Combatting Modern Slavery through Data, Technology and Partnerships
Data Webinar Series: Introduction

In August and September of 2018, Freedom Collaborative\(^1\) held a five-part webinar series examining the role of data, technology and partnerships in combatting modern slavery and human trafficking.

The series brought together experts from different sectors—including law enforcement, information and technology companies, the financial industry, NGOs and the fishing industry—with the goal of drawing from differing perspectives and professional experiences to discuss approaches that enhance our ability to positively impact vulnerable people and create environments that are safe from modern slavery.

This paper explores and develops the themes and discussions raised in the webinars and draws upon the experience of Liberty Shared’s Information and Data Collaboration (IDC) Programme. To listen to the recordings in their entirety, visit: [https://vimeo.com/user48451698](https://vimeo.com/user48451698)

\(^1\) www.freedomcollaborative.org
Executive Summary

In a world that is culturally diverse and increasingly rich in information, data has helped humans develop knowledge and understanding of the environments in which they live. Data, when gathered purposefully and analyzed effectively, has the potential to play an important role in addressing societal issues like modern slavery and human trafficking. It provides an opportunity to “see a bigger picture that clarifies connections among many factors and identifies root causes of complex problems.”

High-quality information helps inform the decisions of those working to address these problems and allows them to better coordinate their responses. As Mayer-Schönberger points out, “by reconfiguring markets and making them data rich, we shape human coordination more generally.” Many disparate models are currently being used to fight human trafficking. Each may be effective in its particular niche, but overall, anti-trafficking efforts remain fragmented and often practitioners in the field are unaware of each other’s efforts. By using data to coordinate our approach, we argue that a more effective response is possible, one that will ultimately prove more beneficial to those we seek to represent.

Human trafficking is a multi-dimensional issue, and as such, it requires a well-rounded research approach that draws upon different types of data sources and research methods. In this paper we explore some of the uses and limitations of different types of data, focusing particularly on big data and thick data, and consider methods and technologies available for collecting data both online and in the field. We argue that integrating disparate sources can lead to insights that were not possible when relying on a single source type, and that doing so helps develop a deeper understanding of the environments and factors contributing to human trafficking activities.

In discussing the ways that data can be used to focus on what is most important in responding to human trafficking, we consider a variety of factors that influence the information needs of actors within a given industry, particularly in regard to information that can help them prevent their involvement in human trafficking and related abuses. The legal and regulatory obligations in place within an industry, the infrastructure that supports information sharing, and consumer demands and preferences all play a role in shaping information environments and contributing to varying levels of transparency.

To conclude, we look at how partnerships, combined with tools for innovation and scale, can increase impact by drawing upon the strengths of different organizations to capture, process and communicate data. These strengths position partnerships to “work toward deep system change by transforming the underlying assumptions and policies that govern existing processes and procedures.”

These partnerships require a shared vision, clarity on the risks and rewards of the partnership, and a clear decision-making process. They also need investment from both sides, and rely on consistent and coordinated leadership, clear communication channels and a strong basis of trust.

Both public actors and private organizations stand to benefit in their efforts to combat human trafficking through partnerships. Civil society, government and industry offer unique resources and expertise which, when combined, can increase capacity and build effective responses to disrupt the business of modern slavery and the environment in which exploitation thrives.

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4 Stroh, Systems Thinking, page 10.
The Role of Data in Coordinating Human Trafficking Responses

In considering how to most effectively utilize data in addressing human trafficking, we first explore different types of data and several purposes for which they are collected. Data can be gathered to help make informed decisions, highlight trends and answer well-defined questions. In counter-trafficking efforts, this includes collecting data to gain insights about trafficking hotspots, perpetrator and victim information, country of offence, and trends in media reporting, among other areas. The value of data becomes evident when it allows for analysis which can be translated into a coordinated response.

