

#### **ANNUAL REPORT**

This report was prepared for publication on the Data for Policy website. The report covers the period March 2022 to February 2023.

April 2023

#### Introduction

#### Highlights of the Year (March 2022 – Feb 2023)

Facilitating global dialogue and debate

Thought leadership – building the field of data for policy research

**Curating and disseminating knowledge** 

Community building & widening participation

#### Outlook for 2023-24

**Scaling-up core operations** 

**Strategy development** 

**Organisational Policies** 

**Funding and Partnerships** 

Data for Policy 2024 Conference and Data for Policy Tenth Anniversary

Report prepared by Emily Gardner Contact team@dataforpolicy.org

#### Introduction

Data for Policy is a community interest company founded to promote the advancement of data science and its applications in the development of public policy, so that the best interests of individual citizens are considered, and expected benefits extend across all aspects of society.

The company was born out of the annual Data for Policy conference, launched in 2014 by the founder Dr Zeynep Engin, and hosted by Prof Jon Crowcroft at the University of Cambridge. Since that time, the conference has grown, its infrastructure has been formalised, the scholarly, open-access journal *Data & Policy* (Cambridge University Press) has been launched and a partnership funding model has been developed. Through these platforms for dialogue and dissemination, Data for Policy is an important thought-leader in the growing field of policy-data interactions, with participation from individuals in 73 countries from all regions of the world.

Since the start of 2020, the global Covid-19 pandemic has further highlighted the essential role of data in policy-making, and likely accelerated its acceptance. Together with the ever-increasing amount of data creation/consumption, it is therefore an auspicious time for Data for Policy to launch a new strategy to maintain its leading position in the emerging field of data-policy interactions.

# Highlights of the Year (March 2022 – Feb 2023) Facilitating global dialogue and debate

Data for Policy took the bold move to make the seventh edition of the conference truly international by organising three separate conferences in Asia (Hong Kong), North America (Seattle) and Europe (Brussels). This approach necessitated a highly-networked, distributed organisation structure, working with partner organisations<sup>1</sup> and regional committees of experts presiding over programme content and local operations committees responsible for venue liaison and management, with both committees being led by a regional chair, and all activities overseen by the central CIC team<sup>2</sup>. The hybrid conferences were held over the period of nine days to an appreciative audience from academia, business, government and not-for-profit sectors. Wide geographic participation was maintained after two years' of virtual conferences, with delegates from 25 countries representing all inhabited continents.

The conference theme 'Ecosystems of Innovation and Virtual-Physical Interactions' was chosen to highlight the distinct geopolitical and virtual-physical ecosystems emerging across the globe where public decision-making is increasingly undertaken by digital systems. These ecosystems reflect different societal values; for example, the US open market approach empowers multinational digital corporations, in contrast to Europe's priority on individual rights, privacy and digital sovereignty. Their developmental trajectory will shape future

<sup>&</sup>lt;sup>1</sup> Division of Public Policy, Hong Kong University of Science and Technology; Evans School of Public Policy and Governance (EPAR), University of Washington; the Lisbon Council; see also Figure 1.

<sup>&</sup>lt;sup>2</sup> Full list https://dataforpolicy.org/data-for-policy-2022/conference-committees/

governance models, democratic values and service provision. Alongside, the envisioned 'metaverse' future will blur boundaries between physical and virtual spaces, further underlining the need for scrutiny and challenge of the various systems of governance.

The content of the programme ranged from keynote lectures, through expert panel discussions, to sessions of individual presentations, providing opportunities for individuals to showcase their work, as well as participating in debates between leading community figures. Continuing the model from the previous two years, discussion time was maximised through the prior-preparation and circulation of full-length presentations from individual speakers. Subject matter ranged widely, including current hot topics (e.g. misinformation<sup>3</sup>, and AI in public decision making<sup>4</sup>), regional issues (opportunities and challenges for data-driven innovation in Asia-Pacific<sup>5</sup>) and citizen engagement<sup>6</sup>.

Developing a multidisciplinary and cross-sector community of data science stakeholders is a core community interest goal for Data for Policy CIC, with the annual conference at its heart. The contribution of the 2022 conference to the CIC's continued success in meeting this goal is highlighted by enthusiastic responses to our post-conference survey:

It has catered to the regional needs, encouraged wider participations, productivity and competitiveness, and covered the wide spectrum data and its use

The planning, processes and preparations were excellent. This made everything run smoothly. In terms of content, it was very high-level and also very diverse with experts from different regions and fields

(The three-region model) worked brilliantly

Well run, inclusive and great content

Wonderful opportunities to hear from experts and network

More information on the conference is available on our website<sup>7</sup> and all video material is available as a playlist on our YouTube channel<sup>8</sup>.

