# UNIVERSITY OF SAN FRANCISCO

CHANGE THE WORLD FROM HERE

**Using Citizen Media and Open Source Investigations to Promote Human Rights:**
**UC Berkeley's Human Rights Investigations Lab**

by

Erica Frances Williams

ericafwilliams@gmail.com

Capstone Research Report Submitted in Partial Fulfillment

of the Requirements for the

Master of Nonprofit Administration Degree

in the School of Management

San Francisco, California

Summer 2017

## Abstract

Citizens with cell phones have the power to change the world.  With the explosion of new technologies such as mobile devices and social media platforms, ordinary people around the world now have the ability to document and report human rights abuses as they happen.  Citizen media, also known as open source information, is changing the way researchers and investigators tackle human rights problems.  In September 2016, in response to these developments, the Human Rights Center at the UC Berkeley School of Law launched the world's first university-based open source investigations lab in collaboration with Amnesty International.  Harnessing the energy of citizen activists, the Investigations Lab trains students from across disciplines to verify human rights violations using open source investigation methods; exposes human rights violations through reports and journalistic projects, and seeks to hold perpetrators legally accountable for their crimes.  After one year, the Lab is an academic success.  But is it achieving its advocacy and accountability goals?  Where does it go from here?  This project reviews the relevant literature on human rights fact finding and open source investigations to understand the Lab's work within the larger human rights context, and to address a pressing issue raised by the research – is it possible to create investigative and evidentiary standards for using open source investigations and citizen media to promote human rights?  Expert interviews supplement this inquiry.  This project next studies the ecosystem of human rights organizations and actors working on open source investigations, seeking to understand the Lab's place in the sector.  Using a semi-structured interview protocol (Gugiu and Rodriguez-Campos, 2007) and Delphi technique (Hsu and Sandford, 2007; Dalkey and Helmer, 1963), this project develops a preliminary logic model for the Lab, outlining key assumptions, activities, inputs, outputs, and intended outcomes.  Through a critical review of internal program documents and publicly available materials, it orients the logic model components and research within a richer organizational context.  Recognizing the need for further analysis, this project culminates in a set of recommendations for the future, and a new model for conceptualizing the Investigation Lab's place in the human rights sector.  It argues that the Human Rights Center has the potential and the duty to take a more central, systemic, coordinating role in open source investigations.

# Table of Contents

# List of Tables and Figures

## Section 1. Introduction

**Project Background**

### Open Source Investigations and Citizen Media.

Technology is rapidly changing the field of human rights.  Global citizens armed with mobile devices and Internet access are now able to instantly capture evidence of human rights violations in the form of photographs, videos, and other digital content. Sometimes, these activists send their digital content directly to human rights organizations.  More often, they post their content to public, "open source" social media sites.  Increasingly, human rights organizations are relying on this citizen media to expose and confirm abuses.  It is not always easy to find content, however, and once found, digital content must be reviewed and verified.  Open source information and citizen media are only useful as tools of human rights advocacy and accountability if they can be 1) discovered amongst the deluge of online resources and 2) verified as credible and authentic (A. Koenig, personal communication, June 19, 2017).  Unfortunately, reviewing and verifying digital content is laborious and time-consuming; most human rights organizations do not have the resources to properly vet citizen media in any meaningful or organized way (A. Koenig, personal communication, June 19, 2017).

In September 2016, in response to this dilemma, the Human Rights Center at the UC Berkeley School of Law (HRC) launched the world's first university-based open source investigations lab in partnership with Amnesty International (AI) (Human Rights Center, 2017).  An extension of AI's Digital Verification Corps (DVC), the

Investigations Lab trains students from across disciplines to review publicly

accessible digital sources for evidence of human rights violations (The Engine Room,

2017; A. Koenig, personal communication, June 19, 2017.)  Students apply open source

investigation methods to verify and authenticate this digital content for later use by

human rights reporters and investigators (Human Rights Center, 2017).

**The Human Rights Center at UC Berkeley (HRC).**  Established in 1994, HRC

is an independent, interdisciplinary research and training center closely affiliated with the

UC Berkeley School of Law.  Its mission is to use science and law to promote human

rights and international justice around the world and to train the next generation of human

rights researchers and advocates (Human Rights Center, 2017).  HRC embraces

innovative technologies and evidence-based methods to accomplish three overarching

goals:  to investigate human rights abuses and hold perpetrators accountable; to give

voice to vulnerable populations and survivors; and to train the next generation of human

rights researchers and advocates – that is, the network of undergraduate and graduate

students from UC Berkeley and other universities around the world (Human Rights

Center, 2017).  From the outset, HRC has focused its work on securing legal

accountability for human rights violations.  It has developed an especially effective

partnership with the International Criminal Court (ICC) located in The Hague as well as

other international criminal courts dedicated to investigating and prosecuting massive

human rights violations (A. Koenig, personal communication, June 19, 2017).

**The Human Rights Investigations Lab.**  The Investigations Lab is part of HRC's Human Rights and Technology program.[1]  Reflective of HRC's broader goals, the Lab's objectives are threefold:  to train students in open source investigation methods; marshal evidence of human rights violations for researchers and investigators to use to hold perpetrators accountable; and shine a light on human rights issues through advocacy and journalistic reports (Human Rights Center, 2017).

*Initial Successes.*  In its first year, the Investigations Lab has trained 74 students who collectively speak 18 languages and represent several diverse disciplines such as law, computer science, biology, and history.  These students have verified 150 pieces of citizen media (in the form of videos); generated 10 verification reports for human rights organizations; and provided positive survey feedback on Lab activities (Human Rights Center, 2017).  They have verified digital media created by citizen activists in Syria, Yemen, Sudan, and Myanmar, and have documented and verified hate speech crimes in the United States (Human Rights Center, 2017).  Local and national media have taken notice – PBS recently produced a documentary on the Investigations Lab (PBS, 2017).  In addition to Amnesty International, the Lab now has partnerships with the Syrian Archive, Bellingcat, and ProPublica (Berkeley News, 2017; San Francisco Chronicle, 2017).  Finally, similar labs, based on the HRC model, have been launched at the University of Pretoria in South Africa, the University of Essex in England, and the University of Toronto in Canada (Berkeley News, 2017).  Part of the DVC, these labs

---

[1] HRC's other programs include Sexual Violence, Human Trafficking, Student Fellowship, and a new Health and Human Rights Initiative (Human Rights Center, 2017).

have contributed more than 6,000 hours of open source investigative work to the human rights sector (Berkeley News, 2017).

***But What Impact.***  From an academic standpoint, the Investigations Lab appears to be a success. Certainly, academic outcomes are important to HRC – it is, after all, a research and training organization affiliated with a major university.  But what about the organization's larger mission?  HRC and the Investigations Lab have explicit goals around human rights advocacy and accountability.  Are these goals being met?  Is the Lab shining a light on human rights issues, and marshaling the evidence necessary to hold perpetrators accountable?   Moreover, what is the Lab's relationship to other human rights actors working on open source investigations?  Is it making a meaningful contribution to the sector?  Is it building capacity and/or helping to scale impact?  These are important questions to ask:  If the Lab is not meeting its objectives or making a meaningful contribution to human rights accountability work, is it truly worthwhile?

**Project Overview**

This project begins to address these questions.  It is a work in progress – an ongoing collaboration with HRC staff and Lab participants.  As a starting point, this project reviews the relevant literature on human rights fact finding, open source investigations, and international criminal justice to situate the analysis within the larger human rights context, and to address a pressing issue raised by the project – is it possible to create investigative and/or evidentiary standards for using open source investigations and citizen media to promote human rights?  Expert interviews supplement this inquiry.

In the context of this research, this project then reviews the various actors

in the human rights sector working on open source investigations, seeking to understand

HRC's place within that ecosystem.  Using a semi-structured interview protocol (Gugiu

and Rodriguez-Campos, 2007) and Delphi method (Hsu and Sandford, 2007; Dalkey and

Helmer, 1963) to elicit information regarding Lab activities, inputs, outputs, assumptions,

and intended outcomes, this project develops a preliminary logic model for the program.

Through a critical review of internal program documents and publicly available materials,

this project orients the logic model components and research within a richer

organizational context.  Recognizing the need for further analysis, this project culminates

with a set of recommendations for HRC's future, and a new model for conceptualizing

the Lab's place in open source investigations.

## Section 2: Literature Review

### History and Evolution of the Human Rights Reporting

With the rise of the Internet and the proliferation of mobile communication

devices, ordinary citizens are playing a more prominent role in human rights advocacy

and accountability efforts.  This reflects an important evolution in the history of human

rights fact finding and investigation (United Nations, 2015; Alston, 2013).

**The Emergence of Human Rights Fact Finding and Accountability Efforts.**

Human rights fact finding was borne out of intergovernmental organizations such as the

United Nations, which were specifically established in the aftermath of World War II to

promote international cooperation and maintain international order (United Nations,

2015).[2]  This mission included "assisting in the realization of human rights," and holding international actors accountable for acts of aggression (United Nations, 2017). Embedded within these institutions were lawyers, diplomats, and experts, who prepared human rights reports by conducting systemic reviews of available information and performing onsite inspections to corroborate that information (United Nations, 2015; Alston, 2013).  These reports were primarily used for political and diplomatic purposes – they were meant to persuade nations and others within the intergovernmental circle of influence to take collective action and/or change policy (Alston, 2013; Robertson, 2010). Much of this work depended on the moral force and standing of the reporter (Robertson, 2010).  With the adoption of the Universal Declaration of Human Rights in 1948, human rights became international law, and from this system emerged international courts and tribunals tasked with investigating human rights abuses and holding perpetrators legally accountable (United Nations, 2017; International Criminal Court, 2017).

