

An instrument constituency of data science—the case of Data for Good initiatives in the UK nonprofit sector

Ville Aula^{1,2} 

¹Department of Media and Communications, London School of Economics and Political Science, Houghton Street, London, WC2A 2AE, UK

²Centre for Socio-Legal Studies, Faculty of Law, University of Oxford, St Cross Building, St Cross Road, Oxford, OX1 3UL, UK

Corresponding author: Ville Aula, Centre for Socio-Legal Studies, Faculty of Law, University of Oxford, St Cross Building, St Cross Road, Oxford, OX1 3UL, UK. Email: Ville.aula@csls.ox.ac.uk

Abstract

Data science is a new link in the long chain of quantitative measurement in public policy. The article analyses the promotion of data science as a tool of public policy by operationalizing the instrument constituency framework. The article expands research on instrument constituencies to two new areas: measurement instruments and the nonprofit sector. The empirical analysis focuses on “Data for Good” initiatives in the UK nonprofit sector and is based on 37 interviews with nonprofit data professionals participating in the initiatives. The analysis focuses on actors, instruments, and promises. The findings show that the innovative potential of digital data and data science is central to the initiatives, but the actual practices promoted by the participants are much more varied. The analysis shows blurred boundaries between different promotional coalitions and underscores the collaboration and competition between initiatives. The article confirms that the instrument constituency framework is applicable to the analysis of measurement techniques in the nonprofit sector. It invites further empirical and conceptual work on the unique elements of instrument constituencies that focus on promoting measurement techniques.

Keywords: policy instruments; instrument constituencies; data science; quantification; non-profit sector; public policy

Public policy is shaped by its instruments, which incentivizes policy actors to actively promote instruments that align with their interests. The active promotion of policy instruments has recently been theorized as the work of *instrument constituencies* (Béland et al., 2018; Béland & Howlett, 2016; Simons & Voß, 2018; Voß & Simons, 2014). In this article, I expand on the arguments of Simons & Schniedermann (2021) on the promotion of measurement techniques in public policy. In doing so, the article elaborates on the political sociology approach to policy instruments (Lascoumes & Le Gales, 2007) and connects it to recent work on sociology of quantification in the public policy context (e.g., Bandola-Gill, 2022; Mennicken & Salais, 2022; Tichenor et al., 2022).

The article makes two extensions to earlier work on instrument constituencies. First, it expands the arguments of Simons & Schniedermann (2021) by showing that the instrument constituency framework is indeed applicable to the study of different measurement techniques in public policy. Second, it expands discussions on the relevance of the framework beyond the immediate governmental context to policy-making use of measurement techniques in the nonprofit sector. The rationale for this expansion was inductive and emerged from first conducting empirical analysis on the promotion of data science and then conceptualizing the findings through the instrument constituency framework.

The empirical part of the article explores “Data for Good” initiatives in the UK nonprofit sector. Various Data and AI for Good initiatives have emerged in the past 10 years to promote the use of new computational technologies in a public policy context and have been promoted by a wide variety of actors that span global corporations, university researchers, and NGOs, and civil society organizations (Aula & Bowles, 2023). The initiatives present advances in data science as an opportunity to innovate the work of governments, NGOs, and nonprofit organizations, and technologies are treated as an intervention that changes the way organizations work. The study is based on 37 interviews with people working in the UK nonprofit sector and participating in the Data for Good initiatives as organizers, collaborators, and participants.

Simons & Voß (2018, 2014) define an instrument constituency as a coalition of actors that focuses on promoting a specific policy tool, justifies its importance with promises about its value, and seeks to recruit new members to increase the adoption of the tool. The article operationalizes the framework by analyzing (a) actors participating in the coalition; (b) instruments they are promoting; (c) promises that justify the instruments. These three elements inform the research questions of the study:

1. Who participates in the Data for Good coalition in the UK nonprofit sector?
2. What instruments do they promote?
3. What promises are used to justify the instruments?

The findings show that the concept of instrument constituencies is applicable to the promotion of measurement instruments and in the nonprofit sector context. The article contributes to the earlier literature on policy instruments and instrument constituencies by taking them in a more technological direction and analyzing the promotion of specific technologies and quantitative techniques in policy-making. The findings invite further theoretical discussion on the unique aspects of instrument constituencies promoting measurement techniques due to the blurred boundaries between different promotional coalitions and shared promises of improved knowledge practice leading to better social outcomes.

Theory

Policy instruments and instrument constituencies

Choice of policy instruments has remained a key question in the literature since the early days of public policy research. This has led both to prescriptive analysis of determining the right tools in a given context, descriptive analysis of instrument choice, and critical analyses of how political assumptions are entangled with the seeming technicality of policy instruments (Hood, 2007; e.g., Howlett et al., 2018).