<sup>&</sup>lt;sup>3</sup> Keynote lecture Carl Bergstrom <a href="https://youtu.be/oATpDGdrTLg">https://youtu.be/oATpDGdrTLg</a>

<sup>&</sup>lt;sup>4</sup> Keynote lecture Gianluca Misuraca <a href="https://youtu.be/Sro">https://youtu.be/Sro</a> itqwQ k

<sup>&</sup>lt;sup>5</sup> Plenary Panel Facilitating Data-Driven Innovation: Opportunities and Challenges in Asia-Pacific <a href="https://youtu.be/cti2c mxlDA">https://youtu.be/cti2c mxlDA</a>

<sup>&</sup>lt;sup>6</sup> Special Track Session Data, Emerging Technologies and Citizens

<sup>&</sup>lt;sup>7</sup> https://dataforpolicy.org/data-for-policy-2022/

<sup>8</sup> https://www.youtube.com/@DataForPolicy/playlists?view=50&sort=dd&shelf\_id=2

Figure 1. Host Institutions at Data for Policy 2022



#### Thought leadership – building the field of data for policy research

Data for Policy CIC, together with the *Data & Policy* journal, works to create a sound underpinning for the developing data for policy research field, and providing a venue for a consistent, symmetrical approach to consideration of systems of policy and data and how they interact with each other<sup>9</sup>. Through the cross-community consultation, the data for policy research landscape has been organised into six detailed, domain-agnostic areas used to align contributions to both conference and journal<sup>10</sup>. This evolving framework aims to streamline different disciplinary perspectives, methodologies and cross-sector thinking that define the field, and its hoped it will also stimulate interdisciplinary thinking and new contributions.

Important in the community network are six committees which are aligned to each area of interest. Originally constituted in 2021 and tasked with managing peer review for conference and journal, the area committees have continued their work in 2022, while the membership has been refreshed and expanded<sup>11</sup>. In addition to peer review responsibilities, the six committees have been commissioned to author a Data & Policy report, reviewing the research landscape for their respective areas. These reports, which are currently in review, will complement an overarching report by Zeynep Engin and colleagues describing the genesis and development of the Data for Policy community (this report is also in review). The future publication of these papers will be an important step for the community, providing further focus for the whole community, leading to further debate and development of this emerging research field.

An emerging area of special interest for Data for Policy is algorithmic governance, this being defined as the design and execution of governance processes through, by and with algorithms. Complex and important decisions that affect individuals, societies and the environment are increasingly delegated to or supported by algorithmic systems, but the relevant research and policy landscapes are alarmingly fragmented. A comprehensive vision for the field is lacking, and there is a pressing need to ensure that these technologies are used equitably to support positive change. In summer 2022, Data for Policy was part of a workshop bringing together from research and practitioner communities from across government, academia, private and voluntary sectors as a preliminary step to building a transdisciplinary and cross-sector ecosystem around this key field. For further information, see our website news item<sup>12</sup>, and read Zeynep's blog<sup>13</sup>.

<sup>&</sup>lt;sup>9</sup> Verhulst, S., Engin, Z., & Crowcroft, J. (2019). Data & Policy: A new venue to study and explore policy–data interaction. Data & Policy, 1, E1. doi:10.1017/dap.2019.2

 $<sup>\</sup>frac{10}{https://www.cambridge.org/core/journals/data-and-policy/information/author-instructions/preparing-your-materials\#areas}; displayed diagrammatically in Figure 2$ 

<sup>&</sup>lt;sup>11</sup> List of editors <a href="https://www.cambridge.org/core/journals/data-and-policy/information/about-this-journal/editorial-board">https://www.cambridge.org/core/journals/data-and-policy/information/about-this-journal/editorial-board</a>

<sup>12</sup> https://dataforpolicy.org/ag-workshop/

<sup>&</sup>lt;sup>13</sup> https://medium.com/data-policy/towards-human-centric-algorithmic-governance-44989c34e27f

Figure 2. Areas of interest framework

# Data for Policy Research Landscape

### Area1: Digital and Data-Driven Transformations in Governance

- From data to decisions: knowledge generation and evidence formation:
- Process, psychology and behaviour of decision-making in digital era;
- Government operations and services;
- · Government-citizen interactions; and open government;
- Democracy, public deliberation, public infrastructure, justice, media;
- Public, private and voluntary sector governance and policy-making;
- Methodological innovations gaps in theory and practice.