**The International Criminal Court.**  One of these courts, the International Criminal Court (ICC), was established in 1998 to investigate, prosecute, and try individuals accused of committing the most serious crimes of concern to the international community, including genocide, crimes against humanity, war crimes, and crimes of

---

[2] The founding Charter of the United Nations emphasized the organization's dedication to human rights, and the Universal Declaration of Human Rights, adopted by the United Nations General Assembly in 1948, set forth the fundamental human rights deserving of universal protection (United Nations, 2017).

aggression (International Criminal Court, 2017).[3]  To date, the treaty that created

the ICC, known as the Rome Statue of the International Criminal Court, has been ratified

by over 120 countries (State Parties) (International Criminal Court, 2017).  The Rome

Statute sets forth the crimes falling within ICC jurisdiction, the elements of those crimes,

the rules of procedure, and the mechanisms by which State Parties cooperate with

investigative and prosecutorial efforts (International Criminal Court, 2017).  Unlike

earlier *ad hoc* international tribunals created by the United Nations Security Council to

address specific situations involving large-scale human rights abuses (such as those

occurring in the former Yugoslavia or in Rwanda in the 1990's), the ICC is an

independent, intergovernmental judicial body designed to permanently complement the

criminal justice systems of national courts (International Criminal Court, 2017).

Like these tribunals, however, the ICC abides by legal principles and rules of

evidence drawn from both common and civil law traditions (Ashouri, Bowers, and

Warden, 2014).  Informed by past experiences of the *ad hoc* tribunals, the ICC has

developed Rules of Procedure and Evidence that set forth standards for the collection,

management, presentation, admission, and evaluation of evidence, whether in the form of

witness testimony and otherwise (International Bar Association, 2016).  Evidence goes to

the heart of the ICC's work – prosecutors assess it when determining whether to pursue

formal investigations, and judges consider and weigh it when deciding whether to bring

---

[3] The ICC, which began functioning in 2002 after entry into force of the Rome Statute,
sits in The Hague.  To date, the ICC has indicted 40 individuals and convicted three
individuals (International Criminal Court, 2017).

charges or convict perpetrators (International Bar Association, 2016). "Direct"

witness testimony of human rights survivors and eyewitnesses is the most compelling

form of evidence in ICC proceedings, but other forms are also considered by

investigators and judges, such as government documents and records; official aerial and

satellite imagery, medical records, and forensic evidence, such as ballistics (International

Bar Association, 2016; Orentlicher, 1990).

Of paramount concern to ICC judges is the admissibility of evidence (Koenig,

Smith Cody, Stover, and Crittenden, 2014). The Rome Statute and Rules of Procedure

and Evidence set forth a three-prong test for admissibility: (1) relevance (i.e., does the

evidence make "the existence of a fact at issue more or less probable"), (2) probative

value, and (3) prejudicial effect (i.e., does the evidence have the potential to undermine

the fairness of proceedings) (International Criminal Court, 2017). Probative value refers

to the reliability of the evidence, and the extent to which it is likely to influence the

determination of a particular issue (A. Koenig, personal communication, June 22, 2017).

To establish reliability, it is necessary to authenticate evidence, i.e., verify its integrity

and originality by demonstrating that the evidence is "what it purports to be" and has not

been altered in any way (Ashouri, Bowers, and Warden, 2014). In practice, ICC courts

tend to admit evidence and then weigh it to determine probative value; it applies a

flexible, but discretionary and therefore unclear evidentiary standard (Hiatt, 2016).

**The Rise of Human Rights NGOs and Advocacy Reporting.** As legalistic

norms and the concept of universal human rights expanded in the post-war period and

beyond, so too did the number of non-governmental human rights organizations

involved in monitoring and investigating human rights violations (United Nations, 2015;

Alston, 2013).  Especially pronounced in the 1960's to 1980's, this growth in NGO's

gave rise to human rights reporting that served predominantly advocacy purposes (Koettl,

2016, Alston, 2013).  This is the second "generation," or wave, of human rights reporting,

and it is commonly seen today (Alston, 2013).  While NGO reports certainly aim to

influence government actors or trigger legal inquiries, they often do so by mobilizing

public opinion around broader patterns of abuse committed or enabled by perpetrators,

institutions, and policies (Alston, 2013; Hannum, 2011).  NGO reports may lead to ICC

investigations, but their overwhelming purpose is to educate the press and the public and

exert pressure on policy makers (Hannum, 2011).

Standing as they do outside the realm of governmental institutions, NGO reports

also tend to be more adversarial in nature, and dependent upon allegations based on

indirect or circumstantial evidence (Hannum, 2011).  As advocacy tools, they may be

more sensitive to journalistic needs and norms.  Nevertheless, in the same way that

careful investigation and authenticity of evidence are critical to legal accountability,

credibility and accuracy are essential components of human rights advocacy:

> For NGOs, the stakes in surviving … scrutiny could not be higher.  The
> credibility of their fact-finding is their stock-in-trade.  Broadly stated,
> the chief objective of human rights NGOs is to promote compliance with
> international human rights standards. (…)  Fact-finding lies at the heart
> of these efforts, and the fact-finding "works" when it convinces the
> target audience that the published allegations are well founded
> (Orentlicher, 1990, pp. 92-93).

As Koettl (2016) noted, "evaluating the credibility of a source is at the core of human rights fact finding" (Koetll, 2016, p. 15). Integrity, then, is critical for both human rights advocacy and accountability - "facts" must be truthful and verifiable in the advocacy context, and they must be authentic and reliable in the legal context. Both contexts require clear research and reporting methodologies and evidentiary standards.

**The Rise and Impact of Technology and Citizen Media**

According to Alston (2013), human rights investigators are being swept up in a third wave of fact finding and reporting due to the proliferation of information and communication technologies (ICTs) such as mobile devices and social media:

> The availability of camera-enabled cell phones in combination with digital social networks is nothing short of a game changer, especially for human rights research and advocacy, and offers enormous opportunities if properly integrated with well-established fact-finding methodologies (Koettl, 2016, pp. 1-2).

Many in the human rights field have embraced these new technologies and the "open source information" they yield – "open source information" encompasses the broad array of publicly available information such as news articles, academic articles, statistics, and audiovisual content or reporting increasingly being shared through open online social networks (Koettl, 2017; Aronson, 2017; Hiatt, 2016). Citizen media – images or video created and shared by "digitally enabled actors" such as bystanders, monitors, citizen journalists, activists or armed actors – "can be considered the visual subset of open source information" (Koettl, 2016, p. 1; United Nations, 2015). In the advocacy context, these digitally enabled actors have the power to transform human rights reporting,

providing the press and the public with evidence of abuses in real time, as in a

recent example out of Syria:

> Within hours of the chemical weapons attack in the eastern suburbs of
> Damascus on 21 August 2013, more than a hundred videos were
> uploaded to YouTube, showing the horrific impact of this alleged attack.
> A review of the videos by medical and chemical weapons experts,
> combined with testimonies from survivors and doctors, allowed human
> rights researchers to establish basic facts about the attack and the
> chemical agents used, even before U.N. investigators were able to
> produce a comprehensive assessment through direct ground access
> (Koettl, 2016, p. 2).

As Aronson explained, citizen images and videos, whether captured accidentally or

intentionally, "often compliment official narratives and press accounts of an event or

situation, adding detail and nuance.  At other times, they directly rebut certain factual

claims and contradict particular narratives" (Aronson, 2017, p. 84).  Thus, by providing

visceral and compelling graphic detail of human rights abuses soon after their occurrence,

citizen media directly challenges the accounts of perpetrators, including governments.

As an advocacy tool, it is powerful.

In the accountability context, citizen media and other forms of open source

information have the potential to provide important evidence of human rights abuses.

"Digital evidence" was defined by Koenig, Cody, Stover, and Crittenden (2014) as "data

that is created, manipulated, stored or communicated by any device, computer or

computer system or transmitted over a communication system, that is relevant to the

proceeding (Koenig et al., 2014, p. 1, fn. 2).  It includes emails and GPS data extracted

from cell phones, as well as social media such as photographs, videos, and audio

recordings of live events captured on mobile devices and shared directly with

investigators or via social networks like Facebook, YouTube, and Twitter (Ashouri et al.,

2014; Koenig et al., 2014).

Digital evidence "can help court investigators document criminal intent and link

perpetrators to specific events," providing "linkage evidence" between the defendant and

the crime (Koenig et al., 2014, p. 4; Ashouri et al., 2014).  This linkage-based evidence

sheds light on the "who" and the "how" of a human rights violation (Witness, 2017).

Digital evidence may also provide crime-based evidence, say, for example, where a video

captures a torture in progress – the "what" of a violation (Witness, 2016).  Finally, and

perhaps most frequently, it can be used to corroborate witness testimony and other

evidence by pinpointing the time, place, and manner of a violation (Ashouri et al, 2014).