Voß & Simons (2014) have proposed the concept of instrument constituencies to denote the active promotion of policy tools by a network of actors to an audience of other policy stakeholders. The operationalization of the framework, however, has emphasized different elements. On the one hand, the instrument constituency framework can be used to explore the foundations of policy instruments within expert and professional groups. For example, Voß & Simons (2014) analyzed the scientific foundations of emissions trading, the promises associated with it, and the instrumentalization of politics. This analysis drew from science and technology studies and the political sociology approach to instruments outlined by Lascoumes & Le Gales (2007) and has been further explored by Voß and Simons (Simons & Voß, 2018; Voß, 2016). On the other hand, the instrument constituency framework can be used to explore the promotion of instruments within the policymaking process. Voß and Simons analyzed how emissions trading was developed as a policy option, how a network of promoters emerged around the solution, and how it competed against other solutions to establish itself on the agenda. The perspective of competition and choice has later been expanded by Mukherjee, Howlett, and Béland, who focus on active promotion of policy instruments within policy sub-systems (Béland et al., 2018; Béland & Howlett, 2016; Mukherjee & Howlett, 2015). In this article, I adopt the analytical direction of Voß and Simons, which focuses on the promotional activities of the constituency, rather than the policy sub-system emphasis of Mukherjee, Béland, and Howlett.

Simons & Voß (2018, p. 24) argue that the status of instrument constituencies as a collective actor is not a given. The status of an instrument constituency is an achievement that includes active coordination of actors whose interests and goals do not always align. They propose an analysis of three aspects of instrument constituencies: actors, instruments, and promises. While it is self-explanatory that actors and instruments form the foundation for the analysis of instrument constituencies, the role of promises requires more attention.

To hold together an instrument constituency, its members must align the participants with promises about the benefits of the instruments and participation in the network. [Simons & Voß \(2018\)](#) delineate between functional promises and structural promises. The functional promises refer to promises about “the ability of policy instruments to achieve public goals” (p. 20). Public goals here refer both to the benefits brought by the instruments to the wider public, as well as the immediate benefits they bring to their users. They act as the public justification for why an instrument has public value and is worthy of investment. Structural promises, on the other hand, focus on the “structural features of a future world that an instrument is expected to bring about, especially regarding the roles and positions this world offers for different actor” ([Simons & Voß 2018](#), p. 21). Structural promises offer benefits of being a participant in the coalition, whether this means resources, market opportunities, career opportunities, networks, or status. Unlike functional promises, which must be clearly communicated by the constituency to convince its audience, structural promises are more diffuse and implied through the opportunities the coalition offers for its participants.

Measurement techniques as instruments in public policy

[Lascoumes & Le Gales \(2007\)](#) propose that analysis of policy instruments should not be restricted to policies and policy solutions as they are traditionally understood, but also investigate the promotion of specific techniques, such as the analytical, quantitative, and measurement practices that undergird policymaking. The approach connects the analysis of instruments to the broader work in political sociology of the role of numbers and quantification in public policy ([Desrosières, 1998](#); [Porter, 1996](#); [Rose, 1991](#)). The importance of measurement and quantification in public policy has received attention ever since the proliferation of New Public Management ([Hood, 1991](#)) and the impact of calculative practices in policymaking has been explored in various domains of policy ([Mennicken & Salais, 2022](#)).

In this article, I propose that the instrument constituency concept as understood by Voß and Simons can be applied to analyze the promotion of quantification and measurement techniques in public policy. The proposed extension elaborates on the arguments by [Simons & Schniedermann \(2021\)](#) that evidence-based policymaking can be understood as a procedural meta instrument that is promoted by a coalition and grants a special status to statistical instruments and scientific expertise in the policymaking process. The promotion of behavioral public policy is another case where specific quantitative measurement techniques and experimental designs are promoted as instruments to reform policymaking practices ([Straßheim, 2020](#)).

There is increasing empirical evidence that promotion of new measurement techniques is taking a coordinated form and has implications for policymaking practices. Choice between measurement techniques can make a major difference to policy, because it influences how policies understand their objects of intervention and how change towards the desired direction is understood ([Mennicken & Salais, 2022](#)). Recent sociological studies of quantification and measurement in public policy provide a case in point. [Bandola-Gill \(2022\)](#) has shown that the widespread adoption of multi-dimensional poverty measurement in development policy was achieved with active promotion by a network of actors and actively shapes global efforts in poverty reduction. Likewise, advocacy organizations promoting certain statistical standards can achieve lasting policy change by establishing a new way of understanding a policy problem ([Bruno et al., 2014](#)). Both studies highlight that the promotion of specific measurement techniques takes place amidst competition and negotiation between alternative measurement strategies. The effects of these choices are compounded if rewards and punishments are administered according to their measured performance or position in a ranking ([Espeland & Sauder, 2007](#)). Promotion of digital data, data science, and artificial intelligence also make recommendations about how the promoted techniques can improve policymaking by incorporating new data sources and analysis techniques ([Höchtel et al., 2016](#)).