## Area 2: Data Technologies & Analytics for Governance

- · Data Science and Artificial Intelligence;
- · Behavioural and predictive analytics;
- · Large language models foundation models...
- Digital Twins, Ledger Systems, Platforms, Cloud Technologies etc.
- · Edge analytics and federated learning;
- · User interaction and experience;
- · GovTech, RegTech, LegalTech, CivicTech etc.
- Research technology infrastructures.

#### Area 3: Policy & Literacy for Data

- Governance, law and management of data and associated technologies;
- · Design principles and impact assessment;
- · Literacy, translation, communication;
- Intermediaries, trusts, collaboratives;
- Regulation of data-based services and processes;
- Open science, open research infrastructure, and FAIR (Findable, Accessible, Interoperable and Reusable) practice.

#### Area 4: Ethics, Equity & Trustworthiness

- · Privacy, data sharing and consent;
- Uncertainties, error and bias in data-driven processes:
- · Human rights, values and self-determination;
- Information and power asymmetry;
- · Responsibility, benevolence, and maliciousness;
- Fairness, transparency, explainability, accountability, interpretability and reliability;
- Validation, assurance and certification of data-driven services.

#### Environment & context:

- Research and innovation ecosystems and digital cultures;
- Legacy infrastructure and physical environment;
- Public-private sector collaboration and tensions;
- · Digital divide, new inequalities;
- Automation, fear of job losses, and new economic models:
- · Time, space, demographics etc.

#### Area 5: Algorithmic Governance

- Automation of government/governance processes and services;
- · Good governance through/with/by/of algorithms;
- Algorithm agency in decision-making: potentials and perils;
- · Algorithmic behaviour in socio-economic contexts;
- · Human agency in algorithmic governance;
- · Human-machine collaboration models in critical decision-making.

#### Area 6: Global Challenges & Dynamic Threats

- Human existence and the planet;
- Inequalities and discrimination;
- · Sustainability and environment;
- · Global shocks and resilience;
- · Population health and pandemics;
- · Security, organised crime and hostile environments;
- · International collaboration.

#### Curating and disseminating knowledge

The *Data & Policy* journal<sup>14</sup> is an open access journal from Cambridge University Press, which is building its reputation as a learned, trusted publication. From its launch in 2019, it has embraced the ethos of the Data for Policy community, with its commitment to open research, and the findable-accessible-interoperable-reusable (FAIR) principles of data management.

The journal is open to papers that consider the impact of data science on policy and governance. It aims to build theory and practice in the emerging field of policy-data interactions, across all sectors and disciplines. The journal combines academic rigour with flexible publishing formats to meet the needs of diverse contributors, thus research articles are academic papers, which use rigorous methods which investigate how data science can inform or impact policy. Commentaries are shorter papers which discuss and problematise relevant issues for the community, and translational papers focus on the transfer of knowledge to practice, and vice versa. Finally, The Data & Policy blog provides a vehicle for comment which is well-informed yet less formal, and a mode for rapid response to posts on policy developments (for example<sup>15</sup>) and current affairs (for example<sup>16</sup>) published in 2022.

In 2022, the journal received 61 submissions, and accepted 36 papers for publication<sup>17</sup>. The major category for both was research article. In keeping with the wide scope, papers published highlighted applications of data in many areas, including peace negotiations, political misconduct, digital identity, corruption, fraud, food security and pandemic response. Countries of study ranged across the globe, from Latin America, through the Middle East and Africa, to Australia, highlighting the international membership of the community.

Data & Policy is an important vehicle for dissemination of conference outputs. Authors and invited speakers receive invitations to submit their papers for consideration. We were pleased to publish seven papers from the 2021 conference in the reporting period, with nine under review, and three having been published earlier<sup>18</sup>.

Information from the Data for Policy conference is also curated and disseminated through less formal channels. Authors of accepted conference contributions are required to submit abstracts and encouraged to submit discussion papers to the Data for Policy community on Zenodo<sup>19</sup>, these then being available as a public resource. The conference YouTube channel<sup>20</sup> boasts an impressive collection of varied video material. To maximise discussion time at the conference, presenters of individual contributions are asked to pre-record full-length presentations for distribution on YouTube. Recordings of keynote lectures and plenary panels are also featured.