> [D]igital and technologically derived evidence allows for information
> to be introduced in court that captures dimensions of a situation, event
> or location that may be beyond (contemporaneous) human perception
> or may provide a counterpoint to a witness's recollection. While an
> eyewitness account provides that witness's perception and recollection
> of an event, a video may capture elements that were outside a person's
> range of vision or that the individual has forgotten; a satellite or aerial
> image may show an overview of a larger area or an inaccessible
> location; and data such as phone records or computer records may show
> communications and patterns of communications relevant to an
> individual's activities and knowledge of events. This information, when
> presented as evidence, has the potential to better enable judges to
> discharge one of their key functions: to ascertain the truth about crimes
> charged within the jurisdiction of the ICC (International Bar
> Association, 2016, pp. 19-20).

Citizen media has implications for both human rights advocacy and accountability.  As

Koettl (2016) noted, "[c]itizen media can often present direct evidence of specific

violations and can at the minimum – by itself – be used to support initial calls

for further, independent investigations into apparent human rights violations or war

crimes, using a standard public pressure advocacy strategy" (Koettl, 2016, p. 21).  Human

rights researchers have identified several additional benefits inherent in citizen media:

- Accessibility:  Citizen media provides researchers and investigators with greater

  access to conflict zones: "The ubiquity of cell phone cameras and digital networks

  further helped to address the access challenge, making it easier for activists,

  journalists and ordinary citizens" to document abuses and circumvent the control

  of governments or armed groups (Koettl, 2016).  And as Hiatt (2016) noted in

  discussing the availability of open source information, "hundreds of thousands of

  videos depicting human rights violations [from conflict zones] have already been

  posted online. Many of them will be relevant" to human rights reporting and

  investigation (Hiatt, 2016, pp. 325-326).

- Detail:  By its very nature, citizen media provides an extreme level of detail, and

  if preserved appropriately, creates a permanent record of human rights violations.

  To the extent citizen media reveals important details such as landmarks or

  signage, insignias, license plates, serial numbers, weaponry, or name badges, it

  may even be more accurate than witness testimony (Koettl, 2016; Aronson, 2017).

- Perspective:  Citizen media often shows events from multiple locations, allowing

  for a multi-perspectival reconstruction of those events.  "It can provide a richer

  accounting of what happened by expanding the amount of information that can be

gathered about an event, as well as what happened immediately before

and after" (Aronson, 2017).

- Certainty:  According to Koettl (2017), when taken together, ICTs such as citizen

    media and satellite imagery have the power to reduce information uncertainty

    (what Koettl called the "lemon problem") in human rights fact finding, which is

    helpful to "provide the necessary facts and evidence to counter perpetrator

    strategies of denial and minimization" (Koettl, 2017, p. 47).

- Security:  To the extent citizen media is posted anonymously or from a safe place,

    it may protect eyewitnesses (Koettl, 2016).  And the use of citizen media to

    bolster or corroborate witness testimony may also insulate those witnesses from

    intimidation or excessive exposure (Hiatt, 2016).  Hiatt (2016) also noted that it

    provides a level of protection to human rights investigators who carry out open

    source investigations away from conflict zones or problem areas.

**The Need for New Standards.**  As promising as citizen media and open source

investigations are for human rights fact finding, researchers and investigators have

highlighted the need for updated methodologies and evidentiary standards to address

these new realities.  Koettl (2016) called for the "development of robust and transparent

methodologies of citizen media verification" (Koettl, 2016, p. 2).  He noted that "human

rights researchers should strive to adopt high standards of handling digital evidence,

similar to those used in forensic or criminal investigations (Koettl, 2016, p. 11).

Citizen media, like all other forms of human rights fact finding, must be verified and authenticated to have any meaningful reporting or investigative value – it must be credible (A. Koenig, personal communication, June 19, 2017; F. McMahon, personal communication, June 28, 2017). Similarly, according to Hiatt (2016), the ICC and international criminal courts should "embrace open source investigations" but also "clarify evidentiary rules to allow for admission, and clearer weighing, of this new and powerful kind of evidence" (Hiatt, 2016, p. 330). In its most recent strategic report, the ICC called for a greater diversity of evidence in criminal prosecutions, including digital evidence, but noted a lack of clear evidentiary standards (International Criminal Court Strategic Plan, 2015).

There is general consensus that standards are necessary. But what should these standards include? The literature points to a number of technical, journalistic, legal, and ethical factors that human rights researchers and experts should consider as they develop investigative and evidentiary standards for open source investigations. Of particular note is the extent to which these factors implicate different disciplines and areas of expertise.

**Technical Considerations.** Technical challenges involving the use of citizen media in the human rights context abound, including: the sheer volume of citizen media, its ephemeralness (citizen media is often posted and then removed from the Internet), and its ability to be manipulated, re-posted or shared in the wrong context (Koettl, 2016). Koettl (2016) proposed an analytical framework for handling and verifying citizen media that addresses many of these technical issues:

1. <u>Material Collection and Preservation:</u>  The first step of the verification

   process proposed by Koettl (2016) is to save the underlying digital files and

   collect all available documentation, including the URL, screen shots of the social

   media post, and the exact time of posting.

2. <u>Metadata Review:</u>   This step involves reviewing both the digital metadata and

   public metadata of the image or video (Koettl, 2016).  Witness (2016) defined

   digital metadata as "information about a file created by an electronic device that is

   automatically stored and is often not visible to the user" (Witness, 2016, p. 7).

   Digital metadata includes timestamps and GPS coordinates that help document

   the time, date, and location of a recording, and it also reveals the specific

   recording device used (Koettl, 2016).  By contrast, public metadata is the external

   "publicly visible information such as the upload time [of a social media posting]

   or the unique ID that is assigned [by a social media platform] to any piece of

   citizen media" or the location of the posting (Koettl, 2016, p. 13).  This step is

   necessary for citizen media posted to social media sites because such sites often

   alter or remove digital metadata from the original digital file (Koettl, 2016).

3. <u>Verification of Provenance and Source:</u>  As explained by Koettl (2016), this step

   involves establishing the original source and provenance of citizen media.  This is

   often difficult as media often passes through many hands and appears on many

   social media sites before it reaches researchers and investigators.  Nevertheless,

   "it should be considered best practice to track down the original source of the

[citizen] media content under investigation, even when there's no

difference in actual content" (Koettl, 2016, p. 15). Koettl (2016) outlined a few

strategies for accomplishing this, including: reviewing the account history and

activity of the social media post to confirm that it is a real account; reviewing that

account's links to accounts to establish a digital profile; contacting the source, if

safe to do so; reviewing other content posted by the source to confirm geographic

location; searching the unique identifier of the post for other instances of the

content online; and conducting a reverse image search to confirm the source.

4. <u>Content Analysis</u>:  This step focuses on the actual content of the digital file under

review (Koettl, 2016). Specific details are analyzed to pinpoint the location, date,

and time of the events depicted, and the actors involved. This can be done by

carefully identifying "relevant features in a video or picture that can be matched

up with satellite imagery, street-view imagery, or other open source videos and

pictures, including geo-referenced pictures available on specialized websites"

(Koettl, 2016, p. 19). Koettl (2016) identified several features that may yield

valuable information as to location, including traffic signs, license plates, shops,

landmarks, vegetation, terrain, graffiti, street lamps, and road conditions.

Indicators as to date may include weather, clothing, or other corroborating open

source materials, and agency (perpetrators) may be revealed by details gleaned

from uniforms, flags, insignia, weapons, inventory or serial numbers, munitions

or clothing. (Koettl, 2016). "A frame by frame review [of video content] will also

help to detect potential edits in a video, an important fact that can have significant implications" for verification (Koettl, 2016, p. 18).

5. Optional Expert Analysis: According to Koettl (2016), another important step in the verification process is to consult with experts, such as digital forensic experts, weapons specialists, or forensic pathologists, to confirm findings regarding digital metadata as well as file content.

6. Integration with Other Research: Lastly, Koettl (2016) recommended that citizen media findings be combined with traditional methods of human rights fact finding such as witness testimony and satellite imagery. "Citizen media can often present direct evidence of specific violations…. However, corroboration [of other, more direct evidence such as testimony] normally yields the strongest results, and is highly recommended in line with traditional fact-finding" (Koettl, 2016, p. 21).

The analytical framework proposed by Koettl (2016) provides the most comprehensive technical outline for handling citizen media and conducting open source investigations. However, several others have addressed technical considerations and published informative "how to" guides. Trewinnard (2017) produced a *News Verification Guide* for journalists to use to establish the credibility of citizen media. Trewinnard (2017) highlighted effective techniques for addressing: old media that has been stripped of original content or reused in the wrong context; manipulated content, staged content; and fake news sites. Like Koettl (2016), he also set forth specific steps for verifying citizen media and determining its originality, source, geolocation, date, and

motivation (Trewinnard, 2017).  Geolocation "takes advantage of a number of

data sources including maps, satellite imagery, street-view imagery and geotagged

photos and videos" to corroborate the location of a piece of citizen media and establish

its credibility (Trewinnard, 2017, p. 16).  Witness (2016) also published a guide for

journalists, researchers, students, and policymakers – *DatNav: How to Navigate Digital*

*Data for Human Rights Research* – that broadly outlines the use of digital data for

human rights documentation, and provides resources for further reading.