Instruments and measurement beyond the government context

Past studies of instrument constituencies have focused on government use of instruments. Yet nongovernmental actors play an increasing role in contemporary governance as governments have delegated responsibility to both international and domestic nongovernmental organizations. Indeed, increasing the importance of nongovernmental actors is in itself a procedural policy instrument that uses different modes of governance to structure policymaking ([Howlett, 2000](#)). When ties are retained between governments and nongovernmental actors through outsourcing, performance measurement often serves as the link between the two ([Le Galès, 2016](#)). Furthermore, several earlier studies of instrument

constituencies have explored the interlinkages between policy instruments in the government and non-governmental contexts. For example, the promotion of mini-publics as a procedural policy includes collaboration between citizens, NGOs, and governments to include new groups in the policymaking process (Voß et al., 2022). Similarly, the promotion of emissions trading as a policy instrument has been embraced by government and private companies alike, and the private sector has gone beyond government-mandated mechanisms to promote new emission trading mechanisms (Voß & Simons, 2014).

The analysis of measurement techniques in the nonprofit sector is valuable for understanding instrument constituencies, for two reasons. First, nonprofits are close partners of governments in designing and delivering public services, as indicated by the shift from government to governance. This is especially the case in the UK nonprofit sector, which is the empirical context of this article. In the United Kingdom, government has collaborated closely with nonprofit to achieve policy goals, with state involvement increased especially during the Labor government from 1997 to 2010, and government outsourcing continuing to play a role during the Conservative government from 2010 to 2024 although with budget cuts and more focus on facilitating private investment in social and health services (Alcock, 2016). Quantitative measurement plays a central role in governing such partnerships because they are used as tools of accountability that tie nonprofits into governmental measurement practices (Le Galès, 2016).

Second, nonprofits play a major independent role in designing and delivering services beyond those provided by governments. The independent role of NGOs in humanitarian and development policy is well-established in public policy literature, and the importance of quantitative measurement plays a central role (Bandola-Gill, 2021, 2022). In the United Kingdom, cuts to public services have increased the independent role of nonprofits in providing social and welfare services to those in need (Alcock, 2016). This means that the measurement-based governance strategies within the nonprofit sector shape nonprofit work in the same way that measurement influences policymaking within the government. Economic approaches to measuring social value of nonprofit work rely on complex calculations based on diverse data sources (Barman, 2016). The practices used by large donors and third-party organizations to measure social change influence which activities are funded, and delivery organizations adjust their work to better fit these expectations (Cochrane & Thornton, 2016; Krause, 2014). Nonprofits themselves also try to improve the effectiveness and efficiency of their work by adopting new managerial and measurement practices (MacIndoe & Barman, 2013).

The nonprofit sector measurement practices described above directly influence the provision of public goods by nonprofit organizations and their strategies of tackling policy problems, which have far-reaching policy implications given the importance of the nonprofit sector in the United Kingdom and elsewhere. They also directly influence governmental policy through partnerships and lobbying efforts by nonprofit organizations. Yet, changes in nonprofit measurement practices also have indirect effects on public policy. The success or failure of nonprofit organizations to tackle policy problems such as inequality indirectly influences the pressure governments face to tackle the same issues. Indirect effects also follow from changes in the political economy of policymaking through the increasing prominence of NGOs and the emergence of “philanthro-capitalism” in social and humanitarian policies. Lastly, indirect influences are felt through changes in the ideas and discourses of measurement promoted by instrument constituencies as the ideas adopted in the nonprofit sector diffuse to governments. For example, the promises of technological innovation in ICT for Development initiatives influence the wider discourse on the potential of digital technologies to tackle social problems. These indirect mechanisms highlight the relevance of analyzing instrument constituencies even when the connection to governmental work is less pronounced.

Materials and methods

The study uses a qualitative case-study methodology that combines interviews and fieldwork. The case of Data for Good initiatives in the United Kingdom is treated primarily as a case of promoting data science and other measurement techniques, and only secondarily as a case of instrument constituencies in the nonprofit sector. Because of the inductive nature of the study and the aim of theoretical development, the article makes no claims about the representativeness of the case.

Data collection took place in 2019 and 2020. The first stage of data collection included fieldwork in events and networks working with data in the UK nonprofit sector and interviews with active participants. At this time, the focus of the study was on data and data science in the UK nonprofit sector, and the

existence of the Data for Good initiatives was discovered through fieldwork. In the second stage, data collection turned to interviews with organizers and collaborators of the Data for Good initiatives, and interviews became the primary method of analysis in exploring the emergence of the initiatives. The interviewees were selected based on purposive sampling and snowball sampling. In purposive sampling, interviewees are selected based on some unique characteristics that make them relevant beyond their representativeness of some larger population (Tongco, 2007). Interviewee recruitment focused on interviewees from three different groups: (a) interviewees working for organizations participating in Data for Good initiatives and facilitating the use of data in the nonprofit sector; (b) interviewees in grant-awarding organizations participating in Data for Good initiatives who were referred by other interviewees; (c) interviewees working in service-providing nonprofits and taking part in Data for Good events and networks, who were identified both through fieldwork and referral by other interviewees. Overall, the focus of recruitment was on organizations that were thought to be in some ways advanced or innovative in their use of data, because this allowed the study to gain further insights into the uses of data that were promoted in Data for Good initiatives.