Data, a collection of facts made up of numbers, words, measurements and observations, has taken new forms in recent decades and is continually evolving as new technologies develop. Data in itself isn’t a new invention. Prior to computers and the ability to store information electronically, the data universe consisted of primarily physical formats, such as paper transaction records, customer records and archive files. The development of computer-based databases paved a way to storing and organizing data on a mass scale and in easily accessible and shareable formats.

Big Data

The term “big data” refers to the collection of this data and our ability to use it to our advantage across a wide range of areas, from business to human rights. Big data works on the principle that the more you know about anything or any situation, the more reliably you can gain new insights and make predictions about what will happen in the future. By comparing more data points, relationships begin to emerge that were previously hidden, and these relationships enable us to learn and make smarter decisions.

Big data is made up of large, often complex data sets that are derived from diverse sources, such as online activity, GPS-equipped smartphones, social media and chat applications, purchasing patterns, and many others. These data sets include both structured formats (such as numerical data) and unstructured formats (like photos, text files or audio). Big data is ever-expanding given the increasing range of online activity and growth in internet access globally. As Bernard Marr points out, “every two days we create as much data as we did from the beginning of time until 2000.”

While big data can be helpful in answering specific research questions, drawing high-level insights, directing research priorities and guiding human focus to areas that merit more in-depth analysis, it also has limitations. It has the potential to reflect a great level of detail about observed events and behaviours, but often lacks the ability to explain why they occur, or the factors and reasons influencing them. We cannot assume, for example, that the cultural nuances and social context of individuals from different backgrounds, who have varied preferences and reactions, will be reflected in a data set that is limited to a specific set of quantifiable information inputs. Media articles, for instance, provide an excellent source of data about human trafficking activities; however, they typically report on the outcome of events and often lack information that dives into the underlying factors contributing to those events.

In recognising limitations of big data, it’s important to also direct efforts towards gleaning relevant information from a second, distinct type of data, known as “thick data.”

Thick Data

Thick data, which examines people’s emotions, motivations and reasons behind their behaviours and preferences, is gained through exposure to realities on the ground, primarily via qualitative research methods. It is this ability to dig into reasons that influence people’s actions and decisions that make thick data an important information source in developing a richer
understanding of human trafficking, allowing for insights that are not possible through big data analysis alone. Thick data can provide information about cultural context and trafficking systems, including networks, relationships and the specific roles of individuals. It can also help to identify risk factors that lead to vulnerable people being exploited within high risk industries. Such risk factors include racial and ethnic biases, gender stereotypes, and levels of education, unemployment, and criminal activity.

Thick data, like big data, has its own share of limitations. It typically requires time intensive research methods and focuses on smaller sample sizes, raising issues of scalability and statistical validity.

Public and Private Actors Utilizing Data

Industry, corporations, media outlets, and public sector actors can stand to benefit from both big data and thick data. As discussed further in this paper, we highlight how companies and non-profit organizations are gathering diverse types of data in their approach to advise and bring transparency to their specific areas of interest. For businesses, data can be used to identify risk, improve a customer's experience, refine a marketing strategy and increase cashflow. As an example of data being used to identify risk, banks are able to view their clients' transactions records, showing how a person or entity is spending their money. This transaction information can be used to identify criminal activity and assist banks in responding to that activity.

We argue that corporations, media outlets and public sector actors have a key role to play in data collection and aggregation that can be used to help coordinate responses that impact human trafficking and influence change in society. Collectively, actors in private industry, government and civil society cover a wide range of topics relevant to human trafficking research, including migration, civil unrest, markets, unemployment, mental health, crime rates, corruption, and organized crime. They are well-positioned to collect these and other types of information, that when combined, can influence the way in which diverse sectors work together to coordinate their responses to human trafficking and other social issues.