In addition to the verification process, which usually takes place on the front end,

Aronson (2017) outlined important considerations involving back-end activities such as

the storage, organization, curation, and archiving of citizen media to maximize and

protect its value for human rights work.  He argued that proper preservation and

cataloguing of the following types of information is especially important for research

and investigative purposes:  geolocation; date and time of day; perpetrators; approximate

counts of people depicted; types of weapons, vehicles, tools, and other implements;

forensic clues; and patterns of activity (Aronson, 2017, p. 91).

**Journalistic Considerations.**  Applying rigorous technical standards to the

verification of citizen media is critical to establishing its credibility.  As a United

Nations report (2015) noted, human rights work "often concerns *disputed facts*….

Individuals commit [human rights] violations not because they believe it is justifiable,

but because they believe they will not be called on to justify themselves.  That places a

premium of fact-finding and evidence" (United Nations, 2015).  Perpetrators of human

rights violations have every reason to deny or obfuscate their activities, and

researchers and journalists must be careful not to counteract these tendencies with

misinformation.  Credibility and accuracy are at the core of human rights advocacy and

journalism – "the risk of using misinformation can discredit an entire research project.

While this is an old problem it is exacerbated in the digital age, where the spread of

misinformation is made easier by digital social media networks" (Koettl, 2017, p. 38).

To compound the problem, there is a lack of quality control in the sector:

> The lack of institutions that provide quality control – such as traditional
> media outlets before the advent of digital social networks – contribute to
> this challenge, which only recently came under scrutiny through the fake
> news debate following the 2016 U.S. presidential elections.  The human
> rights profession is not immune to this problem (Koettl, 2017, p. 39).

**Legal Considerations.**  Credibility and quality control are equally important in

the legal context.  Again, in international criminal courts, evidence is deemed admissible

for prosecutorial purposes if it is found to be relevant, reliable, and authentic (in other

words, credible) (Ashouri et al., 2014).  This is true of all forms of evidence, digital or

otherwise.  As with advocacy, however, the rapid rise of digital content creation has far

outpaced investigators' and courts' ability to develop adequate standards for admissibility

(International Bar Association, 2016).

Ashouri et al. (2014) identified three types of factors to consider when developing

evidentiary standards for open source investigations vis-a-vis ICC proceedings:

authentication, hearsay, and provenance (chain of custody).  As we have seen,

authenticity is concerned with ensuring the integrity of digital evidence, and that it is

"what it purports to be" (Ashouri et al., 2014, p. 117). Proving that a piece of evidence has not been manipulated or taken out of context is key to establishing its authenticity (Ashouri et al., 2014). "Hearsay" evidence is evidence that is outside the direct knowledge of the testifying witnesses, and offered for the truth of the matter asserted – documents prepared outside of court generally fall within this category, as would digital evidence. To get around a hearsay objection, prosecutors may need to offer corroborating evidence such as "live testimony, and explanations of the procedures by which the digital evidence was obtained, including testimony of those involved with obtaining it" (Ashouri et al., 2014, p. 121). Gardner (2009) defined "chain of custody" as "[t]he movement and location of real evidence, and the history of those persons who had it in their custody from the time it is obtained to the time it is presented in court" (Gardner, 2009, p. 260). In ICC proceedings, "a strong chain of custody increases the weight judges accord to the evidence because…'[f]actors such as….the proof of authorship will naturally assume the greatest importance'" (Ashouri et al., 2014, p. 121). Again, corroborating evidence may be necessary to establish chain of custody, assuming that information exists and has been documented (Ashouri et al, 2014).

Mehandru (2017) proposed a test for admissibility that addresses many of these factors and borrows heavily from the manuals of advocates, journalists, and technical experts. The test outlines key internal and external indicia, including metadata, that courts should look to when determining the probative value of digital evidence (A. Koenig, personal communication, June 22, 2017) (see Figures 1 and 2).

**Figure 1: Test of Admissibility in ICC Proceedings**
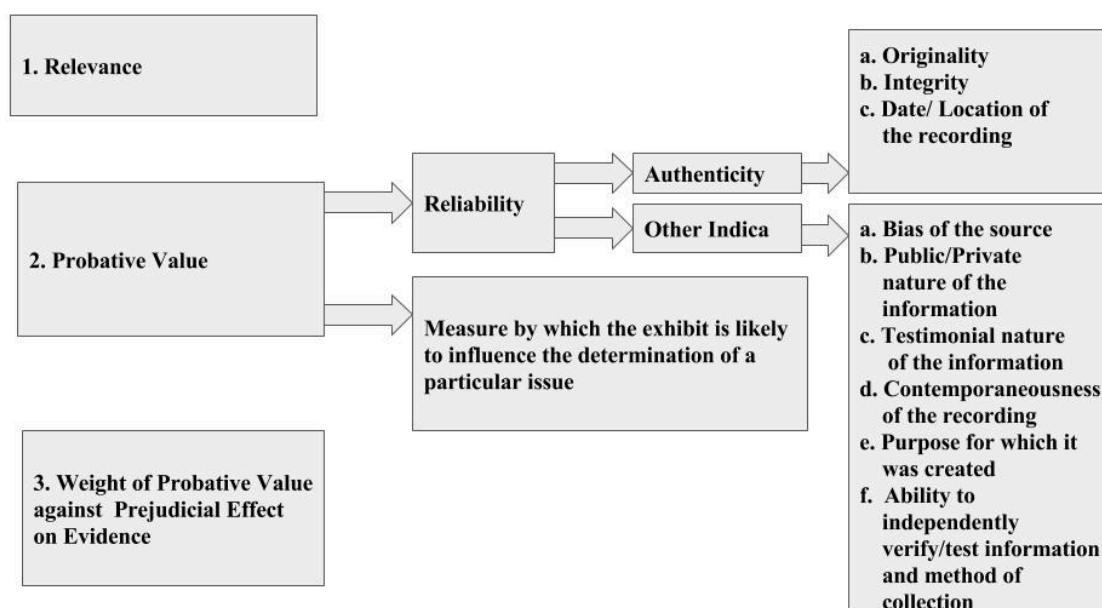


**Source**: **Mehandru (2017)**

**Figure 2: Internal and External Markers of Authenticity of Digital Evidence**

| Internal Markers | External Markers |
|---|---|
| Metadata: date stamps, timestamps, digital signatures, GPS data and triangulation, watermarking | Source |
| Location: street signs, prominent landmarks | Storage/Chain of Custody |
| Integrity: to tampered with, via editing or manipulation | Testimony |
| Continuity: capturing full event, people arriving/leaving, other surroundings | Replicable process for gathering and storing the evidence. |

**Source**: **Mehandru (2017)**

**Ethical Considerations.**  Sometimes lost in the technical and legal aspects of

open source investigations are very serious ethical concerns stemming from the use of

citizen media.  Koettl (2016), Aronson (2017), and others addressed the need to factor in

these considerations when developing investigative and evidentiary standards:

- Informed Consent:  Where possible, the consent of the original creator (source) of

  citizen media should be obtained (Koettl, 2016).

- Privacy and Security:  Citizen media has the potential to put eyewitnesses and

  citizen activist at risk as they are often on the front lines of conflict zones and in

  close proximity to perpetrators (Hiatt, 2016).  Where consent is not possible, the

  faces of any vulnerable individuals who are depicted in citizen media should be

  blurred and their identities concealed (Aronson, 2017).  Additionally, efforts

  should be made to monitor the public versus private nature of citizen media – if

  digital content is posted onto social media sites, but then subsequently removed or

  made private, human rights researchers and investigators should take these

  personal privacy decisions into account, if possible (Koettl, 2016).

- Access and Stakeholder Involvement:   Access to preserved digital content should

  be limited to those organizations and individuals who are legitimately involved in

  human rights advocacy and accountability efforts (Aronson, 2017).  Moreover,

  where possible, survivors and other important stakeholders should be included in

  the decision-making process vis-à-vis the uses of citizen media.  Aronson (2017)

  advocated for the convening of "a knowledgeable and empathetic board of

trustees for a particular collection – made up of a mix of survivors,

relatives of victims, affected community members, human rights advocates and

investigators, lawyers, and other relevant specialists – to set policies and also act

as a co-custodian or steward of a collection" (Aronson, 2017, p. 94).

- Secondary Trauma: Koettl (2016) argued that any investigative standards should

  include self-care plans and policies for preventing psychological harm to open

  source investigators and others who view citizen media that depicts human rights

  abuses.  In addition, thought should be given to the potential trauma caused by

  encouraging citizens to capture such abuses in the first place.

The International Bar Association (2016) pointed out an ethical concern that is

less immediately obvious in the context of human rights work but no less important.

Pursuant to court mandate, international criminal courts such as the ICC have a duty to

hold fair and efficient trial proceedings that protect the rights of the accused as well as

those of the victimized (International Bar Association, 2016, p. 13).  In addition, the ICC

imposes obligations on prosecutors to disclose all potential evidence against the accused

and to "'investigate incriminating and exonerating circumstances equally'" (International

Bar Association, 2016, pp. 16, 31).  The increasing volume and complexity of digital

evidence in international criminal courts, combined with the court's lack of technical

resources and expertise, have the potential to slow down proceedings considerably.