Descriptive statistics on the interviews are presented in Table 1. Altogether, 37 research interviews were conducted during the study with 35 unique individuals. The difference between the number of interviews and unique interviewees is explained by five interviewees being interviewed twice, and two interviews having more than one participating individual. Most of the interviewees were from facilitator organizations who helped other organizations use data and operated either through grant-funding, volunteer, or by taking a fee for their services ($N=24$, 68%). This predominance is explained by organizations focusing on the facilitation of data and data science skills being particularly active in Data for Good initiatives, as will be discussed in the empirical analysis. Interviewees from funding organizations tallied to seven (20%), and those with service-providing nonprofits amounted to four (11%). The interviews typically lasted for 1 hour. All interviews were recorded and transcribed verbatim.

Interview transcripts were coded using the qualitative analysis software NVIVO. Coding and analysis focused on identifying measurement techniques and promises associated with them. Initial codes were combined to form wider themes that had resonance across interviews. For instruments, a combination of initial themes focused on categorizing similar measurement techniques and functions together. For promises, the focus of combining initial themes was thematic unity and functional purposes regarding the benefits of the techniques promoted in the coalition.

Empirical findings

Actors and audiences

Based on the interviews, a new interest in data in the nonprofit sector started to emerge in the early 2010s. Some of the interviewees emphasized that interest in digital technology started at this time to take a more explicit focus on data. This timing is captured in a quote from an interviewee working as the Head of Impact and Innovation in a medium-size social sector charity and over a decade of experience in the sector: “In 2013, 2014, then you started to see organizations actually starting to recognize that we do need to get better with our data. Incidentally, this was badged under digital” (Interviewee 21). This timing coincides with the hype around Big Data as an extension of digitalization taking hold in the public imagination (Kitchin, 2014).

Based on interviews with organizers and participants of the initiatives, three organizations played a pivotal role in the formation of the Data for Good initiatives in the United Kingdom. Data Kind UK is a data science volunteering program that was founded in 2013 as a local chapter of an US-based

Table 1. Descriptive statistics on interviewees.

Total interviews	37
Total unique persons interviewed	35
Male interviewee	18 (51%)
Female interviewee	17 (49%)
Interviewees in facilitator organizations	24 (68%)
Interviewees in service-providing organizations	4 (11%)
Interviewees in grant-maker organizations	7 (20%)
Total recorded interview minutes	2,205 min

organization with the same name. Their work concentrates on promoting the use of data science to address social problems by providing nonprofit organizations with programmers and analysts through a variety of volunteering schemes. Data Orchard is a consultancy founded in 2013 that focuses on nonprofit data. They developed a popular framework to assess the readiness of nonprofits to use data, which they called a “data maturity model,” and played a leading role in organizing the first UK conference on nonprofit data, the Data4Good Fest in 2018. Finally, 360Giving is an open data platform for charity funding founded in 2014. Its goal is to promote charity accountability and effectiveness using data, particularly by pushing grant-givers to publish their funding decision in a standardized digital format. The centrality of these three organizations to the network of actors was confirmed by other interviewees who recognized the leading position of the organizations.

In 2018, the leaders of the emerging network organized a conference titled “Data4Good” that many interviewees saw as a turning point in the public profile of nonprofit data, bringing together for the first time organizations that had worked on nonprofit data independently. According to one of the organizers of the event, who worked in a leading role in one of the three organizations mentioned above:

[Data4Good Fest] was meant to be a meeting of people who love data, with leaders of not-for-profit organizations, and also potentially lone data experts, or nerds in an organization to be part of a wider community, especially if they're the only person in a small organization. Also for people who didn't know anything about data to come along and hear some of the stuff that goes on to inspire them to become more data-savvy, or to get a grip on data. (Interviewee 27)

The above quote demonstrates that the event had the goal of building a new network of *people* working in data-related roles in the nonprofit sector. It recognizes that not only there are already people with professional interest in data but that it is possible to broaden this audience by recruiting more people and organizations to work with data. In other words, the event marked a new step in the formalization of the coalition: organizing an event required diverse stakeholders to recognize their mutual interests and alignment, and to convince a broader audience to participate in the event. Between 2013 and 2018, the Data for Good coalition gained in strength and recognized its interconnectedness to the extent that it became possible to organize a conference that would recur afterward.