<sup>&</sup>lt;sup>14</sup> https://www.cambridge.org/core/journals/data-and-policy and figure 3

 $<sup>\</sup>frac{\text{15 https://medium.com/data-policy/uk-data-protection-reform-part-1-from-protection-to-participation-}}{\text{4d752cc0588e}}$ 

<sup>&</sup>lt;sup>16</sup> https://medium.com/data-policy/cities-data-and-the-needs-of-ukrainian-refugees-2aa6f8d776fd

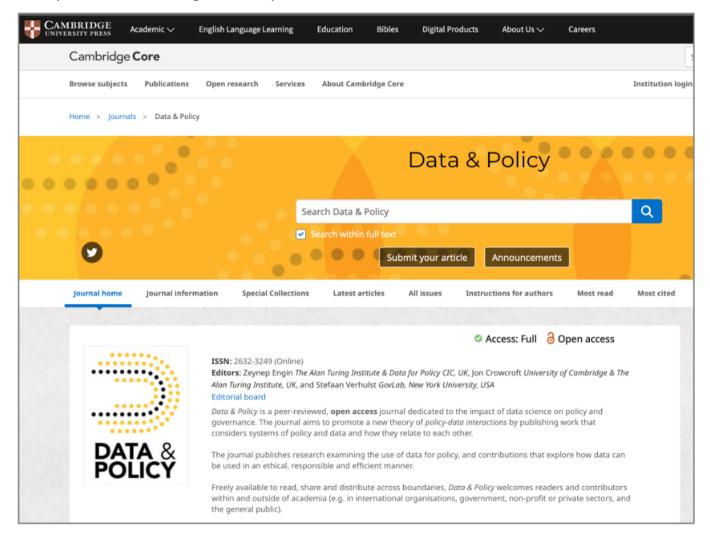
 $<sup>^{17}</sup>$  Note that accepted in 2022 includes those submitted in previous years.

<sup>&</sup>lt;sup>18</sup> https://www.cambridge.org/core/journals/data-and-policy/special-collections/data-for-policy-conference-papers

<sup>&</sup>lt;sup>19</sup> https://zenodo.org/communities/dfp17/

<sup>&</sup>lt;sup>20</sup> https://www.youtube.com/c/DataforPolicy

Figure 3. Data & Policy website at Cambridge University Press



#### Community building & widening participation

Data for Policy and its partner journal *Data & Policy* owe their success to a wide community of individuals contributing in various ways to their activities. The community was borne from a cadre of individuals with a shared interest in the nascent field of policy-data interactions, without formal roles or structures. In 2022/23, as an organisation responsible for an international conference series and partner journal, the community is managed by a highly distributed network from its operational centre in London (see figure 4). This central team works with key members of the community located from west coast USA to New Zealand. Different aspects of the CIC's operations are overseen by separate committees, convened to deliver a time-limited task (e.g. regional committees curating their local conference programme, or to be consulted at regular intervals (e.g. the Advisory Committee<sup>21</sup>). Both conference and journal also rely on the many individuals who contribute content, and the sizeable number who act as peer reviewers.

Data for Policy maintains engagement with its several thousand followers through quarterly updates via a quarterly newsletter, and weekly on Twitter and LinkedIn. In 2022, we increased our number of followers across all platforms, with LinkedIn in particular increasing by >100% to over 2000 followers. The year also saw development of our website<sup>22</sup>, with implementation of an e-commerce module for conference registration, and creation of a membership area for sharing information with delegates.

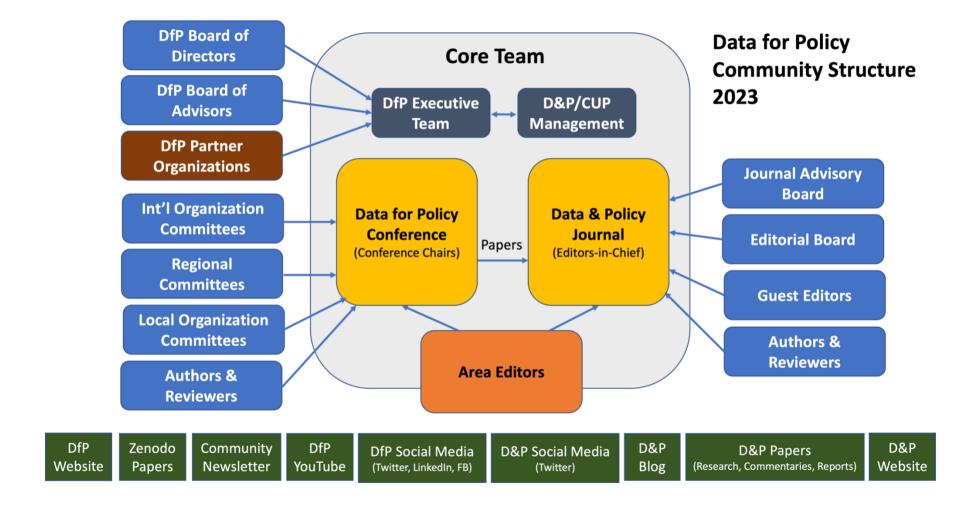
Data for Policy is a global forum which strives to represent stakeholders from anywhere in the world, with no limitation on sector, role or domain. Accordingly, the conference has received contributions from authors from 73 countries, from many disciplines and organisation types. The commitment was further demonstrated by the 2022 conference, held at locations spanning the globe. Since 2020, the CIC has also worked to remove financial barriers to participation through provision of competitive attendance scholarships.

