

# NOT-EQUAL

## EPSRC NetworkPlus: Social Justice through the Digital Economy

### Project Final Review Form

Please submit this form within one month of completing your project to [notequal@ncl.ac.uk](mailto:notequal@ncl.ac.uk).

GENERAL INFORMATION	
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#### 1. SUMMARY

*Please outline the research challenge and question your project aimed to address, in less than 100 words.*

The creep of inequality, risk and casualisation of gig workers continues, work is assigned by closed and proprietary algorithms, workers are isolated, and wages and benefits are eroded. Through collaboration with gig workers and industry, Switch-Gig explores the question: "How can we co-design technological innovations to support workers themselves, shifting the focus of gig work towards just work, and empowerment for workers?"

The objective of Switch-Gig is to generate formative data, speculative design concepts and prototypes, to demonstrate meaningful ways in which gig working can be supported by grassroots technology projects. This will be achieved through engaging such "lifestyle couriers", initially focusing on workers involved with delivery of parcels and food, directly through a pair of structured co-design workshops. In these workshops, we will work with couriers to develop speculative and prototype concepts, to gain deeper understanding of their needs and identify challenges and opportunities they face around their work. The outcomes of this pilot project will inform larger scale projects to support the needs of, and address the issues faced by, gig-workers, both within the lifestyle courier community and beyond, both in the UK and abroad.



## 2. APPROACH

*Please provide a summary of the approach of your research project, including any deviations from your work plan, the reasons for this and how you addressed any issues.*

Switch-Gig was split into three project phases.

### **Phase 1 – Project setup, recruitment, and development of cultural probes**

*Original plan:* Initial project setup, working with advisory board to develop workshop strategy and guide research methodology, and working with RA (Lancaster), partners and stakeholders (Co-operatives UK, IWGB) to recruit gig-workers and representatives. Assembling and distributing cultural probes.

#### *Deviations:*

This phase went relatively according to plan and was a useful process. Especially, in developing the methodology early in the project it became clear that the ethical and legal aspects of the project required careful consideration before recruitment could start. This was important, both for the research to be conducted appropriately, but also to satisfy the University of York's ethics processes. In particular the issue of research participants as co-creators/researchers (workers), and financial inducement. This was resolved in collaboration with advisory board guidance, but highlights systemic challenges of this kind of co-operative work, and the benefit of careful strategy development.

Hiring research assistants for both roles was also very challenging, as the roles were fractional or very short-term. In particular the designer role took several weeks longer to find a candidate as the specific skills required (graphic design, speculative design, etc) were more specific. Both roles were eventually filled.

In terms of recruitment, initial communications with IWGB (Independent Workers' Union GB) indicated that they would be able to support recruitment. Unfortunately the contacts at the IWGB went quiet. Recruitment was shifted to a model where the researchers in Manchester and York approached couriers with a flyer for recruitment with the hope of snowballing. This approach was very quickly successful in York whilst more of a struggle in Manchester and took a few weeks. This relates to the different kinds of courier communities in these very different cities that informs some core findings. In any case both workshops recruited 6 participants (12 in total) ready for each full day event.

We planned to distribute cultural probes to participants ahead of the workshops - this is a useful and established way to gather data around people's experiences as "outsiders", by supplying cameras and stationery for participants to make notes with. We built 12 such probes for participants, however, it proved difficult to engage participants with this (motivating them to prepare ahead of time, supplying addresses). Given limited take-up and existing delays in recruitment we opted to take them to workshops and use them to guide activities.

### **Phase 2 - Design workshops**

*Original Plan:* Workshops in York and Lancaster. Including documentation and continuous feedback, in collaboration with all partners. Each (catered) workshop will involve six representatives from the local community of couriers, incentivised according to living wage expectations for each city, and engage in co-design activities exploring and developing concepts that address issues informed by experience.



*Deviations:* As part of the phase 1 strategy development, and conversations with the advisory board, we changed the approach to the workshops to explicitly not include industry partners in the workshops themselves. Based on advice and discussion we were highly concerned about making the courier participants more standoffish and less comfortable to share their experience openly if there were even indirect representatives of the industry present.