Given that international criminal trials already take years to litigate, this may be an

unacceptable outcome of open source investigations (International Bar

Association, 2016, p. 12).

### Section 3: Methods and Approaches

After one year, the Investigations Lab has achieved academic success, but

questions remain about its impact on human rights advocacy and accountability:  Is the

Lab shining a light on human rights issues, and marshaling the evidence necessary to

hold perpetrators accountable?  Is the HRC meeting its explicit organizational goals?  To

address these questions, this project relies on extensive primary and secondary data

obtained through the following methods:

**Primary Data Collection**

- Program Documents**:**  A thorough review of internal and publicly available

  program documents, including Lab grant applications, year-end reports,

  memoranda and meeting materials, white papers, and press releases.

- Quantitative and Qualitative Data from Previously Administered Surveys:

  Review of quantitative and qualitative responses obtained from 2017 Mid-Year

  and Year-End surveys administered to student participants of the Lab;

- DVC Summit:  Two-day attendance at the first annual summit of DVC and Lab

  participants, including interactive seminars with experts on human rights fact

  finding, open source investigations, and journalism.  Experts included:

- o Sam Dubberley, Director of Amnesty International's Digital Verification Corps, and co-founder of Eyewitness Media Hub, a nonprofit organization dedicated to the creation, discovery, verification, and publication of eyewitness media;

- o Eliot Higgins, founder of Bellingcat, a website and investigative search network for citizen journalists; and

- o Felim McMahon, investigator with the International Criminal Court and former journalist with Storyful, provider of global insights, news, and video content for media partners.

- Informal Focus Groups: Extensive discussions and informal focus groups with Lab participants, including staff members, students, professors, partner organizations, and technical experts;

- Semi-structured Interview Protocol: Review of qualitative data from a semi-structured interview protocol (Gugiu and Rodriguez-Campos, 2007) administered to Lab participants, including staff, students, professors, and technical experts;

- Delphi Technique: Refinement of qualitative data using a modified Delphi technique (Hsu and Sandford, 2007; Dalkey and Helmer, 1963);

- Expert Interviews: Consultation with experts on human rights fact finding, open source investigation methods, international criminal court proceedings, and nonprofit program evaluation. Experts included:

o Alexa Koenig, Executive Director of the Human Rights Center

   at UC Berkeley, and co-author of the book *Hiding in Plain Sight: The*

   *Pursuit of War Criminals from Nuremberg to the War on Terror*;

o Eric Stover, founder and Faculty Director of the Human Rights Center at

   UC Berkeley, author of six books including *The Witnesses: War Crimes*

   *and the Promises of Justice in The Hague*, member of the editorial boards

   of the *International Journal of Transitional Justice* and *Human Rights*

   *Quarterly*, and board member of the Crimes of War Project;

o Dr. Richard Waters, Associate Professor at the University of San

   Francisco School of Management, and member of the editorial board of

   the *Journal of Public and Nonprofit Sector Management*; and

o Nicholas Almeida, Advisor in Philanthropy and Impact Investing, and

   Adjunct Professor at the University of San Francisco;

**Semi-structured Interview Protocol for Logic Models.** Borrowing from the

work of Gugiu and Rodriguez-Campos (2007), a 42-question survey was administered to

Lab participants to solicit qualitative data on the program's primary assumptions,

activities, inputs, outputs, and intended outcomes (see Appendix A). Created as a Google

survey form, and emailed to a select group of staff members, students, professors, and

experts following informal focus groups this particular survey protocol was selected to

elicit wide-ranging feedback from stakeholders on logic model components at the

*individual*, *organizational*, and *systemic* levels (Gugiu and Rodriguez-Campos, 2007; N.

Almeida, personal communication, May 15, 2017) (see Figure 3 for an example

of survey questions).  To date, six participants have responded, but the process is ongoing

and data will continue to be analyzed and incorporated into the preliminary logic model.[4]

**Figure 3: Semi-structured Interview Protocol – Sample Questions**

## Human Rights Investigations Lab

Survey to Collect Logic Model Insights

**Program Outcomes**

Program Outcomes refer to the changes that occur after program services or activities are administered to the target population and/or participants and may represent positive and negative changes or maintenance of a particular level or status that would otherwise have deteriorated without the program.  Intended program outcomes may be short-term, midterm and/or long-term in nature.

**What are the individual-level changes that may occur because of the program?**

Your answer

**What skills or knowledge will participants learn from the program?**

Your answer

**What changes in behavior or performance might one expect to see in program participants?**

Your answer

**What secondary benefits may colleagues, friends or family members derive?**

**Source: Author's creation. Adapted from Gugiu and Rodriguez-Campos, 2007.**

---

[4] Summer and vacation schedules made it difficult for participants, some of whom live overseas, to complete the survey in a timely manner.

**Delphi Technique.** A Delphi technique (Dalkey and Helmer, 1963) was

used to build consensus around preliminary responses to the semi-structured survey:

> The Delphi technique is well suited as a means and method for
> consensus-building by using a series of questionnaires to collect data from
> a panel of selected subjects (Dalkey & Helmer, 1963; Dalkey, 1969;
> Linstone & Turoff, 1975; Lindeman, 1981; Martino, 1983; Young &
> Jamieson, 2001). Delphi, in contrast to other data gathering and analysis
> techniques, employs multiple iterations designed to develop a consensus of
> opinion concerning a specific topic. Ludwig (1994) indicates:

> Iterations refer to the feedback process. The process was viewed as a
> series of rounds; in each round every participant worked through a
> questionnaire which was returned to the researcher who collected, edited,
> and returned to every participant a statement of the position of the whole
> group and the participant's own position. A summation of comments made
> each participant aware of the range of opinions and the reasons underlying
> those opinions (p. 55) (Hsu and Sandford, 2007).

A modified Delphi process was employed here. Rather than a series of confidential

questionnaires or Google surveys, initial responses to each category of questions –

individual, organizational, and systemic – were compiled and resubmitted to respondents

by email to inform them of the range of comments and to solicit their modified responses,

if any (R. Waters, personal communication, July 13, 2017). Typically, the Delphi

process is anonymous, but here, due to the time constraints and limited survey responses,

participants waived anonymity (Hsu and Sandford, 2007). This process is ongoing,

however, and a more formal Delphi technique will be administered in September 2017.

**Secondary Data Collection**

**Literature Review and Sector Research**. Central to this project is a thorough

review of the relevant academic and peer-reviewed literature on human rights fact

finding, open source investigations, and international criminal court tribunals.

The literature reviewed focuses primarily on citizen media – i.e., photographs and videos

created by citizen activists and shared on social media sites – and open source

investigations in the context of the International Criminal Court and similar tribunals.  A

literature review matrix (Kara, 2012) was used to keep track of key information, and

findings were loosely coded for key concepts (see Table 1).

## Table 1: Literature Review Matrix.

| | A | B | C | D | E | F |
|---|---|---|---|---|---|---|
| 1 | Citation | Theoretical Framework | Quote/Page | Why Significant - Analysis/Conclusions | Where potentially useful | Keywords & Questions |
| | International Bar Association. (2016) Evidence matters in ICC trials: An international bar association international criminal court & international criminal law programme report providing a comprehensive perspective on selected evidence matters of current importance in ICC trial practice. Retrieved from: http://www.coalitionfortheicc.org/news/20160929/evidence-matters-icc-trials. | Examination of maturing trial practice of ICC to monitor and anaylze developments and jurisprudence to ensure fair trial standards. Addresses existence and relevance of new types of evidence, and development of ICC procedural law for hearing and ruling on evidence. | P. 19: "Digital and technologically derived evidence = evidence taken from and created by digital devices and via technology, such as cameras, satellites, and other 'remote sensing technologies.'" This is NOT the same as the digitization of evidence per the ICC's E-Court protocol!!! Primary form of evidence is viva voce witness testimony (or prior recorded testimony). Other forms of ICC evidence include documents and records; photographs; aerial and satellite imagery; audio and video recordings; phone records; and forensic evidence such as DNA, ballistics and blood tests; and of course digital evidence from phones, computers, and other digital devices. P. 20. Digital evidence is inevitable. PP. 19-20: "Moreover, digital and | P. 5: IBA previously called for ICC to diversifyits sources of evidence, to ensure that witness testimony is not the sole source of evidence in trials.  Digital and technologically derived evidence is becoming a significant portion of the evidence at trial, and there is a need for a unified approach to the use of such evidence.  It is also important to involve counsel and defense representatives to incorporate digital evidence efficiently and ensure the full protection of the rights of the accused.   Witness testimony will remain the primary form of evidence in the ICC.  Office of the Prosecutor is ICC organ responsible for investigations and prosecutions. P. 6: Discussion of ICC's pre-trial stage of proceedings, which includes an evaluation of the evidence for purposes of confirming charges for trial.  Digital evidence may be useful at this stage, per Alexa. P. 5: ICC is seeking ways to streamline trials - | Discussion of ICC and digital evidence. P. 10: ICC is a permenent, treaty-based court. State Parties. PP. 9-18:  The legal framework, goals, and judicial discretion. P. 22: Discussion of Ayyash et al case at STL - most extensive use of digital evidence. STL prosecution is relying heavily on mobile phone communications data in "raw data" format to establish that telephone networks, involving 49 phones, were created and used by five co-accused.  See 22-23 for details.  As of end of February 2016, prosecution had called 19 OTP staff members to testify as expert witnesses. Judge also recommended internal expert. Recommendations - take common approach to preparing for and working with digital and technologically derived evidence, with participation and input from all parties affected by the use of such | P. 5: ICC is seeking ways to streamline trials - to protect important rights, i.e., the accused's rights to be tried without delay and the victim's right to justice, as well as the desires of stakeholders, including State Parties that fund ICC, to see its limited resources used efficiently. Explain the use of digital evidence at the pre-trial stage of ICC proceedings. P. 21:  ICC's need for offline storage capacity and comprehensive, standard operating procedures for digital evidence. P. 22:  What does the phrase "equality of arms" mean? |
| 10 | | | | | | |

## Source: Author.  Adapted from Kara, 2012.

Additional research into the various human rights organizations and actors

working on open source investigations and citizen media verification was conducted.

