NOT-EQUAL

EPSRC Network+: Social Justice through the Digital Economy

Micro and Pilot Projects: First Call for Expression of interests and Proposals

Closing Date for Expression of Interest: 28th February 2019
Closing Date for Full Application: 30th April 2019

Background

Digital technology has given rise to extensive socio-economic transformation and new and emerging technologies are set to further transform the service economy and public services. Careful design and deployment is needed for this transformation to benefit the many rather than the few. If harnessed to the wrong economic, political and social model, technological innovation has the potential to be detrimental to the most vulnerable; its careless application can amplify existing forms of injustice and create new forms of exclusion in socio-economic life, thus further exacerbate socio-economic inequality and social division. That the whole of society benefits from progress in the Digital Economy is national priority as those who are most vulnerable have the greatest need of opportunities for socio-economic participation.

Not-Equal, Network+ on Social Justice through the Digital Economy funded by the EPSRC, focuses on how the design of new and emerging technologies and their application, can empower, emancipate and more equitably distribute opportunities for economic development to all citizens, consumers and employees.

Not Equal brings together and resource partners from academia, industry, government and civil society to understand, explore and respond, together, to the potential of new and emerging technologies to make the UK socio-economic life fairer for all. The Network+ activities focus on three challenge areas: **Algorithmic Social Justice, Digital Security for All, Fairer Futures for Businesses and Workforces**, that will:

(a) Create research opportunities to address fundamental technological innovation that can promote fairness, equality and economic opportunities for all through the Digital Economy.

(b) Foster cross-disciplinary dialogue and Knowledge-Exchange between different expertise, and between academic and non-academic communities.

(c) Enable cross-disciplinary collaborations and commissioning of original research promoting an ethics of reciprocation whose outputs respond to the Network+ identified broad challenge areas.

Micro and Pilot Projects Funding call

Not Equal is looking to fund a first round of micro and pilot research projects. **Micro research projects** can be up to 3 months in length. We expect to fund up to 8 micro projects of **up to £5k (80%FEC)** for this first funding call. **Pilot research projects** can be between 6-8 months in length. We expect to fund up to 12 pilot research projects of **up to £40k (80%FEC)** for this first funding call.

Not Equal has defined a set of key thematic topic within three challenge areas— **Algorithmic Social Justice, Digital Security for All, Fairer Futures for Businesses and Workforces**—which can be used to guide the development of research project proposals. Within each challenge area applicants might consider research proposals responding to issues at the *micro* (level of the technologies themselves), *meso* (the combination of multiple technologies and application contexts) and *macro* level (market, policy and regulatory).

Algorithmic Social Justice examines fairness in the design and application of algorithmic automated and semi-automated decision-making processes, used in digital services and in public service transformation and to inform, for example, care or health interventions programs, city planning. For example projects might explore: at the micro level, how notions of social justice can be operationalized in the design and evaluation of algorithms; at the meso level, how designs embedding social justice principles can be transferred across different contexts; at the macro level, how links between public policy specification, algorithmic design and digital service impact in specific policy contexts (e.g. welfare, migrant resettlement, healthcare) can lead to recommendations for policy making and new regulatory frameworks to assess algorithmic fairness.

Within this challenge area, applicants might consider one of the following topics:

- **Operationalizing fairness, transparency and accountability** in algorithmic profiling and application of data-driven algorithmic decision-making systems. Proposals in this topic might explore how data-driven algorithmic systems, and criteria and processes used to design them can be made less opaque, fairer and accountable.
- **Frameworks and tools to enable participation** in the design and application of decision-making algorithmic systems applied in digital services, which takes into account the socio-economic contexts of algorithmic justice in relation to social class and mobility.

Successful applicants will produce proposals that relate the area of study to a particular community and context. Example projects: Explorations that may lead to new ways of monitoring or auditing application areas for AI (e.g. open auditing toolkit and ethical indexes)**.** Novel approaches and tools to support public understanding and explorations of algorithmic decision making systems, their design, application and consequences to inform, for example, how innovation can be made to be more socially-responsible.

