



Technical and Learning Report INDIGO Hack and Learn

March 2021



**GOVERNMENT
OUTCOMES
LAB**



Inspire Institute of Education and Research
Inspiring to Transform



This report is part of the GO Lab-supported *International Network for Data on Impact and Government Outcomes*. The report aims at reflecting on the learnings and challenges from participants and co-hosts of the 2021 Hack and Learn event. This is not an academic research report nor is it an evaluation.

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Executive summary

This report reflects on the learnings and experiences of the participants of the last INDIGO Hack and Learn (March, 2021). Participants include attendees that participated in one or more teams, challenge leaders (team leaders) or co-host representatives. Each of these groups has a valuable perspective to offer on the strengths and weaknesses of this event. The objective is to collect all those experiences in a single document that would form the basis for a discussion on how to design and improve future Hack and Learn events.

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Introduction

The International Network for Data on Impact and Government Outcomes - INDIGO - is an emerging data collaborative. Its primary goal is to provide better data for better social outcomes. The INDIGO initiative includes community activities, a system for sharing data, and various datasets available as open data on the GO Lab website. As an emerging data collaborative, we believe that bringing together peers from different countries and policy domains with an interest in sharing data is a key part of our mission.

Our Hack and Learn events are one of our INDIGO engagement activities. Even though the name includes the word 'hack', the event is not a hackathon. Hackathons are usually associated with computer programmers and software developers, or tech-related professions. Instead, our event focuses on the word 'learn'. We bring together policymakers, practitioners, students and senior researchers who share an interest in solving complex problems in a data-driven way. Our participants form a diverse community from all around the world and work for two weeks on a wide array of challenges.

Our challenges are open to all, and there are no prerequisites to joining a team. Some challenges are theoretical, and invite participants to consider data definitions, research questions and lines of possible future research. Other challenges require some data skills. Those groups work with datasets and perform tasks including data cleaning, data entry and data visualisations. When there are participants with no coding background interested in joining a technical team, we provide technical assistance to them. In sum, the goal of our event is not so much about technical data work (although if you do gain new technical skills, that's great!), but instead to learn, to try new research questions, to analyse complex problems and think through possible solutions.

Who should read this report?

If you participated at our 2021 Hack and Learn, you can read this report to reflect on your own learnings, and those of your peers. Also, you may have focused on your team and not had much time to think about other groups' projects. This is an opportunity to have a look at the work of others. If you find a project that you are

The screenshot shows an Eventbrite event page. At the top, there is a navigation bar with the Eventbrite logo, a search bar, and links for 'Browse Events', 'Host An Event', 'Help', and a user profile for 'juliana.outesvelarde@bsq.ox.ac.uk'. The main header features a large image of Earth from space at night, with city lights visible. To the right of the image, the event title 'INDIGO Hack-and-Learn Sessions: Show and Tell 25 March, Learnings 22 April' is displayed, along with the organizer 'Government Outcomes (GO) Lab' and a 'Following' button. Below the image, there are icons for sharing and favoriting, and a green 'Register' button. The event details section on the right shows the date 'APR 22', the date and time 'Thu, 22 April 2021 13:00 - 14:30 BST', and an 'Add to Calendar' link. A dropdown menu for selecting a different date is also present. The location is listed as 'Online Event'. The main content area contains a description of the INDIGO network, an 'About this Event' section, and an 'Agenda' section. The agenda includes 'Session 1: Kick-off Sessions, March 11th 2021', which details an orientation to the INDIGO project, data standards, and datasets, followed by a 'Hack-and-Learn' session where participants will work on challenges and form teams.

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APR 22

INDIGO Hack-and-Learn Sessions: Show and Tell 25 March, Learnings 22 April

by Government Outcomes (GO) Lab

Following

Free

Register

The INDIGO network is about building shared culture and standards around data in social outcome-based projects.

About this Event

For our bi-annual Hack and Learn event, we will bring policymakers, data analysts and other leading representatives of the public and private sectors together to tackle pressing questions in the field of social outcomes. Harnessing skills and experiences from a diverse pool of actors, we will provide a space for learning and community building around the use of data in the field and an opportunity to solve problems, co-produce and make better sense of the use of data.

The International Network for Data on Impact and Government Outcomes (INDIGO) is an emerging data collaborative interested in sharing data about the design, implementation and evaluation of outcome-based projects. INDIGO's objective is to support the creation and use of quality data by policymakers, NGOs, citizen advocates and anyone who is addressing or is interested in complex social problems. Learn more about INDIGO [here](#).

The ambition of this Hack-and-Learn event is to bring together different actors, with different competencies, who can contribute in their own way to answering pressing questions in the field of social outcomes. At the end of the hackathon, we will write a blog post and a report on social outcomes data use to summarise the learning outputs. The report will be presented during our April Quarterly Peer Learning Session. Learn more about this event [here](#).

All are welcome to join, regardless of their field of expertise and experience. Coders and data analysts of all levels will have the chance to play around with our open-source data, assisted by our academic partners and our developers at Open Data Services and Plump Agency. Policymakers, NGO representatives, citizen advocates, and researchers will benefit from seeing their questions and ideas made data, and will have the opportunity to debate solutions to complex social problems with practitioners, cutting-edge researchers and like-minded individuals. At the end of the event, we hope that everyone will come away with a wealth of learnings.

Below you will find the agenda and challenges for our first Hack-and-Learn of 2021. Happy learning!

Agenda

Session 1: Kick-off Sessions, March 11th 2021.

The Kick-off Session will include an orientation to the INDIGO project, data standards, and datasets. Coders and data analysts will get an overview of our open-source database and visualisations code on GitHub.

Finally, along with our partners we will illustrate this year's challenges and set up our "Hack-and-Learn" Teams [Fear not, data novices! We will explain everything, and you are not required to know how to code].

We will have two Kick-off Sessions to better accommodate our participants from around the world. One session will be at 9am GMT, the other at 5pm GMT - Same content, please choose the time that best suits you!

Date And Time
Thu, 22 April 2021
13:00 - 14:30 BST
[Add to Calendar](#)

Select a different date

Location
Online Event

Figure 1. Eventbrite invitation that participants used to sign up for the event.

interested in, you can go back to our Slack channel and contact that team. In addition, you can suggest topics or challenges for our next Hack and Learn.