Expert interviews supplemented this inquiry.

**Section 4. Research and Data Analysis**

**Sector Research**

Research into human rights organizations and actors working on open source investigations revealed a sector that operates largely in silos (Koettl, 2017). Information is not routinely shared and as a result community knowledge is not created (Koettl, 2017; F. McMahon, personal communication, June 28, 2017). Activists, researchers, and investigators often remain myopically focused on their particular areas of expertise and experience. While the work overlaps and the various actors are necessarily interdependent, the ecosystem itself more closely resembles a disparate assortment of particles rather than a holistic system (see Figure 4).

**Figure 4: Ecosystem of Open Source Investigations and Citizen Activists**
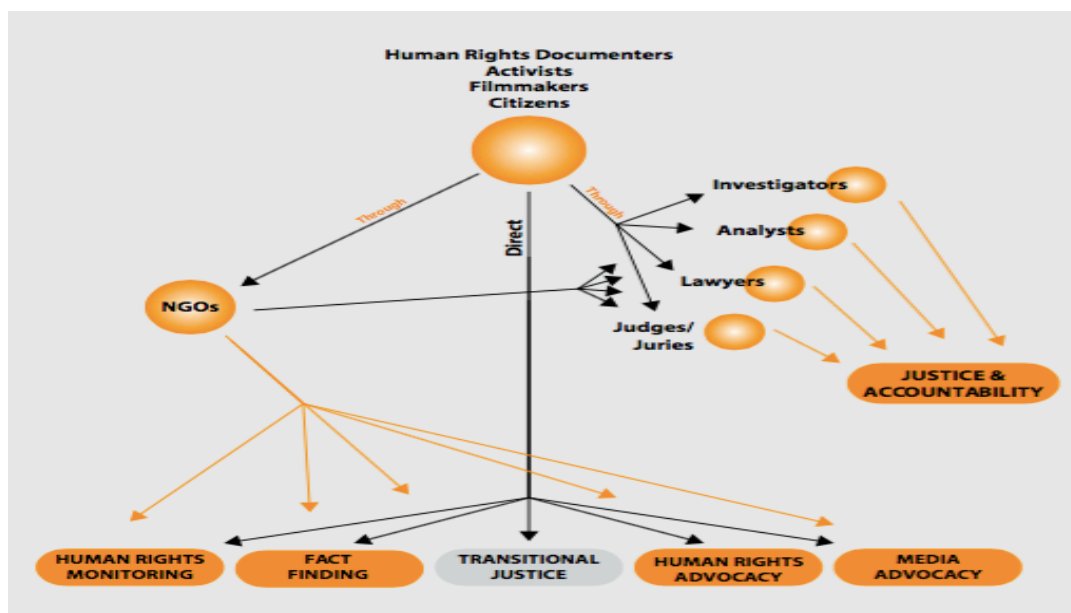


**Source: Witness, 2017.**

In light of this finding, it is not surprising that HRC views itself as a single link in a linear chain of actors rather than as an integral part of a systemic investigations process (A. Koenig, personal communication, July 29, 2017).  HRC merely receives digital content from nonprofit organizations (usually Amnesty International) or finds it online, independently verifies that content, tracks data and performs digital discovery for context, and then returns a verification report to be used somewhere down the chain by researchers and investigators as part of their advocacy or accountability efforts (A. Koenig, personal communication, July 29, 2017) (see Figure 5).

**Figure 5: Chain Model of HRC's Open Source Investigations Work**



**HRC**

**ACTIVISTS NGOS**

**NGOs COURTS**

Create/Store Content

Verify
No Role Before or After

Publish/Use Reports
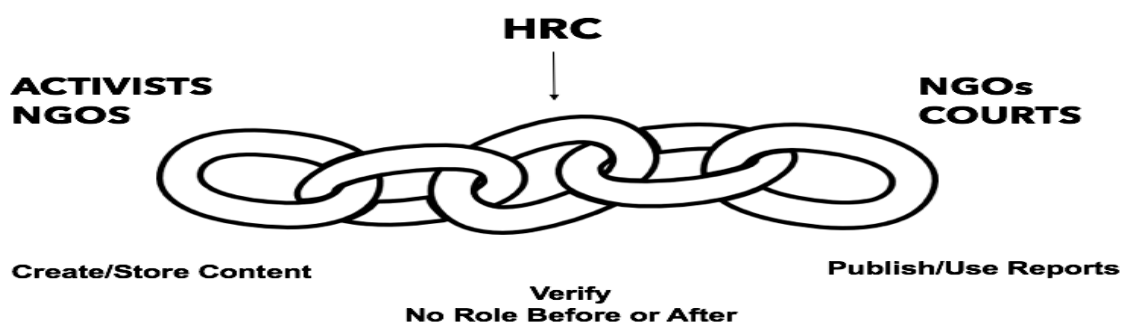
**Source: Author's creation.**

This is a very static view of HRC's work, in keeping conceptually with an ecosystem that is made up of insular, isolated organizations working in silos.  Hiatt (2016) argued that open source intelligence and citizen media will make human rights work "better, cheaper, and safer" (Hiatt, 2016, p. 324).  In reality, however, the current ecosystem suggests significant gaps in the sector – at every phase of open source

investigations, there appear to be issues of capacity, communication, and

coordination (E. Stover, personal communication, June 27, 2017). This is especially true

of the connections between advocacy organizations such as Amnesty International and

the international legal community responsible for investigating and prosecuting crimes

(F. McMahon, personal communication, June 28, 2017).

**Semi-structured Interview Protocol**

As noted above, a total of six participants responded to the semi-structured survey

(see Figure 6 for example of survey responses).

**Figure 6: Semi-structured Interview Protocol – Sample Responses**
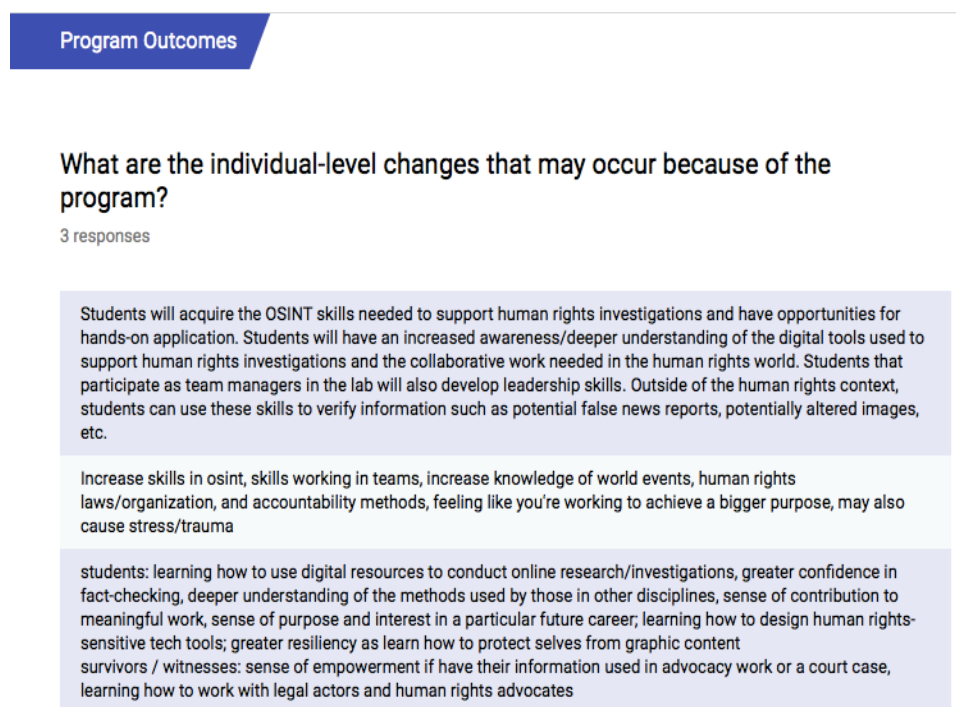


**Source: Author's creation. Adapted from Marco Tavanti, 2017.**

Following an extensive review of Lab materials, informal interviews with participants, and application of the Delphi technique, a preliminary logic model emerged (see Table 2).