In conclusion, to maximize the ‘impact of data’ in the fight against human trafficking, it should be collected in a way that directs a coordinated response, helps make informed decisions, highlights trends, allows for meaningful analysis and answers well-defined research questions. It is important to learn all we can from data while simultaneously recognizing its limits. By its very nature, data is backward looking; it tells us about events and behaviors that have already occurred. Even machine learning (discussed in the following section) uses data about past events to construct models aimed at predicting likely future events or behaviour patterns. With this in mind, the diverse forms and circumstances of human trafficking and how it changes over time should not be discounted. Data is not the silver bullet to combating human trafficking, but without it, our anti-trafficking efforts remain fragmented and we as practitioners fail to learn lessons that could greatly assist in our response.

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10 https://thomasthethinkengine.com/about/
Data Collection Methods

Data collection is the process of collecting, collating and measuring information of interest in an established, systematic fashion. Collected information can come from a range of sources using a variety of techniques, including interviews, surveys, observations, ethnographic research, document and record analysis, and focus groups. Information can be gathered online, in the field, and using a combination of the two.

Application: A Snapshot of Liberty Shared’s Data Collection Methods

Liberty Shared uses a variety of data collection methods in its work. The Information and Data Collaboration programme with Freedom Collaborative, for example, recently released a questionnaire focusing on the nexus between human trafficking and corruption. The questionnaire was shared electronically with over 300 anti-trafficking NGO’s, asking about their experiences and observations in dealing with corruption. A questionnaire format like this allows for the responses to be analyzed with quantitative methods by assigning numerical values to Likert-type scales.

Ethnographic research methods, such as those used in Liberty Shared’s focused work on the palm oil sector, involve studying social interactions and phenomena in the context of a person’s natural environment. It uses a combination of techniques such as observation, interviews and surveys. Conducting field interviews requires a standard of best practices, as the interviewer must take into account realities on the ground, such as cultural and contextual issues, language differences and the challenges posed by communication infrastructure. Clear, focused questions are important in overcoming these challenges.

Another data collection method Liberty Shared employs is aggregating documents and records in its Victim Case Management System (VCMS). The VCMS programme supports frontline NGOs in their work caring for victims of and people vulnerable to human trafficking and modern slavery, enabling the community to use data prudently in the care for the individuals as well as in the fight against human trafficking globally.

Artificial Intelligence

In an age of significant technological developments, the use of online applications and tools like artificial intelligence (AI) technology has become increasingly popular and oftentimes provides a more efficient way to collect data. Bernard Marr discusses the importance of AI in our world, stating “AI technology is a crucial lynchpin of much of the digital transformation taking place today as organisations position themselves to capitalize on the ever-growing amount of data being generated and collected.” Marr further states that the big data revolution has led to intensified research into ways it can be processed, analyzed and acted upon.

AI tools help gather and process big data, as they have capabilities to sift through huge amounts of information to identify patterns. In research on human trafficking and labor exploitation, the added value of AI technologies is seen in several examples in which these tools have been used to initiate contact and collect information from the field, particularly in remote, difficult-to-reach areas. Radio campaigns in Afghanistan and Thailand, for example, have been used to broadcast interview questions about labor recruitment, inviting listeners to respond via SMS short codes. The responses were used to spur further research about the actors identified in the text messages. Bots are another useful tool that can scan vast amounts of information, such as advertisements for jobs or sex, and reach out via the contact information listed on the advertisement to gather additional information.

Machine Learning

When supported by robust data sets, AI can also be used to create predictive models. A core concept of AI is the idea of building machines which are capable of thinking like humans. According to Marr, this field of AI known as “machine learning”

11 https://ori.hhs.gov/education/products/n_illinois_u/datamanagement/dctopic.html
12 https://cyfar.org/integrating-technology-data-collection
13 https://www.bernardmarr.com/default.asp?contentID=963
has been the most fruitful in recent years. The foundation of machine learning is that rather than having to be taught to do everything step by step, machines, if they can be programmed to think like us, can learn to work by observing, classifying and learning from their mistakes, just like we do.\textsuperscript{14}

AI technologies can also be helpful in extracting information relevant to human trafficking from the dark web. AI tools can gather strategic intelligence, such as identifying patterns in the way information is posted and in what time zones or conducting trend analysis on the language used. Those seeking to gather data from the dark web are encouraged to partner with law enforcement and with companies who have the technical capabilities to work in this environment.