If you did not participate, this report offers a summary of two weeks of intense teamwork. You will find out about our initial proposal to participants, the work of each team, and the outputs they presented at the end of the two weeks. We also hope that you will be inspired to sign up for the next Hack and Learn!

Who organised this Hack and Learn?

The organising team was formed by the Government Outcomes Lab from the Blavatnik School of Government (University of Oxford), the INSPER Metricis research team from the Insper Institute for Research and Education (Brazil), the Beeck Centre for Social Impact and Innovation (University of Georgetown), the Bertha Centre for Social Innovation and Entrepreneurship (University of Cape Town) and the Centre for Social Impact and Philanthropy (Ashoka University).

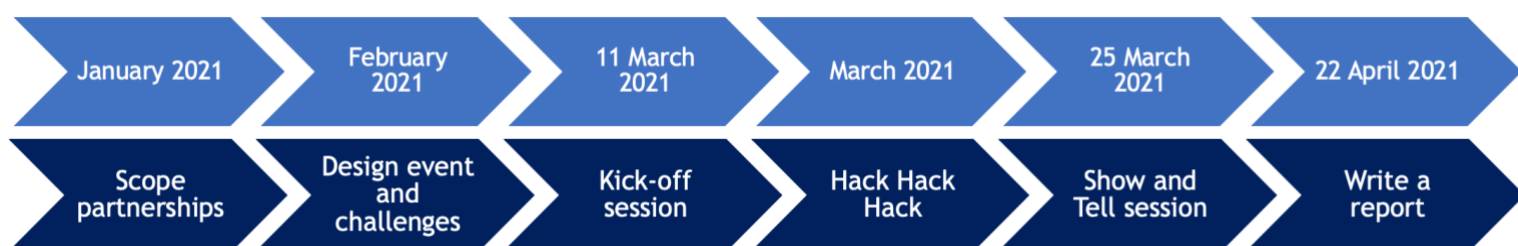


Figure 2. Timeline of Hack and Learn activities

This team was in charge of coordinating activities, planning promotion on social media, organising timetables and identifying appropriate challenge leaders for the different groups. They came up with 9 challenges, each of which was led by someone from a co-host institution. The list of challenges and the initial ideas about potential outputs was structured as follows:

1. **Aligning Outcomes to Sustainable Development Goals.** This team wanted to investigate whether investors and other stakeholders might engage in impact investing as they perceive synergies with outcomes-based contracts (OBCs) and Sustainable Development Goals (SDGs). This challenge aimed at addressing the OBCs-SDGs alignment and analysed the interplay with stakeholders' motivations. It was led by Fernando Deodato Domingos, Icaro Bernardes and Clara Portela (INSPER team) and Juliana Outes (GO Lab).

2. **User Voice.** This team aimed to develop a common understanding/definition of user voice engagement across impact bonds. The group also sought to identify what user voice data is currently being collected across impact bonds. It was led by Leigh Crowley and Franziska Rosenbach from the Government Outcomes Lab (GO Lab).
3. **Governments Awarding Outcomes Contracts.** This team looked for public procurement documents and contracts related to impact bonds. They used the Open Contracting Data Standard (ODSC) to improve the INDIGO Impact Bond Dataset. It was led by Ruairi Macdonald (GO Lab).
4. **Puzzles for Measuring Girls Education Outcomes.** This team aimed to identify innovative assessment strategies for Girls Education projects, bearing in mind that outcomes of interest for Girls Education might be observable only in the long-run. It was led by Fernando Domingos, Icaro Bernardes and Clara Portela (INSPER team).
5. **Exploring Vaccination Data in the United States.** This team explored the U.S. Census Bureau's most recent Household Pulse Survey in conjunction with recent vaccination data made available by the Centres for Disease Control and Prevention. It was led by Nora Ma from the Beeck Centre (Georgetown University).
6. **A new tool for social impact: Impact Wayfinder.** This team had access to a new GO Lab tool within the INDIGO framework. They evaluated the process of connecting impact practitioners with relevant evaluation resources. It was led by Ruby Dickson (GO Lab).
7. **Standardising the Indian NGO ecosystem service provider database.** This team worked collaboratively to standardise a database. Those interested in quantitative research and databases were encouraged to take on this challenge. It was led by Gautam Begamudre Krishnamurthy from Ashoka University.
8. **Visualising Foreign Philanthropy Inflows to India.** This team worked to visualise the data on foreign philanthropy (previously collated by CSIP) in an intuitive manner either using just the foreign philanthropy dataset or in relation to any other publicly available dataset. Graphic design enthusiasts

were encouraged take up this challenge. It was led by Gautam Begamudre Krishnamurthy from Ashoka University.

- 9. An Impact Bond Pipeline/Nursery.** This team discussed the potential use cases, data model, and process behind a pipeline of impact bonds. They thought about the maturity of projects for an onramp and how projects leave the pipeline, conscious that some projects grow into things other than impact bonds. It was led by Mara Airoidi (GO Lab) and Zach Levey (Levoca Impact Labs).

What happened during the Hack and Learn event?

Our 2021 Hack and Learn was divided into three sessions. The kick-off session was held on 11 March. The organising team offered two kick-off sessions, both with the same content, at 9 am and 5 pm (GMT), to make sure that participants from different time zones could join. After an introduction to the INDIGO initiative, all challenge leaders had 5 minutes to pitch their ideas to the public and convince participants to work with them for the next two weeks.



Figure 3. Distribution of participants across the world, according to Eventbrite sign-up.

Participants could pick one or more challenges to work on. Depending on their choice, they would join a particular Slack channel and start working with their new team. Communication over Slack channels lasted two weeks and was a key part of the event, especially because of the different time zones. Conversations were lively and full of questions and ideas.