Digital Security for All investigates new and better approaches to digital security that both meet the security needs of people and society as well as protect data and technology. This challenge area asks in what ways online services can be designed to better support people's sense of agency and trust, whilst both ensuring and assuring security in sharing personal data online. For example, proposals might explore: at the micro level, how security mechanisms create spaces for agency-building and leverage community action; at the meso level, how digital security might be modeled for diverse technical landscapes; at the macro level, how policy and regulatory frameworks might account for the social and economic diversity of all (and associated security needs), and be responsive to, the increasing pace of technical innovation in this space.

Within this challenge area, applicants might consider one of the following topics:

- **Transparency and responsiveness** of the security features of digital services (including robotic automated process and services that rely on algorithmic decision making).

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- **Building and maintaining capabilities** for individuals and communities to manage and protect personal data that are produced, circulated, protected and curated by digital services (including robotic automated process and services that rely on algorithmic decision making).

Successful applicants will produce proposals that relate the area of study to a particular community and that address societal, individual and technological security. Successful proposals will also show how their research has the potential to bring themes of fairness and social justice into conversation with the study of security.

Example projects: Studies that lead to specifications of new and emerging digital security problems that challenge social justice. Community-led exploration of digital security problems and responses. Novel approaches to cross-community dialogue and co-operation to design and manage digital security.

Fairer Future for Businesses and Workforces considers how new 'sharing economy' platforms can be designed to realise more ethical business models and equal opportunities for economic development. This challenge area asks what tools and systems can be designed to support peer-to-peer market places, how to cater for those who have few or no assets; and how to improve workplaces and workplace representation in the digital era. For example, proposals might explore: at the micro level, the logics of the different economies underpinning current platforms; at the meso level, how social justice principles can be operationalised in Sharing Economy business models; at the macro level, how socio-technical innovations can inform policy recommendations for fairer business models and workforce representation.

Within this challenge area, applicants might consider one of the following topics:

- **Investigating digital labour, AI, and emergent technologies as they reconfigure workplaces and workforces**, identifying drivers and systems for greater fairness in the face of algorithmic efficiency that overrides discretion; gamification of work, globalisation of systems and design for maximum profit.
- **Supporting markets, businesses and industry moving into more ethical practices** by developing, for example, new tools to help industry recognise and assess their design practice and offer alternatives that embed social justice principles and ethical practices in market design and business models.

Example projects: Designing for an alternative to mass-scale and heavily commercialized workplaces would allow workers more say on style of work and how it is managed. What kind of tools make platform cooperatives more successful? How might we help member-led organisations replicate, keeping small enough to employ commons-style governance, but scale in terms of concept and competences?

Topics across challenge areas
In addition of the topic outlined above, the following topics can be used to guide proposals across challenge areas.

- **Re-thinking ethics, social justice and human rights in the digital era** by exploring, for example, the relationships between social justice and digital rights and accounting for the different values and understandings of ethics within different communities of practice.

- **Enabling Universities to support social justice** by exploring critically the current opportunities and limitations of academic institutions in supporting social justice. Proposals addressing this topic might investigate the institutional changes required to enable universities to support social justice.

Micro and Pilot research funding aim

Micro and pilot research projects funding aim to support research that respond to the challenge areas and/or issues identified by Network+ partners; foster the development of cross-disciplinary research and encourage collaborative projects between academics, industry and/or community groups within an ethics of reciprocity which are risk taking and that would not otherwise happen.

Micro research projects funds aim to support short-term qualitative or quantitative research, secondments allowing researchers to work with an industry, government and/or civil society partner organisation or fostering knowledge exchange between academia and industry.