While AI provides benefits in terms of efficiency, new capabilities, and in its ability to process large amounts of unstructured data, human oversight is still an important part of accounting for errors, mitigating risk and defining the information priorities that AI is used for. The fundamentals of intelligence gathering, such as validating information with independent sources and challenging outputs, need to be maintained when using technology to enhance research.

\textbf{Security}

Having outlined various data collection methods, it would be remiss to ignore the importance of implementing security measures whilst collecting data from the online environment and in the field. Using a Virtual Private Network (VPN) to protect one’s cyber footprint, and using tools like special settings in web browsers, help safeguard anonymity online. Implementing best practices for managing a research team, including clear protocols and oversight systems, also help reduce risk. Another key security component is understanding the legal and regulatory framework in which one works and building partnerships with law enforcement agencies, so information can be properly disseminated when it moves beyond the organization’s scope.

\textbf{Combining Disparate Data Sources to Drive Impact}

Combining information from multiple sources is an important part of maximizing data’s impact in anti-trafficking efforts. Doing so provides a more complete picture of complex phenomena like human trafficking and environmental crimes, issues that are impacted by a multitude of factors and cannot be captured by a single metric. Analyzing different types of data sources can lead to new insights as the issue at hand is approached from various angles, in turn fueling new research questions and further data collection. Using a mixture of data sources is also helpful in that it can support the development of more reliable conclusions that are verifiable across sources rather than relying heavily on a single data set or source.

\textbf{Disparate Data Sources in Practice}

Several examples from the non-profit and private sectors demonstrate ways in which disparate data sources are currently being used to enrich the information available to efforts to combat issues like money laundering, organized crime, illegal fishing and human trafficking. One example is seen in the approach used by Dow Jones Risk and Compliance,\textsuperscript{15} a global provider of third-party risk management and regulatory compliance solutions. Dow Jones brings together government sources, news outlets, and criminal records produced in a large number of languages, integrating information from these sources to create risk profiles of individuals and entities. These profiles are used to help their clients make better daily business decisions, including mitigating their risk of doing business with actors linked to human trafficking and related crimes.

Another example of using disparate data sources in complementary ways comes from Global Fishing Watch\textsuperscript{16}, a non-profit organization that tracks and maps global fishing patterns and contributes to greater transparency at sea. One of the primary data sources they use is vessel positions from ship transponders. However, as

\textsuperscript{14} Ibid.
\textsuperscript{15} https://www.dowjones.com/
\textsuperscript{16} https://globalfishingwatch.org/
this can be limited by the simple act of turning transponders off—for example, to conceal illegal fishing practices—additional data sources are important. They also use satellite and radar imagery, and “night lights” (the bright lights vessels use to fish at night) to track vessels, and support this with secondary sources like information from regional fisheries management organizations to learn more about vessels and their owners.

**Data Aggregation**

In addition to bringing together different types of data sources to better inform human trafficking research, there is also a need to aggregate and harmonize similar data sets collected across different institutions and organizations. Huge amounts of relevant data exist, but there is a general lack of infrastructure, particularly central databases where data from many sources can be stored, organized and key inputs harmonized. For example, thousands of NGOs globally work with victims and populations vulnerable to human trafficking, collecting client and case information that can shed light on questions about victim risk factors, perpetrator behaviors, the impact of corruption and trafficking routes, among other areas. While many organizations may be collecting similar types of information from victims, they typically have their own documentation processes and record data in different formats and languages. Efforts to pool data sets currently housed across many organizations, such as projects like the Counter Trafficking Data Collaborative,\(^\text{17}\) are important in developing targeted counter-trafficking policies and programming that respond to realities in the field.