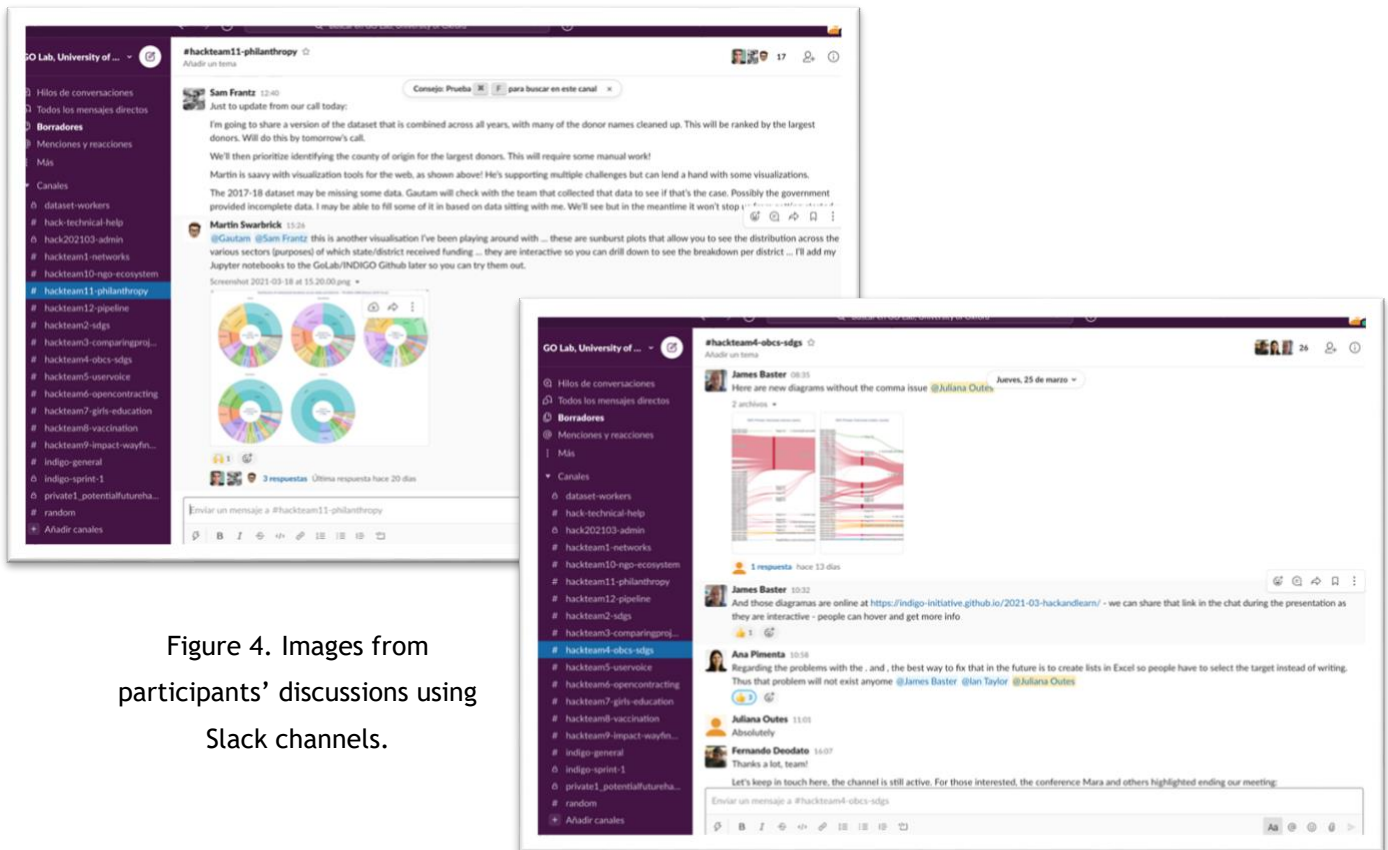
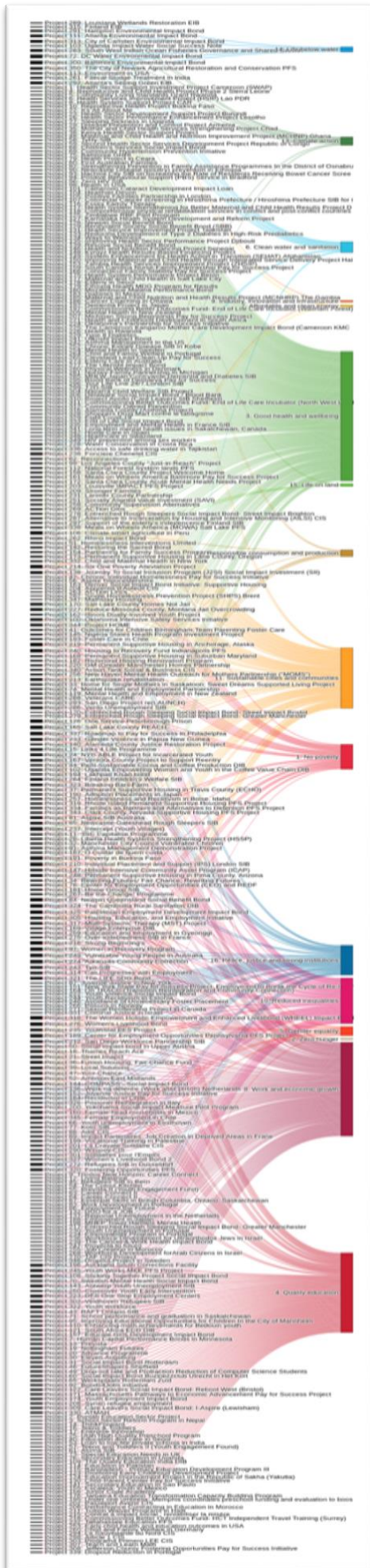


Figure 4. Images from participants' discussions using Slack channels.

In some cases, groups decided to make changes to their initial plans. For instance, Group 5 initially wanted to explore vaccination rates and spatial inequalities in the US. However, they decided to alter that original idea and instead produced a user journey map to understand the number of obstacles a person may face when trying to get vaccinated.

On 25 March, all the groups came together to present the results of their work. We called this gathering the 'Show and Tell'. Each team had 5 minutes to show their analysis, visualisations or infographics. After the presentation, Carolyn Heinrich (University of Vanderbilt), Mehdi Shiva (GO Lab) and Clare FitzGerald (GO Lab) gave feedback to the teams and reflected on future research questions and lines of work.