Instead, at the start of each workshop with couriers we made this intention explicit, with our justification. Following the workshops we developed a report and the initial booklet of design concepts, which we shared with the industry partners, and discussed with them to get their feedback and perspective on the topics covered. In reflection we are glad we decided to separate these aspects as there were clear conflicts between courier perceptions and individual experience, and partners' broader industrial perspectives.

#### Workshops

- The workshops went ahead in early March, in Manchester and York as planned, although somewhat delayed due to recruitment of participants and researchers. The workshops were full days, and followed a structured process to both gather courier perspectives and experiences, and co-develop ideas to be used in phase 3.
- With the growing issues around Covid-19 in March 2020, we were very lucky to be able to complete the workshops just before the national lockdowns started. However, still we had 4 couriers cancel their attendance hours before the events, or fail to show up, due to concerns about the growing pandemic.
- It is important to note we followed all guidance provided by the government and our institutions in running the workshops safely.

#### Phase 3 - Develop design fictions, documentation and next steps

*Original Plan:* In collaboration with Miralis Data and Future City Logistics, and RA (York), in refining, developing and documenting rich concept prototypes based on workshop activities, generating videos, and engaging in outreach. At this stage we will also be investigating, with partners and the advisory board, future options for the project, including further seeking further funding, and reaching out to collaborate with industry partners.

#### *Deviations:*

This phase was relatively unchanged. Due to the separation of concept development from industry involvement, designs were iterated among the research team only, however feedback and commentary from industry partners, as part of our discussions with them, is a key part of the whitepaper. Unfortunately due to lockdown no videos were produced, however the rich booklet and commentaries meet the aims of the project.

In summary, the project completed all three phases with relatively little deviation in terms of scope and objectives. The deviations described above are relatively minor: (no-cost) delays due to challenges in recruitment, minor changes to proposed research methodologies based on careful planning that was baked into the project.

### 3. ACTIVITIES & OUTPUTS

*Please list any outputs from your project to be entered in the Not-Equal Researchfish submission. These include events, publications, workshops, webinars, invited talks, media coverage and tools (please include links to open source, git-hubs if relevant) that have resulted from your project.*

*Please include the following for each entry:*

Title: The future of techno-disruption in gig economy workforces: challenging the dialogue with fictional abstracts



Date: Nov 2019

Type of Event: Paper presentation at Halfway to the future Symposium. Paper in ACM DL

Number of People Reached: Presentation - 200

Primary Audience: Academic

Key Outcomes/Impact: using fictional abstracts to start academic discussions of potentially dystopian future scenarios is a useful tool for Ubicomp and HCI researchers when designing for the future

URL: <https://dl.acm.org/doi/10.1145/3363384.3363476>

Title: Let's start talking the walk: Capturing and reflecting on our limits when working with gig economy workers

Date: June 2020

Type of Event: Paper presentation at LIMITS Workshop/Conference. Paper in ACM DL.

Number of People Reached: 50

Primary Audience: Academic

Key Outcomes/Impact: being transparent about the hurdles in social justice research is important so that other researchers can learn and adapt, leading to more impactful digital justice-oriented research

URL: <https://dl.acm.org/doi/10.1145/3401335.3401364>

Title: Switch-Gig Design Fiction Booklet

Date: TBC Sept 2020

Type of Event: Design booklet of design fictions - Output for industry stakeholders

Number of People Reached: 50

Primary Audience: Industry/Policy Maker

Key Outcomes/Impact:

URL: TBC

Title: Switch-Gig Cultural Probe Pack

Date: TBC Sept 2020

Type of Event: Design booklet of cultural probes developed for the project

Number of People Reached:

Primary Audience: Researcher/Designer

Key Outcomes/Impact:

URL: TBC

Title: Switch-Gig Project Summary Report

Date: TBC Sept 2020

Type of Event: Project Whitepaper on Website

Number of People Reached: N/A

Primary Audience: Academic

Key Outcomes/Impact: workshop findings and reflections from the project

URL: TBC

#### 4. INSIGHTS & IMPACT



*Please describe the findings of your project and their significance in relation to potential or actual social impact.*

Switch-Gig was a pilot project, led by a desire to explore and develop a formative understanding of how to work with gig-workers, build a richer appreciation of the challenges and opportunities, to inform future and parallel work. By engaging the couriers in co-creation of concepts we bring them on board as collaborators rather than subjects in the research. One of the primary outcomes of the project has been the development of expertise, and through better understanding how to work with gig workers the continuing work from the project is enhanced.