Private sector examples can serve as a basis for those seeking to design effective human trafficking data aggregation and harmonization methods. Bureau van Dijk\(^\text{18}\), for example, a company which provides business and risk information, collaborates with over 170 information providers to collect data in a centralized platform. As many counter-trafficking practitioners face practical challenges that limit their ability to aggregate data from different sources, such as a lack of funding or technical tools and expertise, partnerships that span across organizations and sectors have a particularly important role to play. This topic will be discussed in greater detail in later sections.

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\(^{17}\) [https://www.ctdatacollaborative.org/](https://www.ctdatacollaborative.org/)

Factors Shaping Information Environments

In discussing how data can be utilized to better understand and combat human trafficking, it is important to also consider factors that impact the information environments of different industries, particularly the availability, quality and use of risk information that helps companies conduct due diligence and avoid involvement in criminal activity and human rights abuses. Actors in different industries demonstrate varying levels of engagement in terms of seeking out and utilizing information to support their efforts to address and prevent trafficking and labor abuses.

A comparison of the financial industry and the fishing industry is useful for exploring these differences and examining how factors like the strength of the legal and regulatory framework, the development of infrastructure to share risk information, and consumer preferences and demands factor in to the level of transparency.

Case Study: Access to and Use of Information - Financial Industry vs. Fishing Industry

The information needs of actors within a given industry are directly impacted by the legal and regulatory obligations they face and the accompanying levels of enforcement. The financial industry, for example, is a highly structured environment in which the anti-money laundering legal framework creates heavy due diligence obligations for banks and other financial institutions. The serious legal consequences for those who fail to sufficiently mitigate risk, comply with regulations and report suspicious activity has contributed to the development of platforms for gathering and disseminating risk information to financial institutions, an important piece of which includes the services of third-party risk databases. The demand from industry for relevant risk information, met by the development of infrastructure to address these information needs, has contributed to a more transparent environment.

The fishing industry, on the other hand, has been a more challenging arena in which to develop data and engage industry actors in transparency efforts. The very nature of fishing—much of which is conducted on the high seas and which, until more recently with the development of better tracking technologies, has had few oversight mechanisms available—has made it a historically nontransparent industry and one that is ripe for worker exploitation and illegal fishing practices. The weak regulatory and enforcement environment has also contributed to a lack of infrastructure and communication platforms to share information about risky actors.

![Figure 1: Structured environment vs unstructured environment.](image)
Tough legal and financial consequences for fishing industry actors that exploit workers and participate in illegal, unreported and unregulated (IUU) fishing are needed to help shift the norm of non-transparency to an environment that is information rich. In addition to enforcing consequences for bad actors, there is also a need to make good actors want to be seen. One way to do this is to create opportunities for fishing companies to demonstrate transparency and to be rewarded for it.

Where legal and regulatory obligations and enforcement come up short, calls for transparency from consumers are helping to fill in the gap, creating new demands on industries across the board. Shifts in consumer preferences towards supply chain traceability and ethical consumerism, as well as increasing expectations of open data appear to be linked to a generational push from millennials. These expectations will likely change the ways data is shared, open doors for cross-sector collaboration, and drive transparency in historically opaque industries like fishing.
The Power of Cross-Sector Partnerships

We conclude by reflecting on the importance of partnerships in combatting human trafficking, emphasizing how cross-sector collaboration presents the opportunity to leverage diverse strengths and resources to achieve greater impact.

In David Stroh’s book, Systems Thinking for Social Change (2015), Jason E. Glass, Superintendent and Chief Learner of Eagle County School, points out, “Societal problems, (of which human trafficking is a major one) are a swirl of causes, effects, interactions and contributing relationships. Yet, too often, simplistic answers are applied by the well-intended that only touch on the one strand of what is (in reality) a complex and interconnected web.” Such “simplistic answers” often arise when civil society, government and industry work in silos. Industry is often left out of discussions about policies that impact it most directly, in turn, contributing to pushback in compliance with regulations.