The goal of this report is to capture all of the learnings that happened across two weeks of work and the final presentations. These ideas and perspectives will be useful both in designing the next Hack and Learn and improving future INDIGO events.

What did we do?

All 9 groups had insightful discussions over Slack and shared their conclusions. Their presentations showed an in-depth analysis of the challenge to solve and a great deal of creativity and thinking.

1. The ‘SDG alignment’ team moved away from their original idea. Instead, they built a spreadsheet listing all the Education Impact Bonds, together with their social outcomes, from the INDIGO [Impact Bond dataset](#). Each participant picked a group of projects, looked for the corresponding SDG alignment and completed the spreadsheet with numbers corresponding to SDG goals. Once that work was ready, they imported that data into the INDIGO database. As a result of the first Hack and Learn (September 2020), the GO Lab website already had a Sankey diagram representing social outcomes and SDG alignments. So, once their new data was incorporated into the existing dataset, the group analysed how the Sankey diagram changed with data from Education projects.

As the Impact Bond dataset does not have data on SDGs for all cases, the group then turned to work with the INSPER dataset, which is a comprehensive dataset of outcomes-based contracts (OBCs). The dataset is so big that it is difficult to read the names of the projects, but the group could identify which SDGs has more

Figure 5. Sankey diagram of SDG alignment of Outcomes-based contracts from INSPER dataset

I had two main reasons to participate at INDIGO Hack and Learn 2021. First, learn more about the last tendencies and academic research in terms of social outcomes. Second, meet more people in the impact investing and social policy fields. But after having a first session all together to present the available projects, I immediately saw that the Hack and Learn would give me much more than that. The pool of projects was so interesting and innovative that it was hard to choose.

In the end I decided to focus in two projects: Aligning outcomes to SDGs (hack team 4) and a new tool for social impact (hack team 9), both connected with my field of research and work. For the next couple of weeks, we worked together to accomplish our goal: aligning educational outcomes with the SDGs (hack team 4) and providing recommendations to improve this new tool that aggregates all webpages, articles, documents, etc. related with impact measurement (hack team 9).

I found all the process super organised but flexible and creative at the same time, which is not easy to accomplish! I was lucky enough to be one of the presenters for both projects, and it was an incredible experience. All other participants and listeners were really interested in our results and made several questions and suggestions. Reaching such a participative and motivated audience is incredible and motivating. I cannot wait to the next Hack and Learn!

Ana Pimenta, PhD Candidate in Impact Investing at Universidad Autónoma Madrid
Social Impact strategy and measurement at Banco Santander

alignments than others. Good health and wellbeing (SDG 3), work and economic growth (SDG 8) and quality education (SDG 4) are the SDGs that are aligned to the most OBCs.

Another important discussion in this group concerned the interrelation of different social outcomes. Databases tend to identify projects as education projects or employment projects. However, the Sankey diagram indicates that projects tend to be aligned with several SDGs at the same time. For instance, the achievement of an education outcome can also lead to the achievement of a better job or better access to health. The group wondered if impact evaluations are paying attention to this interconnection.

2. The user voice team explored how impact bonds incorporate the perspective of service users. The task was challenging due to little data available on this topic. They produced an infographic about user voice across the impact bond ecosystem.

The user voice team hopes more people can get on board with their research as it represents an opportunity to promote a more broadly inclusive policy-making process, to facilitate improvements in service delivery, and to build trust between users and providers.