**Table 2: Preliminary Logic Model Framework for Investigations Lab**

**Program:  Human Rights Investigations Lab**

Situation: Need to find, review, and verify relevant digital content, such as citizen media; need to produce human rights reports and marshal evidence for human rights prosecutions; inadequate capacity to meet needs; inadequate knowledge of acquisition, collection, preservation, and verification standards

| | Outputs | | Outcomes -- Impact | | |
|---|---|---|---|---|---|
| | Activities | Participation | Short - Education | Medium - Advocacy | Long - Accountability |
| Funding | Open source investigation training sessions | Students, Staff, Experts, and Partners | 1 to 2 years Outputs: | 3 to 5 years Outcomes: | 6 to 10 years Outcomes: |
| Students | | | Increased technical skills - 120 students trained | Increased awareness of human rights investigations | Greater sector-wide capacity for open source investigations |
| Staff | Open source discovery | Students, Staff, and Experts | | Increased collaboration, leadership, resiliency, and empowerment | |
| Experts | Hours spent in investigations lab | Students, Staff | More reports - 10+ verification reports completed | | Greater exposure for human rights issues |
| Facilitators | Verification of citizen media | Students, Staff, and Experts, 2 Partners | More verification -250 to 400 videos verified and authenticated to support of advocacy and accountability e | Increased capacity for open source investigations | Greater empowerment for human rights survivors |
| NGO/NPO human rights partners | Preparation of verification reports | Students, Staff and Experts | | International Standards and SOPs for open source investigation methods, especially to aid and advance prosecutions | Greater legal accountability for perpetrators of human rights abuses and war crimes |
| Physical space | Lab management, oversight, and evaluation | Staff and Experts | More advocacy - 6 public advocacy reports prepared by NGO/NPO partners using student data | | |
| Computers and related technology | | | | | |
| Software and Materials | Quality control and performance feedback | Staff, and human rights partners such as Amnesty International and ProPublica | More partners - 3-6 NGO/NPO human rights partners | Shared knowledge through memos | Scaling of open source investigations work |
| Internet access | | | | | |
| Digital content provided by 2 partners | | | | | |

**Assumptions**
Funding will be available and adequate, open source investigations will be useful for advocacy and accountability purposes, digital content will remain verifiable as technology advances, standards will be acceptable to courts

**External Factors**
Rapidly changing technology, government and/or perpetrators that may increasingly assert control over or manipulate digital content, human rights organizations and actors with competing agendas, actors in other sectors

**Source: Author's creation.**

The logic modeling process revealed three clear outcome areas associated with the Lab's activities – Education, Advocacy, and Accountability.  These are in line with HRC's organizational goals as well as the Lab's specific objectives.  Fairly clear outputs and outcomes exist in relation to the Education outcome.  Students receive trainings in

open source investigations and produce verification reports complete with

Excel spreadsheets of digital and other data.  Internal survey results indicate that students

leave the Lab with increased technical skills, knowledge of human rights issues, and

collaborative behaviors.  The Lab is growing in student population, and some continue to

pursue human rights work at UC Berkeley and beyond.

Human rights groups such as Amnesty International and ProPublica have

incorporated student verification reports into their public reports (S. Dubberley, personal

communication, June 27, 2017).  Thus, there are fairly clear Advocacy outputs and

outcomes.  Advocacy indicators are not perfect, but at the first annual DVC/Lab summit

in June 2017, Amnesty International was able to explicitly demonstrate how it had used

Lab reports to change governmental policies and pursue investigations.  (This was partly

in response to student complaints about impact – on internal survey responses, they

indicated a desire to know more about the larger context of their verification efforts, and

how their work contributed to sector (A. Koenig, personal communication, June 22,

2017).)  For example, student verification reports were used to lobby and persuade the

French government to change its policies vis-à-vis arms sales to Saudi Arabia (S.

Dubberley, personal communication, June 27, 2017).  Amnesty International also used

Lab reports for highly publicized advocacy efforts related to the detention of refugees on

Manus Island in Papua New Guinea, prompting the Australian government to change its

narrative about detainee circumstances (S. Dubberley, personal communication, June 27,

2017).  Similarly, Bellingcat relied on citizen media verified by volunteers to confirm

Russian responsibility for the downing of a civilian plane over Ukraine in 2014

(Eliot Higgins, personal communication, June 28, 2017).

Unfortunately, the Lab's Accountability outputs and outcomes are much more

difficult to conceptualize and understand.  (In general, respondents had trouble

responding to semi-structured interview questions relating to the Lab's intended

systemic-level outcomes.  Most respondents left these questions blank or answered

cryptically, i.e., "perpetrators will be held accountable" as a result of Lab activities.)  For

one thing, it is unclear how Advocacy outcomes relate to Accountability outcomes.  Do

advocacy reports alone result in greater investigations or convictions, and to what extent

are these outcomes attributable to the Lab?   Even more to the point, how is

accountability a direct result of Lab reports, if at all?  The Lab's explicit goals are to hold

perpetrators accountable for human right violations, and to give voice (and justice) to

survivors.  It is unclear, however, whether student verification reports yield any valuable

evidence for ICC courts or other international criminal tribunals.  In other words, is the

data compiled by students admissible as evidence in court?  The logic modeling process

did not answer this question, but rather revealed a lack of understanding about how Lab

activities impact Accountability– there is a disconnect between outputs and outcomes.

One problem is that international criminal investigations and trials take years to

prosecute (International Bar Association, 2016).  For example, the former dictator of

Chad was prosecuted in 2016 for war crimes he committed in the 1980's (BBC, 2017).

No doubt another problem is the lack of capacity, communication, and coordination in

the human rights sector, especially in the area of open source investigations. Viewed as an isolated link in a chain, HRC may not be getting the feedback it needs from other human rights organizations and actors to properly understand the causal relationship between Lab reports and accountability efforts.

A final problem, but not a surprising one in light of the literature review, is the lack of clear investigative and evidentiary standards for the use of citizen media in human rights reporting and criminal prosecutions. Without such standards, it may be impossible for HRC to make the connection between short-term Lab outputs and the accountability goals at the heart of its mission. The logic modeling process, it turns out, revealed the need for research into best practices and possible investigative and evidentiary standards for using open source information and citizen media to promote human rights.

## Section 5: Implications and Key Findings

According to Alston (2103), new technologies and citizen media are ushering in a third wave of human rights fact finding and investigation. He warned that human rights organizations are not doing enough to study these emerging technologies or to effectively harness them in the pursuit of accountability and justice for survivors (Alston, 2013). This project and the research bore that out, and revealed several additional findings:

- The ecosystem within which human rights organizations and actors work is characterized by gaps in capacity, communication, and coordination. These gaps exist at every stage of the investigations process;

- There is a critical lack of clear, comprehensive investigative and evidentiary standards for human rights organizations and actors to follow when conducting investigations, and using citizen media and digital evidence;

- There is a need for organizations and institutions to provide quality control to prevent the use of misinformation in human rights reporting and fact finding;

- There is extensive literature outlining the important technical, journalistic, legal, journalistic, and ethical considerations that should be taken into consideration when developing investigative and evidentiary standards;

- The relevant technical, journalistic, legal, and ethical considerations involve many different academic disciplines and unique areas of expertise;

- HRC views itself as a single link in a linear chain of activity, and without clear standards for moving forward, is at risk of failing to meet its key advocacy and accountability objectives.

In light of these findings, HRC should consider shifting its mindset and expanding its role in the human rights sector. HRC and similarly situated human rights organizations must play a more central, systemic role in open source investigations, and in the development of investigative and evidentiary standards. Rather than functioning as an isolated link in a chain, HRC should view itself as the nucleus or guiding force that sustains the ecosystem of related actors and organizations (see Figure 7).

**Figure 7: Systemic Model of HRC's Open Source Investigations Work**
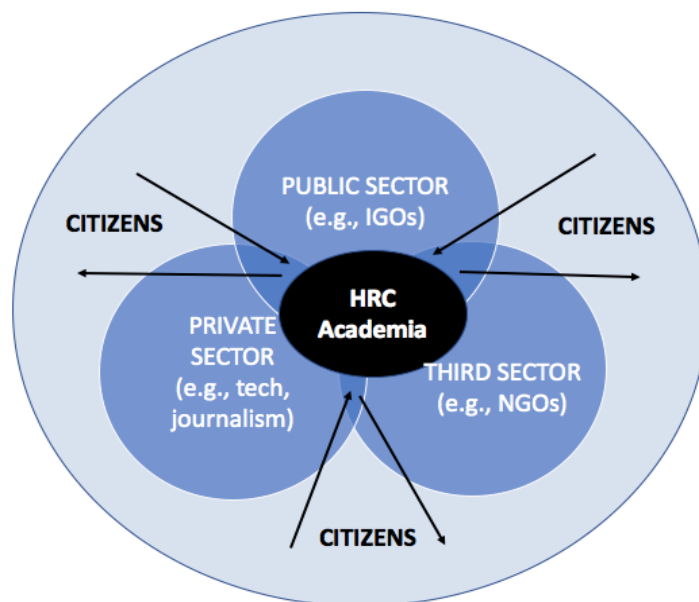


**Source: Author's creation. Adapted from Marco Tavanti, 2012.**

In this model, adapted from Dr. Marco Tavanti's model of Academic Social Responsibility (ASR), HRC and similar academic institutions serve as a stabilizing and coordinating force. They pull various human rights actors together to build capacity, scale impact, and maximize outcomes. They lead the way on developing and promoting standards and guidelines for open source investigations – certainly as an interdisciplinary organization closely affiliated with a major university, HRC is best positioned to ensure that technical, journalistic, legal, and ethical factors are considered and incorporated into any final set of standards. They tap into their own vast intellectual resources to provide labor, research, and ideas to the sector. They engage in multi-sector partnerships, for

example, between tech companies, courts, and NGOs, to improve open source

methods and technologies.  They continue to train professionals in open source methods.