The need to bring civil society, government and industry to the same table is therefore key to combating human trafficking. By bringing these groups together, all can benefit and together create more targeted solutions in efforts to address trafficking. For example, government actors writing policy benefit from the specific knowledge that industry brings, allowing for the creation of policies that are better designed for real-world application. NGOs help industry and government to understand the human impact of their work, and industry’s voice is heard and accounted for in the laws that affect their daily operations.

Successful public-private partnerships “meld public purpose with private practice." Such partnerships can enable growth, increase productivity and multiply impact. By combining resources and expertise, partnerships provide access to new markets, increased capacity, sharing of risks and costs, and access to specialized staff, training and finance. Furthermore, corporates’ technical capabilities and expertise in areas like AI can help NGOs develop capacities in those areas. Leveraging the strengths of private industry can generate collective benefit across the NGO community and expedite results in counter-trafficking efforts.

In a 2010 publication, Rosabeth Moss Kanter, writing for the Harvard Business Review sets out steps for successful strategic alliances. Kanter suggests that “alliances and partnerships resemble modern marriages… and to extract value… they must apply these principals at every stage of the relationship.” When applied, the principals highlighted by Kanter, create platforms for public private partnerships that offer great opportunities and present, like any relationship, certain risks.

21 https://www.nibusinessinfo.co.uk/content/joint-venture-benefits-and-risks
22 https://hbr.org/2010/06/15-steps-for-successful-strate.html
Kanter states that an adequately defined vision is an important piece of establishing a partnership, but this alone is not enough to guarantee its long-term success. Ward, in a 2018 article, highlights risks to mitigate when entering into a partnership, making a case that partnerships fail when values are not aligned, when there is unequal commitment between the partners, unresolved personality clashes and a lack of trust.²³

Building upon this, we highlight three successful public-private partnerships that demonstrate attributes as raised by Andonova, Kanter and Ward and that illustrate the relevance of these models in the development of effective anti-trafficking activities.

**Project Protect**

Project Protect, officially launched in January 2016, is an initiative to combat money laundering and human trafficking. It began when a former director at Bank of Montreal accepted the challenge of a human trafficking survivor who called on financial institutions to be more actively involved in fighting human trafficking. The project, constructed on a model of partnership, included individuals from both public and private institutions. Law enforcement, regulators, NGOs, technology companies, and several major Canadian financial institutions were participants. The goal of their combined partnership was twofold: to raise awareness about the intersection of money laundering and human trafficking, and to increase the reporting of suspicious transactions pertaining to possible human trafficking to FINTRAC.²⁴

To ensure the goals of the project were met, each member of the partnership was asked to abide by a four-point strategy. The objectives of the project were designed to leverage financial institutions' existing legal requirements and strengthen formal communication channels between financial institutions and with partners like FINTRAC and law enforcement who could maximize the information provided to them.

Since the project was launched, there has been a dramatic increase in the number of suspicious transaction reports filed in relation to human trafficking, and elements of the model have been adapted internationally. This partnership's success is credited to the establishment of clear objectives and the buy-in of the partners, who are committed and motivated to make time for the partnership.

**Joint Money Laundering Intelligence Task Force**

Another example of public-private collaboration is the Joint Money Laundering Intelligence Task Force (JMLIT) in the UK, which involves law enforcement, government, the British Bankers Association, and over 40 major banks.²⁵ With crime trends changing and developing, law enforcement recognized that to keep pace, they needed to be working with private companies to leverage their skills, resources and technology. As a result, JMLIT was established in May of 2016.

Since then, JMLIT has seen great success in coordinating interventions between law enforcement and the financial sector to combat high end money laundering. JMLIT has contributed to over 100 arrests, over 3,000 bank-led investigations into customers, the identification of over 3,500 bank accounts linked to money laundering, and the closure of over 1,500 accounts.