The gig-economy is a term that covers a wide range of work, and in the case of Switch-Gig, in the proposal phase we made the decision to focus on one sliver of this, local food delivery, as a kind of gig work that is highly visible, recognisable and well defined through the app-driven technology. Even with this narrow focus, through the project we discovered a very diverse and complex space with many factors at play.

In proposing the project we wanted to run the workshops in a larger city (Manchester) and a smaller one (York) because we suspected that workers engage with the technology, the city and one another in different ways. This was a wise decision and many of our major findings are split along city lines. For example, recruiting participants for the project in Manchester required weeks of speaking to individuals on the streets, explaining the project and trying to get involvement. In York, it took an afternoon. This is because in York there is a single city-wide group for couriers on social media (Whatsapp), so word spread very quickly when a courier uploaded a photo of our flyer to the group. This kind of group may exist in Manchester that we didn't discover, but certainly the number of workers would make a single social network unfeasible. This also followed in our discussions with riders at the workshops about organisation and activism - riders in York were much more engaged with union activity (e.g. IWGB Valentines Day rider strikes) in the city, where riders in Manchester were aware but less engaged.

Following on from this, a key lesson was the importance of paying people for their time in working on the project. We paid the riders living wage for a full day's work sharing experiences and developing ideas at the workshop. As such we had a wider range of riders participate - from the politically active riders to those who are much more practically driven. This is important because the less visible, less vocal riders have very different insights that often challenged preconceptions about rider motivations and experiences.

However, it is also important to recognise that the project failed to have a fully representative sample of couriers. The major ones are cultural (this is a UK project) and gender (all female participants dropped out of the workshops due to Covid-19 concerns), but also in discussion with partners, recognising the number of non-UK nationals who may rightfully be suspicious of participating in this kind of project. There is also the issue of legality, as some platforms allow couriers to subcontract their work to third parties, with little oversight about issues like right to work in the UK, or visa conditions. We are trying to understand how these voices might be heard but for now must recognise who is not included in our insights.

At the heart of the courier's work is a relationship with the mobile technology they use for work, and the apps their employers use to send them orders and directions. Nearly all our participants worked for two or more services at the same time. For the riders, this relationship is complex but vital. Firstly, in terms of infrastructure, couriers carry extra battery packs and cables necessary for potentially long shifts. For couriers using e-bikes, it might also be necessary to switch batteries for their vehicle, or swap the vehicle itself. One participant had secured access to a lockable box in the city centre where they could charge up spare batteries over time with solar panels. Related to this is the relationship couriers have with the city and others, especially the police, taxi and bus drivers, pedestrians, security guards and restaurant workers, which are all strained as the apps oblige them to work as fast as possible in order to make anything approaching a livable wage, and thereby create a lot of indirect, and often direct, conflict.

Secondly, in terms of trust - the food delivery apps (principally, Deliveroo, Just Eat and Uber Eats) issued work but were considered with some suspicion. In particular couriers were concerned about the information that the apps were gathering, and if they communicated data between each other. It was common for riders to have 3rd party applications such as Strava (cycle tracking app) as almost defensive tools. One courier related a story where an order they attempted to deliver “disappeared” and the company refused to admit it existed, and therefore wouldn’t pay for the completed work. Thanks to the Strava tracking and use of the camera app to record all unusual deliveries, the courier could provide evidence to ensure they got paid for their work. These stories of lack of trust in the platforms were common.

The opacity of the app’s working was also a major source of frustration for couriers. The apps work in slightly different ways, but most “hide” some information from the courier. For example one platform does not tell the courier how far they will have to travel, another will add second orders without notice. The presumption is that this is to stop couriers declining work or cancelling requests, but this kind of design creates a conflict between courier and app, and as a result couriers reported many theories and superstitions about how they felt these opaquely designed apps make decisions and distribute work. This was a major theme and comes through in the designs developed during the project.

The workshop involved a lot of discussion between researchers and couriers, and among couriers themselves (who don’t often have time to stop and talk at such length), and led on to a creation activity where we worked with couriers to develop concepts or germs of ideas for speculative technology. This was introduced to couriers as specifically speculative and not necessarily grounded in reality, with the idea that with open discussion and creation, we could understand more about how couriers prioritise various issues and their own needs.