To assemble a network of nonprofit data professionals, the promoters of Data for Good needed to enroll new members with potentially diverging interests. A key element in expanding the coalition is that its members recognize the network and share some of its goals, even if they did not contribute to the promotional activities. This diversity is recognized in the following quote by an interviewee who worked for 360Giving, which is a key member of the Data for Good constituency. According to the interviewee:

The Data for Good really is quite broad in terms of coalition because it goes all the way from data scientists or data products, looking to provide services to the charity sector or not-for-profit things, all the way down to charities who are exploring how to use data for themselves. (Interviewee 6)

The interviewee recognizes that the coalition includes both organizations offering data-related services to other nonprofit organizations to people and organizations using data in their work. This latter group can be seen as the audience that promoters of Data for Good try to recruit as members of the coalition and to expand by convincing more nonprofits to invest in their data capabilities.

Measurement techniques

Based on the interviews, data serve as a catch-all term for any quantitative measurement or digital data collection practice that could be used in the nonprofit sector. Interviewee descriptions of data could be vague and define it through a juxtaposition with professional expertise and first-hand knowledge. When framed in this way, data were argued to be more rigorous and credible knowledge. This catch-all understanding of data and their juxtaposition with professional knowledge was voiced by numerous interviewees. For example, an interviewee working for DataKind UK as a data scientist explained this in a way that captures the catch-all character of data.

[non-profits] have a lot of embedded wisdom, a lot of expertise about how to help those people on the frontline. I think what the data gives them is a way to monitor whether that expertise is still relevant [—]

Table 2. Techniques promoted in the Data for Good initiatives in the UK nonprofit sector.

Type of data and measurement	What was promoted?	How was it promoted?
Data Science	Use of statistical computing, analysis of new digital data sources, combination of diverse data sets, algorithmic automation,	DataKind UK promotes data science and data science volunteering. Data scientists and data science applications are being used as inspiring examples in events and trainings.
Digitalization and digital data	Digitalization of services, digital management systems, increased data collection from users	Promoted as a prerequisite for better use of data. Actual work with nonprofits often focusing on digitalization, data collection, and database development.
Managerial measurement	Output, outcome, and performance measurement. Increased data collection on users.	Promoted as a key area of data collection and use. Presented as a first step towards data-driven innovation and something to be revolutionized by new data sources and analysis techniques.
Open Data	(1) Publish data sets from grant-makers; (2) make use of Open Government Data and official statistics	360Giving promotes the opening of grant-maker data sets and better use of data among grant-makers. Multiple organizations and individuals promoting the use of Open Government Data. Government institutions are targeting the nonprofit sector as an audience for their open data.
Scientific measurement	Representative surveys, Randomized Control Trials, Economic Impact assessments,	Promoted by organizations with their own networks but who nevertheless find it useful to align with and collaborate with Data for Good coalition. Promoted by individuals and organizations with specialized academic training.

They might be offering particular services without necessarily a good understanding of the uptake of those services or they might be positioning a program for a particular purpose and not be aware of whether it's fulfilling that purpose or not. The data allows them to check their assumptions. (Interviewee 7)

Keeping the notion of data as wide as possible enabled the coalition to unite different practices, organizations, and audiences whose connectedness is not a given. Indeed, a variety of measurement techniques, data collection practices, and analytical techniques to be included in the coalition. Table 2 reviews different measurement practices that could be identified through the interviews to be promoted by the coalition. The findings show that data science, which held a key role in the public imagination at the time of the study, was only one among many measurement and analysis practices promoted in the coalition.

I want to highlight two aspects of the measurement practices promoted by the coalition. First, the coalition promoted digitalization and data science as innovative practices that tap into the latest technological developments. Data science was especially important to DataKind UK, which also relied on volunteer data scientists to help nonprofits. Based on the interviews, new digital data sources and data science were considered innovative opportunities that were at the forefront of what data could do for nonprofits. The flagship projects used by Data Kind UK in their marketing and public communication are a case in point. These projects used data science to analyze novel data sources such as geolocation and demographic data,¹ textual data,² or administrative data in nonprofit databases.³ One of the flagship cases advertised by DataKind UK saw data scientists build an algorithmic risk-scoring system for a UK-based food bank to help early identification of foodbank dependency.⁴

However, benefitting from the volunteer data scientists provided by DataKind UK required nonprofits to already have a digital system to collect large quantities of digital data. This is not a given for nonprofits that tend to lack resources and digital infrastructures. Indeed, a more mixed picture of data science in the nonprofit sector is given by an interviewee working in a leading role for DataKind UK. According to

1 <https://datakind.org.uk/portfolio-item/mental-health-bame-sobus/> and <https://datakind.org.uk/portfolio-item/ca-lewisham/>

2 <https://datakind.org.uk/portfolio-item/action-children/>

3 <https://datakind.org.uk/portfolio-item/15000-volunteers-sja/>

4 <https://www.datakind.org/projects/identifying-food-bank-dependency-early>.

the interviewee, “Our problem was actually finding projects that needed data science because honestly, most UK charities just needed help better understanding the data they were collecting in really basic ways. They did not need machine learning” (Interviewee 19). Because of these shortcomings, the promotion of data science did not necessarily mean that the audience could or would use any new computational analysis techniques. Promoting data science, therefore, required the members of the coalition to also promote digitalization and digital data collection as a pre-requisite for data science. The problems faced by DataKind UK, however, did not prevent it from being a vocal promoter of data science in the nonprofit sector, or other data scientists from promoting their tools.