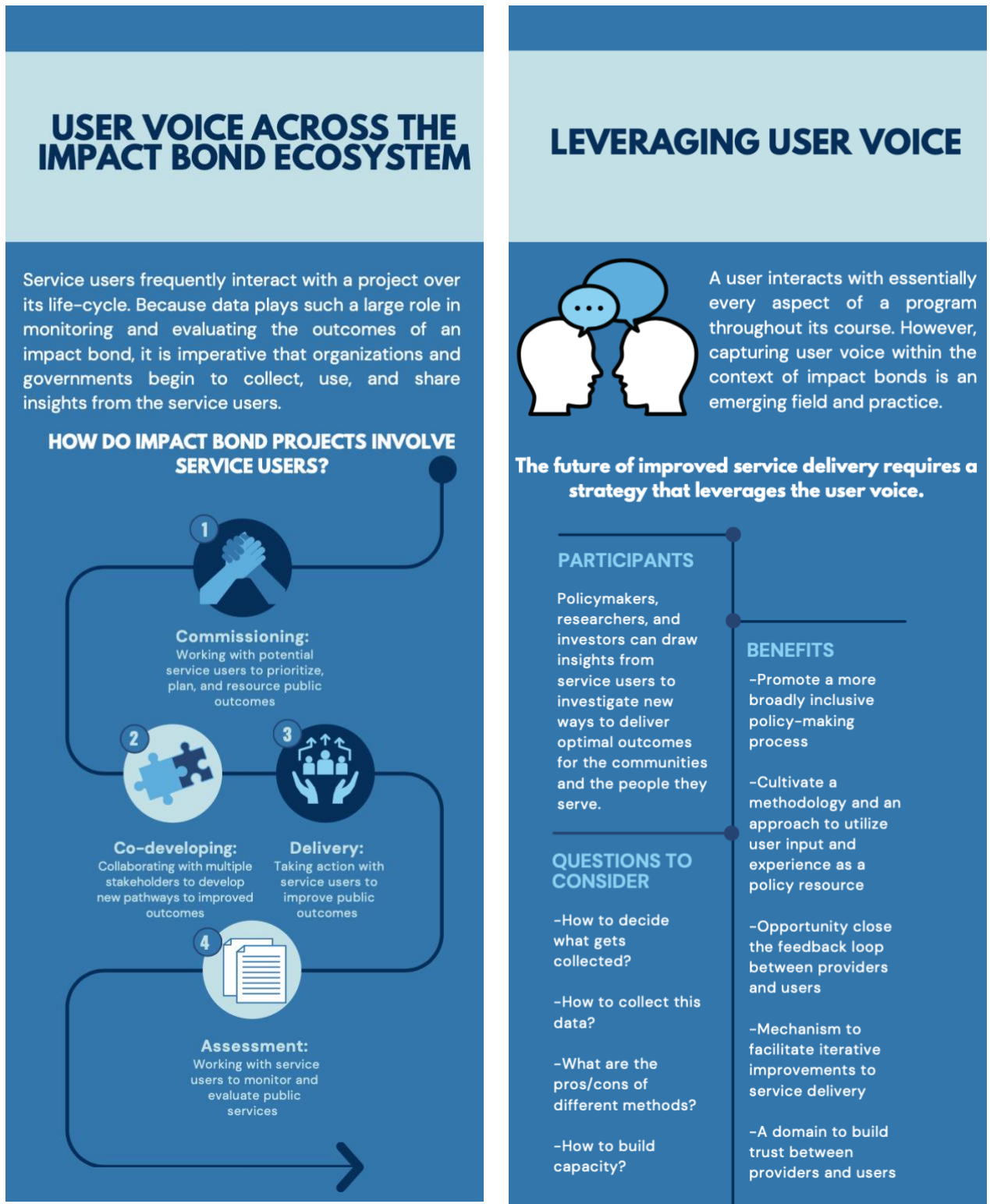


Figure 6. Infographics from the User Voice team

Being invited to co-lead the INDIGO Hack and Learn was both an honour and an outstanding learning opportunity. I thank the whole team, especially my partners from the INSPER team, Ícaro Bernardes and Fernando Domingos, and our professors Sandro Cabral and Sérgio Lazzarini.

I co-led two of the challenges: “Aligning Outcomes to SDGs” and “Puzzles for Measuring Girls Education Outcomes” and together with everybody who joined our challenges I was able to evaluate politics that are already ongoing, analysing them and helping them to be improved, and also proving ground for new ideas.

Being responsible for building a better world through actionable solutions and through tools that stimulated my creativity and problem-solving abilities was awesome and I am so thankful. Hope to see you all again in 2022!

Clara Fagundes Portela, INSPER Brazil

- The Government Awarding Outcomes Contracts team spent two weeks navigating public procurement portals, such as the UK Contract Finder. They were looking for procurement documents corresponding to impact bond projects in the INDIGO impact bond dataset (Tenders, Notices or Contracts, for instance).

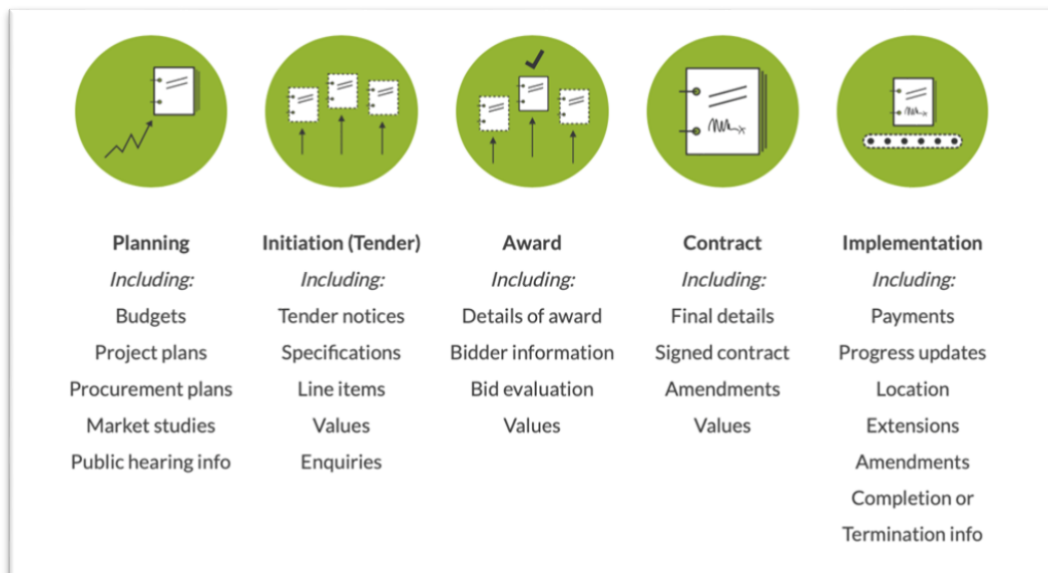


Figure 7. Stages of a procurement process according to the Open Contracting Data Standard.

Finding these documents proved to be a difficult task, for many reasons. Sometimes impact bonds take on the name of the service provider after they have been contracted, but procurement documents use a different name that

the community is not necessarily aware of. Not knowing the original name of the impact bond makes the task more time-intensive, as one needs to try with other key words, such as the name of contracting authorities or the name of service providers. Sometimes, a country has more than one public portal related with procurement, making it even more difficult to identify the location of relevant documents. Finally, this team highlighted the difficulty of finding publicly available contracts. They hope to keep searching so they can link each impact bond project from the INDIGO dataset with the corresponding procurement documents.

4. The Girls Education team analysed a diverse array of documents about challenges for girls' education, such as poverty, child marriage and gender discrimination. They also did a

quantitative exploratory analysis of the INSPER dataset and found that from 45 projects related to Education and Social Care, only one had a particular focus on girls' education (the Educate Girls in India impact bond). The group presented some results from the Educate Girls in India final report, which indicated that girls who were part of the treatment group achieved significantly better results than the control group. In addition, they highlighted that even though only one impact bond had a particular focus on girls' education, many other impact bonds had potential spillover effects that could positively impact education outcomes in girls' lives.

As a PhD candidate researching Social Impact Bonds, participating in this Hack-and-Learn was a great opportunity to connect with and learn from others with a range of expertise and experience on many vital issues. In fact, I found the topics of the challenges so pertinent that I couldn't choose just one (or two!) to join, so I decided to work with three different groups. In reflecting upon my whirlwind, two-week experience, I noticed a few comparative advantages of these different groups, especially as related to the number of members. For instance, in the larger groups (SDGs and Wayfinder), I appreciated the effectiveness of crowd-sourcing efforts in order to produce some meaningful deliverables by the end of our time together. Meanwhile, in the smaller (User Voice) group, I enjoyed the ability to have more nuanced discussions with other passionate individuals about the importance of developing an emerging field. Overall, I thought that the Hack-and-Learn process well-reflected one of the key strengths of Social Impact Bonds themselves: that collaboration allows us to leverage a range of assets from diverse communities to generate more impact. And I look forward to continuing the conversation beyond!

