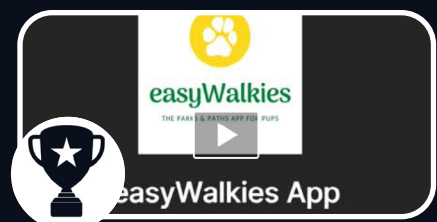1st Place and £1000 Prize - Retriever

2nd Place and £700 Prize - Trax

3rd Place and £300 Prize - easyWalkies

retriever
Find the solution

TRAX

easyWalkies
THE PARKS & PATHS APP FOR PUPS
easyWalkies App

you can watch these videos and see who were runners up at www.pethack.space/2020

- £**2400 delivered in prizes** (£2000 from the IAA, and £400 in website building vouchers obtained by one of the organisers)
- **11 mentors**
- **3 judges**
- **8 partners** (up from an initial number of 4)
- **250K+** open data points provided
- A dedicated digital channel for participants to communicate (Slack)
- A powerful data visualisation platform for participants to use exclusively during the event (Open Data Soft)

Winners

Winning entries were chosen by a panel of judges from Surrey and Zoetis, following a scoring matrix designed specifically for the event on vision, impact, participation and scalability.

First prize went to '**Retriever'**, a solution that looked at how veterinary professionals can continue to see patients during the current pandemic and explored the effects of closing veterinary practices on local communities.

Second prize was awarded to '**TRAX'**, an ideated global animal disease dashboard to monitor outbreaks of illnesses and their intersection with humanity. **Third** prize went to the '**easyWalkies**', an app to create a community of dog walkers in urban areas, with special benefits in times of Covid-19.

Runners-up included 'Pet Lighthouse', an app to take control your pet's health records, receive prescriptions from across the country, find walks and activities near you, and get tips and advice for your pet. And 'Cats Japan', a digital cat litter box solution that monitors urine volumes to help identifying health anomalies in domestic cats.

Other outcomes

Collaboration. The event was a successful cross-disciplinary collaboration that gathered academic partners within and outside the University of surrey and the industry as follows.

- **Academia**: within the **University of Surrey**, we continue to build bridges and work collaboratively between the Vet School and the Business School, mainly via the vHive and Surrey CoDE. We also collaborated with the **University of Exeter**, who contributed mentors to the event.
- **Industry**: in addition to **Zoetis**—the biggest Vet pharma in the world—we got on board three other organisations. **Open Data Soft**, who contributed with the provision of their platform free of charge for the event; **Virtual Recall**, a digital marketing company in the Vet space who contributed with anonymised datasets for the event, and **Medical Detection Dogs**, an NGO in the Vet space who contributed with specific problem to solve.

Overall, this was a big success for us, given the short timings to organise the event, which demonstrates the potential to grow industry collaborations even further in the future.

Capacity building. Participants gained knowledge on how to work in a rapid manner, with exposure to a team of highly qualified mentors that guided the outcomes. All three winners recognised this, as it was their first experience in a Hackathon. Participants also benefited from feedback from mentors and judges for winning entries.

The event also resulted in capacity building for some academic staff involved as well, some of who have herd of a hackathon but never actively participated in one. As a result, the event was a real capacity building exercise not only for participants but for academic and industry staff not exposed to this sort of innovation contests. Among other things, they understood the basics on how to design it (for example, around challenges, and specific questions), the role of prizes to attract participants, the importance of communication pre, during and post event and the basics on running a digital campaign via PR channels.

Recognition and Exposure. The event offered a unique opportunity to develop projects individually or alongside teams, gain insights from highly qualified mentors from the vHive and partners, and to get exposure to a panel of high-profile judges. All three winning teams highlighted these as valuable reward and recognition.

Ecosystem generation. This is something we are proud of. We wanted to put the vHive and partners on the map, and we feel we have created the first successful steps. Not only in terms of the participants we gathered in the event but also in the collaborations we fostered within and across the university and industry.

Lessons learned and future

"I have been so pleased to break into it to judge the PetHack contributions. Put simply – I have been blown away. They are, each and every one of them, truly exciting… So many hours and litres of perspiration from our contributors." Prof Alex Cook, PetHack Judge

By all means the event was very positive. Even so, there were things that we could improve for the future. Running the event in such short time (4 weeks) limited our capacity to **reach out more partners and more participants**. We would have liked to have provided more unique open datasets from partners, but the limited time, plus regulations around personal data (i.e. GDRP) constrained our ability to do so.

Regarding the hackathon dynamics, our initial idea of **forming teams to work remotely** was something that particularly didn't work. While we assigned teams as best as we could, the fact that team members where either busy or working in different time zones ended in individuals working on their own, instead of with teams. While this is not necessarily bad, we realised that working with a team you do not know in advance may be easier/more suitable for face to face innovation contests. If virtual, teams should be formed in advance and encourage to interact before the event starts.

Last, we got repeated feedback from participants that while they would have loved to join, the context of the pandemic made it **very hard to engage as planned**. While this was out of our control, we anticipated this could be a challenge given the current circumstances of the pandemic.

Overall, the event confirmed the **validity** of the event strategy to do both, come up with real, scalable solutions for a world problem and to ignite an ecosystem of innovators around Vet data and practice. The **success** in this event confirms our **longer-term plans** of contributing to more impactful activities. The overall aim is to demonstrate the value of open data in the industry to help foster research and innovation. We have already started plans to apply for bigger IAA grants and to seek for funding from other research bodies to help us build the first Vet open data innovation platform in the world.

"There has never been a more pressing time to take a step back and take into account the fact that animal health has a direct impact on human health. It is my hope that this hackathon has brought awareness to animal health communities and the industry at large - in relation to COVID-19 and displays the need for multiple holistic approaches when dealing with the complex ecology of our health as a society." Travis Street, vHive & PetHack 2020 Organiser