Second, the coalition also promoted much more established practices that are categorized here under the title managerial measurement. Because only relatively few nonprofits could benefit from data science, it was common for the interviewees to promote measurement practices more readily available for nonprofits. These more established measurement practices were promoted both as a first step towards data-driven innovation and as something that could be revolutionized by new data sources and analysis techniques. These practices tended to be discussed through the catch-all meaning of data as a source of innovation, but the details given by the interviewees suggested a more mundane managerial measurement practice.

The findings presented in Table 2 suggest that the Data for Good coalition also connects to *other* promotional networks. This also highlights the blurred boundaries and transnational character of the constituency. Open Data constitutes its own independent promotional movement originating from the United Kingdom but acting globally, and counts both civil society organizations and government institutions as its supporters. In the study, it was possible to find both these actors participating in the promotion of data in the nonprofit sector, although only 360Giving was a central organizing force in the coalition. On the other hand, scientific measurement techniques such as representative surveys, economic modeling, and randomized control trials are all promoted by the evidence-based policymaking movement. These techniques are promoted internationally, and dedicated coalitions have emerged to promote RCTs in development policy and economic modelling in Impact Investing. Some organizations and individuals in the current study could be seen to have a double-allegiance of promoting their tools through Data for Good initiatives while also being part of the wider evidence-based policymaking movement. For example, an interviewee whose work focused on promoting the use of statistical analysis in the nonprofit sector and connecting volunteer statisticians with nonprofits commented on their relationship with the Data for Good coalition in the following way: “In a way, [Data for Good]’s a selling point [—] to promote the good things that can come out of using data. It’s a way to make it a positive thing for the charity sector. Sometimes, it’s quite nice to have a buzzword” (Interviewee 26). When asked whether the organization itself uses the Data for Good label, the interviewee responded “Not really, not really. Though it’s not that we haven’t been [involved]. We have been involved with programs” (Interviewee 26). I suggest that these observations show how the coalition promoting data in the nonprofit sector has expanded to include a diverse set of actors with their own promotional aims that nevertheless aligned with the broader goals of the initiatives and were willing to collaborate and participate in its activities.

Functional and structural promises

Instrument constituencies justify the importance of the tools they promote with functional and structural promises. As discussed in the theory section, functional promises refer to the public benefits expected from the adoption of the promoted tools, whereas structural promises refer to benefits for the members of the coalition.

Following their name, the initiatives justify the value of their tools by suggesting that investment in data will help nonprofit organizations better tackle social problems and make a positive contribution to society through new sources of knowledge. Because the UK network focused especially on social and health sectors, the functional promise of the initiatives focused on alleviation of social and economic inequality as well as improvement of human welfare. This promise of public benefit was complemented by the promise that increased use of data will help nonprofits achieve more objective and more reliable knowledge that will help nonprofits improve their work. As discussed in the previous sections, many interviewees believed that the achievement of better knowledge was a valuable public goal in itself. This idea is broader than Data for Good initiatives, and the objectivity and credibility associated with quantification are well-established in past literature (Desrosières, 1998; Porter, 1996).

In addition to promises of better knowledge and positive contribution to society, Data for Good initiatives promised practical organizational benefits that justify investment in new measurement techniques. These promises were easily identifiable in the interviews because the success of the coalition depends on the effectiveness of communicating the practical benefits of data for individual nonprofit organizations. For example, the founder of one of the key organizations in Data for Good initiatives and the main organizer of the Data4Good fest argued the importance of data in the following way, which contains several promises about the organizational benefits.

I still feel very passionate that unless you have got data and a grip on data, you won't be able to evidence your need and to get funding or to get political will to change the world as you see it. [—] unless you have data and can tell your story and articulate why it is what you do because of this problem, and why are you having an impact, why it's worth investing some money with us to do this thing, whether it's about helping vulnerable people or saving the environment or whatever, we're never going to achieve those things or continue to do social good. I think there's just increasingly going to be the need to evidence what it is that you do. (Interviewee 27)

The quote frames the benefits of data in very tangible terms. It identifies articulation of needs, acquisition of funding, and changing political will as areas where data can make a difference. Using data is framed as an upside opportunity to improve nonprofit work, whereas failure to use data is framed as a risk that threatens to prevent nonprofit goals from being achieved.