Like Project Protect, JMLIT has well-defined objectives and operational priorities which are kept under on-going review. The partnership also benefits from working within a strong legal platform. The information sharing provisions in the legislation that created JMLIT are broad, allowing the National Crime Agency to share and receive intelligence. Another key factor contributing to its success are the benefits that law enforcement has gained from partnering with private companies.

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Ria Financial and Liberty Shared

Our final partnership example comes from Liberty Shared's collaboration with Ria Financial, a global leader in money remittances. Ria is a part of an industry that moves more than $575 billion each year, providing a secure, reliable and affordable way to send money via cash pick up, bank deposit, and home delivery as an alternative to traditional banking services. They are located in 149 countries, in 361,000 locations and trade in over 100 currencies.

Liberty Shared strategically partners with Ria Financial as a way to increase the capacity and impact of the work carried out by Liberty Shared’s Information and Data Collaboration Programme. Liberty Shared provides Ria with information about individuals prosecuted for human trafficking. Ria, as a company with a global footprint, has the resources, staff and technology needed to proactively identify those individuals in their database of customers or beneficiaries who may be using their services as a means to engage in illicit activity. Ria is able to block financial services to those identified when relevant.

Partnerships like this have a direct impact on a financial institution’s daily operations, helping them identify and carry out the reporting of suspicious transactions that they are obliged to do by law and avoiding fines from regulators.

Whilst each partnership highlights successful attributes, challenges to these partnerships are also evident. Managing logistics, the need for flexibility in an ever-changing environment, and adhering to privacy laws and data sharing measures are three such issues. Project Protect managed the legal restraints to privacy it faced by designing the model so that no breaches of privacy laws, on either the public or private sides, would have to be undertaken in order for the project to be effective. JMLIT designed a legal framework that allowed the National Crime Agency to share and receive intelligence. RIA proactively uses information received from Liberty Shared that comes from the public domain, thereby avoiding the sharing of sensitive data.

As demonstrated, well designed public-private partnerships are increasingly important in combating modern day slavery. Richard Norment, Executive Director National Council for Public-Private Partnerships, states “most important of all is that the private and public sectors build a collaborative relationship – one that requires “give and take” on both sides of the table to make the project a success.”

26 https://corporate.riafinancial.com/
PANELISTS

We sincerely thank the following panelists and moderators for sharing their time and ideas, and our viewers for tuning in and contributing thoughtful questions.

**Webinar 1: The Data Universe and its Boundaries**

Jake Shapiro is a Professor of Politics and International Affairs at Princeton University and directs the Empirical Studies of Conflict Project. He is also the President of Giant Oak, a technology company that uses AI and machine learning to tackle problems like human trafficking.

Jamie Shaw is the Analytical Operations Manager for Assaye Risk, responsible for overseeing due diligence and corporate investigations. He worked previously in Military Intelligence and provided operational intelligence to the oil and gas sector in the Niger Delta.

Sarah Youngblutt is an Asian Scholar and PhD candidate researching state behavior at World Heritage Sites in Asia. She has experience as an archaeologist and anthropologist, and has worked as a consultant in Cambodia, Canada and Australia for academic institutions such as UNESCO.

Leighton Joyce, Director of Liberty Shared’s IDC Programme, moderated the discussion.

**Webinar 2: Means of Gathering Data and its Application to Industry**

B.C. Tan is head of Global Trade Finance Proposition and APAC Head of Risk Proposition at Refinitiv (formally Thomson Reuters). He has worked as APAC Head of Customer and Third Party Risk and Global Head of Organised Crime Research for World-Check, a Refinitiv business.

Neil Giles works with STOP THE TRAFFIK, where he directs their Centre for Intelligence-Led Prevention. He comes from a long career in law enforcement, leading major international programs to counter organized crime.