Hilary Olson, Ph.D. Candidate, Public Policy and Management, USC Price School of Public Policy

This groups expects to bring the message that a gender perspective can be beneficial when designing and delivering impact bonds.

I was invited to co-host a pair of challenges in the event by colleagues at INSPER. At first, I was unsure about this task since I never did something similar. Fortunately, our team became more experienced as the challenges progressed. By the end, our fellow challengers listed interesting documents on the field, analysed data on OBCs and provided opinions about OBCs alignment with both SDGs and Girls Education issues.

To achieve this, we deployed two main strategies that evoke the ideas of learning and hacking. Our first concern was to bridge expected knowledge gaps in our diverse group. We did this through the pitches we presented and the documents we suggested. The other issue we anticipated was low engagement and focus. To avoid this, we constantly provided the challengers with simple tasks and examples of results we attained.

In summary, this whole experience was quite enjoyable and stimulating. I am really looking forward to doing it again, now that I became a little wiser to the ways of hosting challenges.

Ícaro Bernardes, UFBA, Federal University of Bahia, Brazil

5. The US vaccination team realigned their interest with user journey experiences. They asked themselves why accessibility is important for Covid vaccination information, and identified a number of important answers, including equity, and both individual and public health. After collating local and national vaccination websites, they evaluated their accessibility depending on range of variables including availability of Alt text, font sizes, and facility for translation.

As an additional output, they developed a user journey map for the hypothetical case of a 55-year-old person who does not speak English, is physically impaired and lives in the State of Arizona. The idea was to show that even when vaccines are available to a particular segment of population, there are some groups that face more barriers than others when booking an appointment.

As possible lines of future research, the team suggested analysing how lack of internet access might affect vaccination rates and exploring the relation between vaccine accessibility and social vulnerability indexes, such as the [index reported by the US Centres for Disease Control and Prevention](#).

I worked with the vaccination data challenge during this spring's Hack-and-Learn. Working with the Beek Centre for Social Impact + Innovation, we wanted to craft our challenge with an equity lens, emphasizing the different impact of COVID-19 on various populations in the United States. Initially, we had intended to explore how COVID-19 vaccination rollout is associated with other demographic considerations and data points, like food security and the ability to make rent. Thinking about this, we posed the challenge of mapping vaccination rates (CDC) onto data provided by the household pulse survey (U.S. Census).

However, we also wanted to be flexible with the challenge, and change the challenge based on our team's interests and skills. Because the vaccination data team was small, with only three people, we found that our interests lie more in the area of access and equity. We found that we were all interested in finding out how people actually go about making a vaccine appointment, and what challenges are associated with that. We then decided to focus on website accessibility for each state, as appointments are typically made online. We created a user journey map as a visual to understand how website accessibility, including language accessibility, can impact vaccination access. We found that there were often issues with state vaccination websites (like font size, contrast, and alt text availability) that often impede access for those with visual impairments. Similarly, websites oftentimes lack clear language access directions, creating barriers for people whose primary language is not English.

Nora Ma, Beek Centre for Social Impact + Innovation, Georgetown University

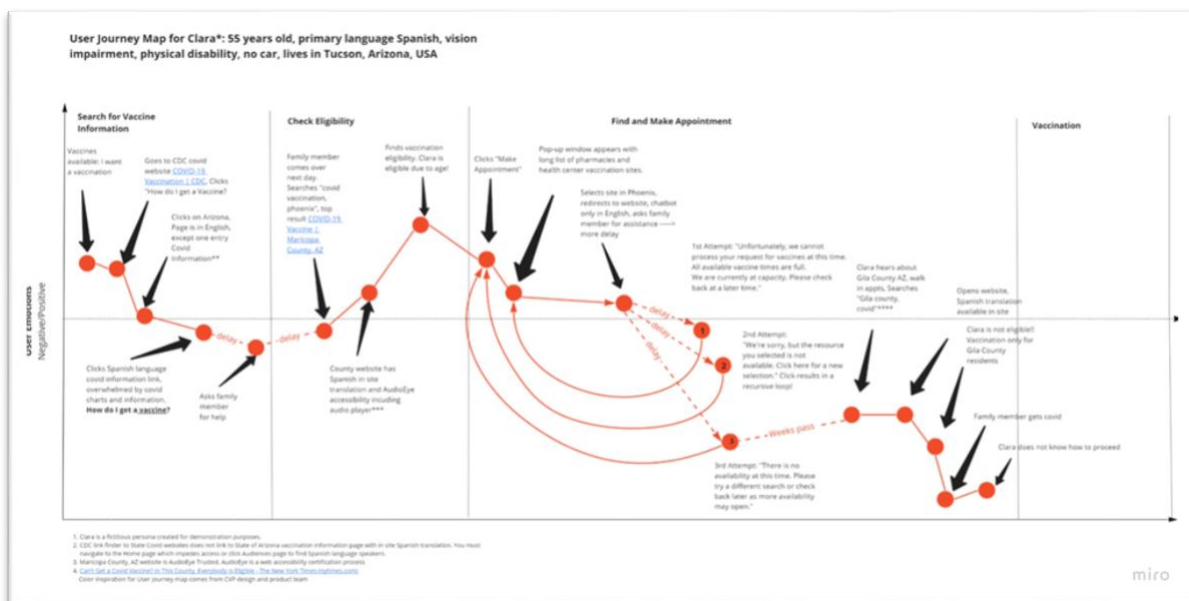


Figure 8. User journey map: vaccine accessibility in the US.

6. The INIDGO [Impact Wayfinder](#) is a recently launched tool that enables practitioners and evaluators to find the best impact evaluation for their project. This team tested the tool and provided feedback to improve the user experience.