The three areas of using data identified in the above quote were widely discussed by other interviewees. In fact, I suggest that they contain salient functional promises that the Data for Good initiative uses to justify their work beyond the overall promise of better knowledge and alleviation of social problems. Table 3 presents key details of these promises of organizational benefit, which are categorized as (a) better management of services and outcomes, (b) improved acquisition of funding, and (c) improved ability to influence public debate and policy. These promises frame data as a beneficial tool in changing a specific aspect of nonprofit work. They also act as the link between local uses of data and the promises of public benefit. It is noteworthy that these promises are not tied to any specific measurement technique and are hardly unique to the Data for Good coalition. They would rather speak to the basic concerns of nonprofit organizations as members of the civil society. By arguing that investment in data will deliver these goals allows the coalition to present itself simultaneously as an innovative novelty and as a movement that is grounded in nonprofit sector concerns.

Table 3. Functional promises of Data for Good initiatives.

Functional promise	Intended role of data in delivering the promise	Example of interviewees voicing the promise
Better knowledge	More data help nonprofits to make more credible claims, discover new details and trends in their work, and improve the knowledge base of their interventions.	<i>"Data is the foundations that you need to [—] be able to go from, 'I'm doing something charitable, which is nice and amazing' to 'I also want to be able to establish what kind of changes my intervention' is actually triggering." (Interviewee 24)</i>
Better management of services and outcomes	More data allow services to be adjusted to user needs on the individual and collective level. Data on user and service outcomes help design effective and efficient services.	<i>"using data to become more effective, to better understand your users, where they're coming from, what kind of things they've been struggling with." (Interviewee 24)</i>
Improved acquisition of funding	More data help nonprofits argue about the need for their services, demonstrate impact, and report compliance with funder requirements.	<i>"It might be that you're just using that data to source funding, to expand your service. You prove that there's the need, and you prove that you're an effective delivery organization." (Interviewee 2)</i>
Improved ability to influence public debate and policy	More data and better-quality data help nonprofits articulate policy problems, attract public attention, recruit allies, and influence policymakers.	<i>"Unless you have got data, you won't be able to evidence your need and [—] get political will to change the world as you see it." (Interviewee 27)</i>

Data for Good initiatives also include structural promises. Paraphrasing [Simons & Voß \(2018\)](#), structural promises are about the world where these organizations have a legitimate position within the ecosystem they are building and where their work is thought to be valuable by their target audience.

On the organizational side, Data for Good offers an outlet for its main proponents to promote their data-related services and expand their operations. A key structural promise of the Data for Good initiatives is the expansion of the services that they provide and increased demand. The more successful the initiative is and the wider the network, the greater the potential demand for its services, which encourages organizations beyond the initial promoters to join the coalition. The three organizations central to Data for Good initiatives in the UK nonprofit sector each provide an example of what this means. Data Orchard is a consultancy that helps nonprofit organizations for a fee. Increased interest in data and Data for Good initiatives is likely to increase the demand for their services. DataKind UK is a volunteer-driven organization that tries to create demand for its supply of data science volunteers. Increased recognition helps it secure partnerships and resources. Finally, 360Giving does not take fees but looks for grant-makers to join their open data platform and use their services, which are both aided by increased publicity. In addition to these three, many other organizations participate in the Data for Good coalition to gain publicity and generate demand for their services, whether fee-based or not. In the 2021 Data4Good Fest, over 70 organizations were presenting their work, which included many organizations looking to promote their services for other nonprofits. However, it would be a mischaracterization to imply that the organizations are driven purely by private gain, or that the functional promises of social betterment were a marketing or branding strategy as has been in some similar cases in humanitarianism (e.g., [Aula & Bowles, 2023](#)). Based on the study, it seems to be more the case that the organizations genuinely framed themselves vehicles of change in achieving the functional promises of the coalition and securing better resources for their work.

The structural promises also work on a more personal level. As explained above, the network extends to the people working in nonprofit organizations in data-related roles. The structural promise for these people is that increased recognition for the value of data strengthens their status, clout, and career prospects. The more organizations invest in their data capabilities, the more resources and opportunities will be available for professionals. In the interviews, the personal opportunities of structural promises could be identified in different contexts. First, interviewees working in leading roles in nonprofits often complained about their lack of resources and the need for more investment within their own organization. Second, volunteers in Data for Good events could see it as an opportunity to gather experience, boost employability, and promote the public recognition of their profession. Third, the data science volunteer scheme run by DataKind UK can be seen as an organized form of promoting the status of the data science profession as a collective. In each of these cases, the initiative promises the participant a strengthened role and higher status. Again, this strengthened position is justified by the participants acting as vehicles for the functional promises.

Discussion and conclusions

In this paper, I have expanded the use of the instrument constituency concept ([Simons & Voß, 2018](#); [Voß & Simons, 2014](#)) and arguments of [Simons & Schniedermann \(2021\)](#) on how initiatives like evidence-based policymaking push measurement techniques to have processual implications for public policy. The findings demonstrate the applicability of the instrument constituency framework in analyzing the promotion of measurement techniques in the nonprofit sector. The findings show that the Data for Good initiatives successfully leveraged emerging practices relating to data and data science to assemble a new promotional coalition. Based on the study, the tools and practices promoted by the coalition are diverse but united by the idea that ultimately, all measurement is about data. The interviewed members of the coalition offered coherent descriptions of how different measurement practices were connected by the goal to rethink nonprofit work *through* data and improve it *with* data. On the level of functional promises, the members of the coalition believed that data help nonprofits to better achieve their goals of social betterment, which on the organizational level can take the form of improving service, receiving more funding, or influencing policy. On the structural promises, the coalition promotes the view that data is a valuable area of professional expertise that should receive higher status and more resources. The coalition was successful in framing data both as something familiar that nonprofits already use but also as an innovative novelty that can deliver new benefits.