This led to dozens of small ideas for projects. For example, a “fitness app” that people could use to replicate the exercise that cycle couriers get through their work. The courier in question pointed out that their work fits the idea of “high intensity training” perfectly, as periods of hard and continuous exercise punctuated by “breaks” of 5-10 minutes (while waiting at a restaurant, unpaid). Other ideas were highly practical, such as places to store equipment and belongings while at work, or shared resources for repairs and tools where necessary.

Based on this process, and working with a designer, we selected 5 themes that we found in the design and discussion, complemented by an illustrative design example. These themes and examples are pulled together in the Switch-Gig design booklet.

The themes in brief are:

1. Couriers role as “local heroes” and essential “key workers”, represented by their inclusion on a statue to celebrate emergency service workers
2. Couriers as infrastructure, represented by an invoice to a restaurant that details the cost of maintenance of infrastructure (stolen bikes, new batteries, etc)
3. Couriers’ livelihoods at the whim of opaque unknowable systems, represented by a service that gives tarot readings to see who the algorithm will favour.
4. Couriers seizing power, solidarity platforms and working together to share knowledge
5. Couriers as deviants - obliged to appropriate and subvert the infrastructure of the city to make a living.

These themes, and the associated booklet designs, which were intentionally from the rider perspective, and do present a biased vision of their role in society and others around them. We discussed the booklet and the themes with industrial partners in a series of meetings where we sought to understand the industrial perspective and how it relates to their understanding of courier issues. The feedback and commentary from the partners provides very



important context to the ideas couriers have about their work and the platforms they engage with, but also demonstrates how the perspectives of technologists and couriers on the same issues can be very different.

This work is significant because it provides good grounding in both our understanding of couriers' relationships to technology, and how that technology mediates their work, their relationship to their fellow workers, customers and employers. It has also been an extremely valuable pilot for understanding how to run this kind of research with couriers, how to engage them with the work and the aims of the research, and how to navigate the bureaucracy required for universities to work with this kind of research participant. We have already published a few small papers on the topic and will no doubt be following up with further publications, outputs and project proposals.

## 5. REFLECTIONS & FUTURE DIRECTIONS

*Please list the key highlights from your project, summarize any lessons learned from this work and outline any future directions or plans to continue activities beyond this project.*

Switch-Gig has been a very valuable pilot project in this space. Within the research work, gaining a much richer and nuanced understanding of how couriers engage with and around technology in their work, and also the meta-expertise gained. Phase 1 of the project in particular proved extremely effective in helping us consider, plan and prepare to work with this group of people and highlighted several potential issues before they arose. In particular, the need to pay workers for time, the need to physically and figuratively separate worker and industry voices in a space with a lot of conflicting views, the need to recognise limits to who we are able to reach when talking about economically marginalised groups, and most importantly, how to meet the goals of engaging couriers in research in a carefully considered and ethical way. We're very thankful to our advisory board for their support.

### **Future work and opportunities**

From our engagement with the workers and the industry partners it looks like there is limited number of existing initiatives to help couriers change their work, short of starting their own business, as policy makers aren't engaged and the union has limited scope for impact mostly focusing on case work to help individual workers who have faced unfair dismissal. There are certainly opportunities in this gap that can offer support to individual workers with limited time and expertise.

As part of Switch-Gig we have developed a relationship with a newly formed cycle delivery co-operative based in York (The York Collective). This is a local organisation that offers app-based courier services to a growing range of independent businesses in York. This is based on a federated platform Coop Cycle, developed in Belgium, and is the first coop in the UK working with the platform. The coop has been exceptionally busy during the lockdown of 2020, however we are looking to develop follow on project proposals in collaboration with the group as it stabilises.

In addition, findings from Switch-Gig have already been directly useful in the sister EPSRC FlipGig Research Project (EPSRC EP/S027726/1. [www.flipgig.org](http://www.flipgig.org)) to help shape design work around empowering gig economy couriers.

### **Further Information**

If you have any further questions regarding this form, please contact [notequal@ncl.ac.uk](mailto:notequal@ncl.ac.uk) or 0191 2088268.





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