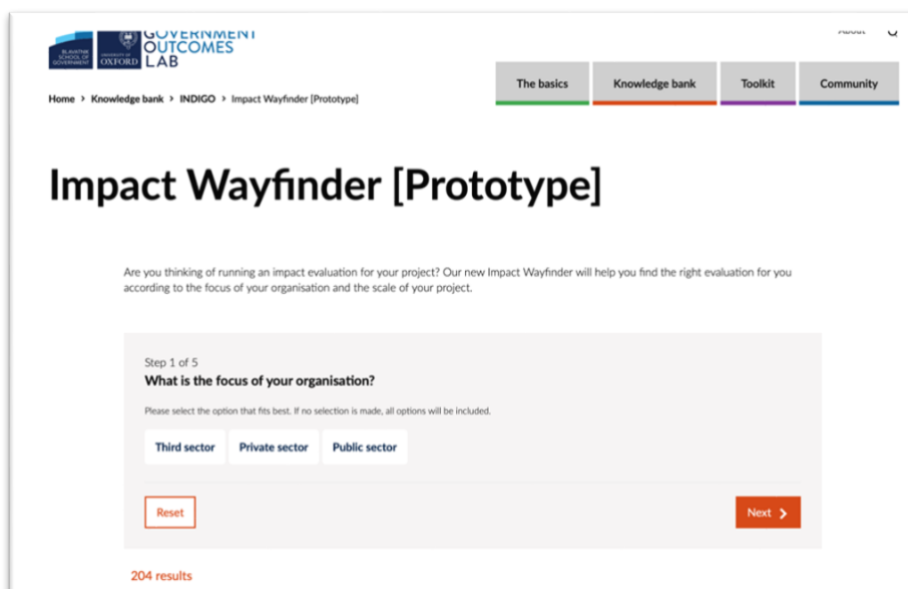


Figure 9. Impact Wayfinder prototype: a tool for social impact

In general terms, the group suggested using simpler words for some questions, giving practical examples for each step of the process (so people can have a better idea of what they should be answering) and providing a user guide with data definitions to support the choice of options.

As long-term goals, they recommended creating new filters that would enable practitioners to filter impact evaluations (for example, by SDGs), ranking resources by level of popularity, and allowing users to export the entire dataset of assessment resources.

HackTeam9 set out to review and improve the new Wayfinder tool for social impact. Regarding the Hack and Learn itself, we found it was somewhat difficult to maintain connection and forward momentum with such a dispersed team. We learned that it is helpful to:

- Lay out expectations ahead of time, to clarify how much time and effort people should set aside for the Hack challenge.
- Take strong leadership as the challenge leader. It was a waste of precious time to ask people to fill out their availability in an online form before scheduling a kick-off. Next time, we should set the time and date of 2 kick-off meetings (for eastern and western hemispheres, roughly) and clearly lay them out in the presentation, along with a more thorough hack challenge plan.
- Assign a "buddy" system to keep people on track and help participants get to know each other.
- Encourage casual social interaction, potentially through setting up an Icebreaker session as part of the kick-offs.

Ruby Dickson, Research Assistant at the Government Outcomes Lab

7. The Centre for Social Impact and Philanthropy (Ashoka University) led a challenge on ‘Standardising the Indian NGO ecosystem service provider database’. Participants were eager to take up the work of cleaning a dataset of more than 4000 rows. Even though the data cleaning work was not finished, the team did make significant progress and set clear short and medium-term goals. The team hopes to get more people interested in working with them to complete the clean-up, upload the data onto Ashoka’s portal and write an academic paper about the ecosystem of service providers in India.

Coordinating two challenges seemed daunting at first, but once the participants joined the respective challenge's Slack channels, there were a lot of ideas exchanged in the first week - the organic interest shown by the cohort, especially by the visualisation team was heartening. After a quick poll in both groups, we earmarked 2 hours a day per project and worked on the project. In the second week, division of labour simplified tasks for the ecosystem database project and in what seemed like a short duration we got quite a bit of work accomplished in both challenges. Special shoutout to Sam Frantz for his stellar efforts on the visualisation project. I really enjoyed participating and co-organising the event.

Gautam BK, Senior Consultant - Tech and Convening, CSIP

8. Another Ashoka-led team analysed the inflow of philanthropic donations to India. With a dataset previously collated by the Centre for Social Impact and Philanthropy, they started a process of data cleaning. They found that the recipient side needed no further work, as it was clear who was receiving philanthropic donations. However, on the donor side, several donors were duplicated in the dataset as they were inputted with slightly different names (e.g., “Bill and Melinda Gates” and “Bill and Melinda Gates Foundation”). The team started the manual work of identifying these duplicated organisations and fixing the dataset.



Figure 10. Distribution of institutional donations across states and districts in India - 2018/2019

Another task was categorising donors by country and organisation type. Thanks to the disaggregation of donors, the team was able to try different types of data visualisations to understand patterns behind philanthropic donations, such as these sunburns plots that present the distribution of institutional donations across states and districts in India for 2018 and 2019.

As next steps, the team recommended continuing to work on data cleaning and categorisation and writing a comprehensive document about the dataset with data definitions. Also, they suggested building an interactive dashboard.

9. Our last team focused on the development of data definitions for a new dataset on upcoming impact bond projects. The team called this potential dataset a 'pipeline' or the 'nursery', as they understood that a considerable part of the learnings take place in the design phase of the impact bond. This pipeline would be a tool to network between potential stakeholders of a project, reduce transaction costs and raise awareness of the dynamic ecosystem 'under the soil'.

The team started by working on data mapping. They compared the variables from a survey by the Impact Bond Working Group to the INDIGO data definitions, [identifying which variables matched up](#) and which ones needed further discussion or standardisation.

The Hack and Learn was a great opportunity to come together with people from different backgrounds and experiences and think about the common challenges we face when talking about Social Impact Bonds. It is not often that you see such a diverse group of people brainstorming about the same projects - students, academics, people from international organisations and governments, and more. On one of the teams that I was a part of, intended on creating a pipeline for new Social Impact Bonds, it was incredible to see how some challenges we face are the same all over the world. We do not have all the answers yet but coming together to work on common challenges is a great first step towards them.

Mayra Gramani, Oxford MPP student

The team shared four main learnings with the community. First, there were two key definitions that were necessary to define the scope of the dataset: when a project can be part of the dataset, and when a project should leave the pipeline. Second, stakeholders could view some of this information as commercially sensitive. As a result, there is a need to consider which data pieces stakeholders are willing to share with the broader community. Hence, the group identified only 5 variables that should be a 'must have' for upcoming projects to be part of the new dataset. Third, more thinking should be done around how to motivate stakeholders to share data. Publishing a quarterly report or sharing regular snapshots of the dataset are possible solutions.