The empirical analysis brought up challenges in determining the outer boundaries of the Data for Good constituency. As discussed in the empirical section, the coalition overlapped with other promotional coalitions, such as Open Data and evidence-based policymaking. The analysis suggests the functional promises of the coalition were not tied to any specific measurement technique and could therefore be attached to any of them. The boundary between different instrument constituencies relating to measurement techniques therefore appeared to be more about the level of organizational commitment to shared promotional activities and less about distinct functional promises attached to different techniques. This finding aligns with the arguments of [Straßheim \(2024\)](#) regarding the shared discursive foundations between different manifestations of evidence-based policymaking. Based on the findings, it is also possible that organizational-level considerations also manifest in structural promises incentivizing overlapping coalitions to maintain distinct identities because this serves their organizational interests in strategic communication.

It is also worth reflecting whether the UK case is part of a global push to promote data science in public policy (e.g., [Aula & Bowles, 2023](#)) or an independent coalition that only shares a loose affinity with the other activities. Whilst the functional promises and the techniques promoted by the UK constituency were closely aligned with the international counterparts, the study revealed little to no overlap in their audience and membership. The goal of building a coherent audience meant that the coalition focused on the UK domestic nonprofit sector, but not on humanitarian and development sector organizations. The transnationality of the Data for the Good constituency therefore might warrant different answers depending on whether the focus is on the promises and techniques, which are similar across international cases, or the community and audience, which are distinct in the international cases. Ultimately, choices in research design also guide attention to different aspects of transnational coalitions, with the country case-study approach adopted in this article guiding towards geographic specificity, whereas comparative analyses with interviewees from different countries potentially revealing closer transnational alignment.

The above observations matter for the generalizability of the findings. I suggest that the functional promises of public benefit, that is better knowledge to improve social outcomes, might be widely shared across different instrument constituencies relating to quantitative measurement, but the functional promises of organizational benefit are more specific to sectoral contexts. In other words, I suggest that it is likely that the findings of the study apply to other instrument constituencies focusing on nonprofit sector measurement practices, regardless of their geographic or technological focus, such as other Data for Good initiatives and promotion of evidence-based policymaking in the nonprofit sector. On the other hand, the findings are less likely to be applicable to instrument constituencies focusing on governmental activities, which constitute different potential members and audiences.

The study opens theoretical questions about whether promotional coalitions of measurement techniques are a special case of instrument constituencies that require further conceptual development. This question stems from the possibility that the blurred boundaries are a hallmark of promotional coalitions that focus on measurement techniques, data, and technology. Indeed, blurred boundaries are a challenge to evidence-based policymaking as well, which was the focus of [Simons & Schniedermann \(2021\)](#). The evidence-based policymaking as a unique instrument of constituency originates from the United Kingdom, but identical practices were promoted long before the assembling of this coalition. The tools and practices associated with evidence-based policymaking are diffuse across the world without necessarily being connected by an instrument constituency. Based on the current study, the promotion of data and data science might have similar characteristics with multiple independent centers that take their inspiration from broader changes in technologies and discourses. As noted above, the functional promises of public benefit can be similar for several different techniques, which inevitably blur boundaries.

The third open question is how the identification of functional promises should be related to research on ideas and beliefs in public policy. The factors that make the promises convincing are hardly a property of the constituency alone, as has been suggested by earlier studies of evidence-based policymaking ([Simons & Schniedermann, 2021](#); [Straßheim, 2024](#)). In this article, the functional promises of public benefit were closely connected to the idea that decision-making can be improved with expert knowledge and professional data analysis. I also suggested that the promises of public benefit were not tied to any specific measurement techniques. Future studies should explore whether there are such recurring themes in how instrument constituencies articulate their functional promises. However, such discussion should not overshadow the importance of structural promises, which provide participants of an instrument

constituency with a material benefit of participation. Exploring the ideas and beliefs behind functional promises might therefore highlight tensions between the ideals used to justify instruments and the more practical motivations for joining a coalition.

Finally, a key limitation of the article is that it was not possible to assess the actual success of the initiatives on the organizational level or the challenges of resource scarcity for the adoption of new measurement practices. In light of earlier literature, it is likely that the benefits of the new measurement practices are unevenly distributed. Future research should explore the limits imposed by resource scarcity on the adoption and impact of new data practices.

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Conflicts of interest

None declared.

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