In Spring 2022, Data for Policy in collaboration with EPAR secured grant investment from the Bill & Melinda Gates Foundation in support of these aims. This allowed an enhanced offering of scholarship awards, including support for exceptional candidates to travel from the global south to attend conferences in Seattle and Brussels.

<sup>&</sup>lt;sup>21</sup> See advisory committee membership <a href="https://dataforpolicy.org/people/">https://dataforpolicy.org/people/</a>

<sup>&</sup>lt;sup>22</sup> www.dataforpolicy.org

Figure 4. Data for Policy community structure



The investment from the foundation also supports a project developing an engagement strategy with sub-Saharan Africa (SSA); this is a large region which is currently underrepresented in the Data for Policy community, and where the foundation supports a range of programmes working alongside national and local organisations. Work is currently underway on stakeholder consultation, which includes convening invitation-only workshop events in Nairobi, Kenya (March 2023) and Accra, Ghana (likely May/June 2023) with participation of representatives from key organisations in the region. The outcomes from the workshop will inform the business plan and future engagement strategy, both in SSA and other under-represented areas.

#### Outlook for 2023-24

#### **Scaling-up core operations**

Since establishment, Data for Policy CIC has been mainly operating on voluntary contributions with minimal professional support. However, the scale and impact of the community activities have grown considerably over the past few years and the volume of current investment necessitates dedicated executive and professional support. To this end in 2023-2024 accounting year, we will aim to expand the core operational team with more direct executive and professional staff employments. We also aim to develop associated formal structures and facilities as a non-profit employer.

#### **Strategy development**

The CIC leadership is working to develop an ambitious 10-year vision which will be underpinned by a shorter-term (3-5 years) operational strategy focussed on establishing a strong basis on which achieve the vision. The potential for rapid developments in the technology sector, and current global uncertainties will also necessitate an agile approach to planning. In the first part of the 2023-2024 reporting/accounting year, the operational strategy will be developed through leadership discussion and consultation with key advisors. A central element will be the continued aim of widening participation in the community, particularly with respect to the global South. Alongside this, CIC leadership will work to ensure a sustainable funding model for the organisation through evolution of current collaborations, and creation of new partnerships with appropriate organisations in the field. The business plan under development as part of the Sub-Saharan Africa engagement project will be an important informant of this activity.

#### **Organisational Policies**

Due to Data for Policy's move to primary employer, a priority for the coming year will be development of a full suite of accompanying policies and procedures. These will cover all aspects of CIC business. We will go beyond the legal requirement, and include policies covering good practice (e.g. quality and safeguarding).

#### **Funding and Partnerships**

The CIC has been supported through a partnership model since its inception. Our partners work with us to sustain and build our strategy through contributions to our activities, and membership of our committees. In 2023/24, securing new funding with partners where there is greatest potential for synergy will be a priority, with the aim of building long-term mutual

benefit. We will identify potential partners through research, including our SSA engagement project and recommendation from our networks. As part of our thought-leadership role, we will also look to build relationships with organisations with which to pursue research funding opportunities from public and non-profit bodies.

#### Data for Policy 2024 Conference and Data for Policy Tenth Anniversary

Following two virtual-conferences in 2020 and 2021, and the three-centre regional conferences in 2022, there is strong demand from our community to hold a single global inperson conference, preferably in the UK. Also considering feedback on conference timings and the essential preparation period, we are looking for potential June-July 2024 dates for the next edition of the Data for Policy conference series. Although most of the conference calendar will still fall into the current reporting/accounting year, the conference itself will fall into the following reporting year (2024-25). 2024 also marks the tenth anniversary of the launch of the first Data for Policy conference series. We will therefore plan for appropriate celebration and landmark events and activities to undertake in the following accounting year.