Chris White is a Principal Researcher and Partner at Microsoft working on special projects, where he develops software for data analysis with a focus on the intersection of artificial intelligence and business intelligence. Previously he was a Program Manager at the Defense Advanced Research Projects Agency (DARPA).

Jack Clode, the founder of Blackpeak, an investigative research and risk advisory firm, moderated the discussion.

**Webinar 3: “Something from Nothing” — Driving Impact from Disparate Data Sources**

Ingrid Verschuren is Deputy Head of Professional Information Business and Senior Vice President of Data Strategy at Dow Jones, where she is responsible for developing and growing the Professional Information Business and overseeing all of Dow Jones’ licensed content and proprietary data collections. She previously served as Managing Editor of Dow Jones Risk and Compliance.

Nathan Miller is a Data Scientist/Research Analyst at SkyTruth/Global Fishing Watch, where he researches and visualizes global fishing patterns through the development of tools to process remote sensing data. He has experience as a marine biologist and research scientist, studying the responses of marine organisms to climate change.

Duncan Jepson, Managing Director of Liberty Shared, moderated the discussion.

**Webinar 4: “More than the sum of the parts” - Partnerships and tools for innovation and scale**

Ahmad Baihaki is a Programme Manager at Global Fishing Watch (GFW), where he leads efforts for a sustainable ocean through transparency of commercial fishing vessels. He oversees the programme in Indonesia, the first country to share their commercial vessel monitoring systems data.

Qing Liu heads the Government Sector for Bureau van Dijk across the Asia-Pacific region, where she is responsible for developing strategies and partnerships with governments. She previously worked with customs and border protection agencies to support risk-based data assessment frameworks.
Hannah Linder is the Seafood Fraud and Illegal Fishing Fellow at OCEANA, where she uses Global Fishing Watch’s vessel data to identify suspicious vessel patterns and support global advocacy efforts. Previously she was a fisheries data analyst for NGOs and academic institutions.

Duncan Jepson, Managing Director of Liberty Shared, moderated the discussion.

Webinar 5: Successful Public-Private Partnerships

Joseph Mari is the Senior Manager of major investigations in the AML and financial intelligence unit at Bank of Montreal, where he is responsible for coordinating cross-compliance investigations on an international client base. He is an expert on blockchain and cryptocurrency, with a focus on anti-money laundering and regulatory issues, and is the lead coordinator for Project Protect.

Andrew Dean is an experienced law enforcement officer currently serving as the UK National Crime Agency’s Liaison to Hong Kong, Japan, Macau and Taiwan where his focus is on financial crime. Throughout his career he has operated in seven different countries, investigating drug and firearms trafficking, human smuggling, cyber-crime and money laundering.

Elena Lasa is the Head of Compliance for Australia and New Zealand at Ria Financial Services, a global Remittance Network Provider, where she leads a team that uses open source techniques to identify and mitigate AML risk. Her specialty is remedial compliance and payment services.

Liz Barrick, the Deputy Director of the Transactional Record Analysis Center, a non-profit organization that provides data analysis and training to law enforcement agencies investigating money laundering and organized crime, moderated the discussion.

HOSTING PARTNERS

The Information & Data Collaboration (IDC) programme is a Liberty Shared programme that collects and collates publicly available data to create information and research products which can be used by recipients in their decision making to reduce their risk and involvement in exploitation and contribute to the fight against slavery. IDC increases and improves the collection, analysis and circulation of information and data about perpetrators and incidents of slavery and trafficking activities from the ground to industry, augmenting the information available to decision makers.

Freedom Collaborative is a Liberty Shared programme that offers the first online service platform to facilitate connectivity, knowledge-sharing and cross-border cooperation among anti-trafficking stakeholders. Given the need for greater collaboration to achieve a significant reduction in slavery and forced labor, Freedom Collaborative provides a tool to share information and news and gives users access to quality information about individuals and organizations as potential partners for collaboration. Freedom Collaborative regularly hosts webinars that bring anti-trafficking practitioners together.