Finally, the team highlighted that this an initial prototype and many iterations may be needed before they have a final version. All the INDIGO community is invited to provide feedback and contribute with data definitions and standardisation.

What did our co-hosts learn while co-hosting the event?

The Hack and Learn was a learning opportunity for challenge leaders can co-host institutions. Learnings can be summarised in three different categories.

First of all, challenge leaders said that they gained and improved their organisational skills. The design of each challenge took a considerable amount of work including thinking of research questions and framing the challenge, setting up Slack channels and organising introductory material, coordinating activities and timetables, and finding new ways to keep participants engaged. Organisational challenges were further magnified by the virtual nature of the event.

I enjoyed my time leading one of the hack-and learn challenges, as it allowed me to learn from other data enthusiasts and develop new skills. Through this experience as a co-host, I not only learned technical skills from the hacking itself, but also online organizational skills. I learned how to virtually coordinate people and find new ways to engage people through slack, like sending messages that had clear action items to make sure everyone was on the same page. I also learned how to better delegate tasks virtually between participants based on their interests. These organizational skills helped us improve our learning and find ways to modify the challenge to each of our skills sets.

Nora Ma, Beeck Centre for Social Impact + Innovation, Georgetown University

Challenge leaders also mentioned developing leadership skills. Running a two-week challenge with people from around the world taught them about different leadership strategies. For instance, while some groups were more responsive and needed no further intervention, others were in need of a leader who could give clear instructions, distribute work across participants and organise a final presentation for the Show and Tell session. Challenge leaders had to identify whether a group needed a firm leader or could self-organise and work independently.

The Hack and Learn was a networking opportunity, too. Co-hosts used this event not only as a learning space, but as social space as well. It was a moment to meet new people and connect with other research institutes that are studying similar

topics. These new connections could potentially develop into new research projects, or new challenges for future Hack and Learn events.

The INSPER team embraced the Hack and Learn as an experience of sharing and collaborating to learn together about OBCs and their broader impacts. We perceived the Hack and Learn as an opportunity to connect with other leading schools in Brazil, inviting researchers from UFBA to join us. We believe this is fundamental to enhance the long-term engagement of our own Brazilian community in tackling such global issues together with INDIGO. It would be a pleasure to join again in further events. Our social comms team wished to have more time to promote the event within and outside the INSPER community, further spotlighting the Hack and Learn. We could work together in planning innovative mechanisms to enhance the participants' engagement.

Fernando Deodato Domingos, INSPER Brazil

Apart from reflecting on their learnings, challenge leaders also identified specific parts of the event that they would like to improve or change for future editions. Most suggested that earlier social media promotion of the event may have been more productive. The first tweets and LinkedIn announcements were published in February 2020 but the entire organising team agreed that an earlier start would have had better results in terms of number of participants.

In addition, there is an ongoing discussion about the ideal number of participants for a group. The Hack and Learn had no specific rule for the number of members of a team. If one challenge only got 3 participants, it was up to the participants to decide if they wanted to keep working within a small team. Other teams had more than 10 participants, for instance, and could distribute work more effectively. Some possible solutions for this disparity are to decide on a minimum number of participants per

group and/or offer fewer challenges to participants, so as to incentivise a higher number of participants per challenge.

What are our next steps?

At the GO Lab, we believe that learning with the community is a key part of our work. After our first Hack and Learn (September 2020), the INDIGO team integrated some of the products from the three teams into our website. Both the SDG Sankey diagrams and the Social Investment/Fund Manager prototypes originated as part of our Hack and Learn. We would like to take the same approach this time and analyse which data visualisations and/or other ideas can be incorporated into our website.

Keeping in touch with our participants is a key priority. Our Slack channels will remain active through the year, and we will keep sending invitations to learning activities or other opportunities through that channel. Those who expressed an interest in being added to our mailing list will be included in the INDIGO mailing group and receive invitations to peer learning sessions and other events.

Finally, we will start organising our next Hack and Learn event. Your feedback and learnings will be used to design and improve our next event. If you want to share your thoughts with us, you can do it [here](#).

Leading Challenge 5: User Voice was a daunting proposition! Exploring user voice was a first for INDIGO, and this meant a blank page to create something original or we would have so much rope that we tie ourselves up in knots - to mix our metaphors. Despite this we could rely on an energetic community that have previously expressed an interest in 'user voice'. On reflection, our pitch of the opportunity to join and shape the challenge was overly vague and didn't have enough concrete elements for INDIGOers to understand how their skillsets could be used in the challenge. While we didn't get the uptake we wanted, the 'elite' team of Hilary and Natalie brought the enthusiasm equivalent of that of an army of INDIGOers.

A truly collaborative experience. This was always our big pitch; we wanted our members to come with their own interests and experiences to help create our outputs. As a group we explored literature of the rationale for collecting user voice data and the methods of collecting this data. Natalie developed a wonderful infographic that outlined the touchpoints where user voice data could be collected. For a small team, we delivered a KO punch!

Just the start. Now that we have a clearer idea of our place in the INDIGO ecosystem we have plans to continue our work exploring who might be the users of 'user voice' data, what questions might be answered using this data, and we are exploring the potential of building a pilot data model. It is not too late to join!

Leigh Crowley and Franziska Rosenbach,
Government Outcomes Lab

I am interested in being part of INDIGO, how can I contribute?

INDIGO is a diverse community of peers with an interest in better data for better social outcomes. You can help us grow our community by attending our quarterly peer learning sessions, joining future Hack and Learn events and signing up for our mailing list. If you prefer social media, engage on Twitter using @golaboxford and #indigoinitiative.

If you are involved in the delivery of an Impact Bond project, you can share data with us and email us at indigo@bsg.ox.ac.uk if you have any questions or need a place to publish your open data and documents.

Finally, the GO Lab will hold the [Social Outcomes Conference](#) on September 2021. We are inviting submission for papers and presentations from policymakers, researchers and practitioners. The Conference will be guided by the following question: How can government combine its multiple roles - sometimes as provider, funder, facilitator, and regulator - to support activity which improves social outcomes? If you think that your work can help to answer this question, we encourage you to submit a proposal.