Pilot research projects funds aim to support longer cross-disciplinary research collaborations and can include longer qualitative research studies, the design or rapid prototyping and proof of concept of a new technology, or reconfiguration and application of existing technologies for testing and evaluation; or the development of toolkits to better understand social justice implications of existing technology or guide their novel application within a social justice framework.

Application Process

Applications will initially be made via a short Expression of Interest (EOI) Form and a sifting process will be carried out to check for applications that are out of the scope of the call.

Applicants that are out of scope will be notified by the 15th March. Applicants submitting the full application form, will be offered mentoring and support for proposal development as well as potential collaboration opportunities with other applicants.

The application will be reviewed by a multidisciplinary panel of experts and a citizen panel, who will shortlist and decide on awards allocation.

Opportunities for Collaboration

Not Equal seeks to promote and facilitate collaborations within an ethics of reciprocation. To this end, at the EOI stage, applicants are invited to consent to sharing their Expression of Interest with other Network+ members. This will help facilitate collaborations that wouldn't otherwise happen and assist finding appropriate or additional project partners if necessary.

Selection Criteria

Applicants should consider that the following criteria will be used by the review panel when assessing the proposals for micro and pilot projects:

Essential
- Responds innovatively to issues within one or more challenge areas identified by Network+ partners;
- Demonstrates value for money;
- Demonstrates significance and rigor;
- Potential to have a positive social impact;
- Involvement of industry, civil society and/or community groups network+ partner;

- Feasibility within the given timeframe;
- Potential to lead to strong dissemination materials.

Pilot projects will also be assessed against the following additional essential criteria:

- Previous track record of successful projects;
- Demonstration of a 'cross-disciplinary' collaborative approach within an ethics of reciprocity.

Desirable criteria for micro and pilot projects:

- Led by or involving early career researchers.

Key Dates

Date	Application Stage
29 January 2019	Call for proposals goes live
28th Feb 2019, 5pm	Deadline for submission of expression of interest
15th March 2019	Applicants with out of scope expressions of interest will be notified
30 April 2019, 5pm	Deadline for full applications
May 2019	Expert and Citizen Panel shortlisting
30th May 2019	Applicants advised on outcome of application
Mid-June 2019 (TBC)	Award Event
1st September 2019	Expected start date for projects

Eligibility

Eligible lead organisations include all UK Higher Education Institutions that receive grant funding from one of the UK higher education funding bodies. However, SME's/industry and community groups are expected to engage in collaborative applications.

What can the funding be used for?

The budget outline for the proposed micro and pilot applications can include investigator/researcher time, travel and subsistence appropriate to delivery of the project, and small scale consumables. Equipment is eligible following EPSRC standard conditions. https://epsrc.ukri.org/research/facilities/equipment/

As the grant holder, Newcastle University is responsible for allocating funding to successful proposals and will reimburse subcontracting organisations at 80% full economic costing. Academic institutions will be required to itemise bills based on 100% FEC and then invoice at 80% FEC. The applicant must also assume full responsibility for any subcontractors involved in the project, this includes payment to them.

Submitting expression of interest and proposals

Micro and Pilot expressions of interest and proposals should be submitted via email to notequal@newcastle.ac.uk. The deadline for expression of interest forms is 5pm on the 28th February 2019. The deadline for full applications is 5pm on the 30th April 2019.

A breakdown of the allocation of the funds with a short justification for each category is also required. The categories are:

- Directly Allocated
- Directly Incurred
- Indirect Costs

Expectations for successful proposals

Successful applicants will be expected to produce a report mid-way through the project and a final summary report, on completion of the project. Applicants will also be asked on a yearly basis to identify any funded activity that has followed on from the initial funding, until the close of the project in 2021. This will help evidence the success of the programme.

Successful proposals will also be invited to an event aiming to offer an opportunity for researchers to present their project as well as support and guidance on contractual agreements, requirements and next steps.

Further Information

If you have any further questions regarding this call for proposals, please contact notequal@newcastle.ac.uk or Kate Kelly (Not Equal Project Manager) on 0191 2088268.