They develop a consortium to scale efforts and possibly to serve as a collective archive of

digital evidence. They leverage their contacts with international human rights

mechanisms and courts.  They promote communication and coordination between all

those who have an interest in applying law and science to the pursuit of justice and

accountability.  They lead the third wave of human rights researchers and investigators,

and in so doing, they create community knowledge.

In this model, as in life, information flows in all directions, from all sectors –

nonprofit, public, and private.  Importantly, however, the three sectors remain firmly

embedded in the larger community where citizens and survivors interact and for which

the sectors exist.  The public should have a prominent place in the model.

### Section 6: Recommendations and Conclusions

Moving forward, HRC should consider implementing the following recommendations:

1. Continue the logic modeling process to fully flesh out the Investigation Lab's key

   activities, inputs, outputs, and intended outcomes, especially with regard to

   HRC's Accountability goals.

2. Work with the human rights community, including international NGOs and the

   international justice community to develop investigative and evidentiary standards

   that squarely address the important technical, journalistic, legal, and ethical

   considerations raised by the research.

3. Engage all three sectors – including NGOs, tech communities, the international legal community, citizen activists, and other key stakeholders – by holding conferences, panels, and workshops on open source and citizen media topics.

4. Develop a strategic plan for the Investigations Lab based on a model that recognizes HRC's central role in open source investigations and human rights work more broadly.  Consider developing a consortium of academic research centers and governing structures to scale the work and build capacity, and be sure to include all key stakeholders including survivors.

This last point is particularly important.  A new model for conceiving HRC's place in the ecosystem of human rights actors working on open source investigations has the potential to benefit the organization, the human rights sector, and the wider community.  Further, in keeping with the concept of Academic Social Responsibility (Tavanti, 2012), this model recognizes and promotes an important viewpoint –that academic centers have an "institutional capacity, as well as [a] responsibility, to educate for the public good and engage for the global common good."

**List of References**

Alston, P. (2103).  Introduction: Third Generation of Human Rights Fact-Finding.
        Proceedings of the Annual Meeting (American Society of International Law),
        CVII, 61-62.  Retrieved from:
        https://www.cambridge.org/core/journals/proceedings-of-the-asil-annual-
        meeting/article/div-classtitleintroduction-third-generation-human-rights-fact-
        findingdiv/384A93DD6419EABDD8728BB073AD9EC6.

Aronson, J.D. (2017).  Preserving human rights media for justice, accountability, and
        historical clarification.  *Genocide Studies and Prevention: An International
        Journal,* 11(1), 82-89.  DOI: http//doi.org/10.5038/1911-9933.11.1.1441.
        Retrieved from: http://scholarcommons.usf.edu/gsp/vol11/iss1/9.

Ashouri, A., Bowers, C., & Warden, C. (2014). The Salzburg workshop on cyber
        investigations: An overview of the use of digital evidence in international
        criminal courts. *Digital Evidence and Electronic Signature Law Review*, 11, 115-
        127. DOI: http://dx.doi.org/10.14296/deeslr.v11i0.2130.  Retrieved from:
        http://journals.sas.ac.uk/deeslr/article/view/2130/2060.

BBC. (2017).  Hissene Habre: Chad's ex-ruler convicted of crimes against humanity.
        Retrieved from: http://www.bbc.com/news/world-africa-36411466.

Berkeley News. (2017).  World's next generation of human rights investigators meets at
        Berkeley.  Retrieved from: http://news.berkeley.edu/2017/06/28/worlds-next-
        generation-of-human-rights-investigators-meets-at-berkeley/.

Carter, D.L. (2004).  Law enforcement intelligence: A guide for local, state, and tribal
        law enforcement agencies. University of Michigan.
        https://fas.org/irp/agency/doj/lei/chap5.pdf.

Engine Room. (2017). Amnesty International's digital verification corps: New networks
        and methods for human rights research. Retrieved from:
        https://www.theengineroom.org/digital-verification-corps/.

Global Justice Information Sharing Initiative. (2013). Developing a policy on the use of
        social media in intelligence and investigative activities:  Guidelines and
        recommendations.  Retrieved from:
        https://it.ojp.gov/documents/d/Developing%20a%20Policy%20on%20the%20Use
        %20of%20Social%20Media%20in%20Intelligence%20and%20Inves....pdf.

Gugiu, P.C., Rodriguez-Campos, L. (2007).  Semi-structured interview
         protocol for constructing logic models.  *Evaluation and Program Planning*, 30(4),
         339-350.  Retrieved from: https://www.ncbi.nlm.nih.gov/pubmed/17905433.

Hannum, H. (2011).  Fact-finding by nongovernmental human rights organizations.
         Retrieved from:
         https://www.google.com/search?site=&source=hp&q=hannum+fact+finding+by+
         nongovernmental+human+rights+organizations&oq=hannum&gs_l=psy-
         ab.3.0.35i39k1j0i20k1j0l2.1291.1993.0.3188.7.6.0.0.0.0.99.549.6.6.0....0...1.1.64.
         psy-ab..1.6.546.0..0i46i67k1j46i67k1j0i67k1j0i10k1.L-l1cM-NMkU.

Hiatt, K. (2016). Open source evidence on trial. *The Yale Law Journal Forum*, 125, 323-
         330. Retrieved from: http://www.yalelawjournal.org/forum/open-source-
         evidence-on-trial.

Hsu, C., Sandford, B.A. (2007). The Delphi technique: Making sense of consensus.
         *Practical Assessment Research & Evaluation*, 12(10), 1-7. Retrieved from:
         http://pareonline.net/getvn.asp?v=12&n=10.

Human Rights Center. (2017). Annual report 2016/2017.  Retrieved from:
         https://www.law.berkeley.edu/wp-content/uploads/2015/04/HRC-annual-report-
         2016_final_web.pdf.

Human Rights Center. (2012).  Beyond reasonable doubt:  Using scientific evidence to
         advance prosecutions at the international criminal court.  Berkeley, CA:  UC
         Berkeley School of Law.  Retrieved from:
         https://www.law.berkeley.edu/files/HRC/HRC_Beyond_Reasonable_Doubt_FIN
         AL.pdf.

International Bar Association. (2016) Evidence matters in ICC trials: An international bar
         association international criminal court & international criminal law programme
         report providing a comprehensive perspective on selected evidence matters of
         current importance in ICC trial practice.  Retrieved from:
         http://www.coalitionfortheicc.org/news/20160929/evidence-matters-icc-trials.

International Criminal Court. Understanding the International Criminal Court.  Retrieved
         July 2017 from https://www.icc-cpi.int/iccdocs/PIDS/publications/UICCEng.pdf.

International Criminal Court Strategic Plan 2016-2018. (2015).  Retrieved from:
         https://www.legal-tools.org/doc/7ae957/pdf/.

Koenig, A., Smith Cody, S., Stover, E., Crittenden, C. (2014). Digital fingerprints: Using
         electronic evidence to advance prosecutions at the international criminal court.

Berkeley, CA: Human Rights Center of UC Berkeley School of Law. http://dx.doi.org/10.6078/J80Z7154.  Retrieved from: https://www.law.berkeley.edu/files/HRC/Digital_fingerprints_interior_cover2.pdf/.

Koettl, C. (2016). Citizen research and verification: An analytical framework for human rights practitioners. *Human Rights in the Digital Age: CGHR Practitioner Paper 1*. Cambridge, UK: University of Cambridge Centre of Governance and Human Rights.  Retrieved from: https://www.repository.cam.ac.uk/bitstream/handle/1810/253508/Koettl_Citizen%20Media%20Research%20and%20Verifcation_FINAL%20%281%29.pdf?sequence=1&isAllowed=y.

Koettl, C. (2017).  Sensors everywhere: Using satellites and mobile phones to reduce information uncertainty in human rights crisis research.  *Genocide Studies and Prevention: An International Journal*, 11(1), 36-54. DOI: http://doi.org/10.5038/1911-9933.11.1.1440.  Retrieved from: http://scholarcommons.usf.edu/cgi/viewcontent.cgi?article=1440&context=gsp.

Mehandru, Nikita.  (2017).  Open Source Intelligence in International Criminal Trials. Berkeley, CA:  UC Berkeley.

Orentlicher, D. (1990). Bearing witness: The art and science of human rights fact-finding. *Harvard Human Rights Journal*, 3, 92-93.  Retrieved from: http://heinonline.org/HOL/LandingPage?handle=hein.journals/hhrj3&div=8&id=&page=.

PBS. (2107).  A new generation of human rights investigators turns to high-tech methods. Retrieved from: http://www.sfchronicle.com/bayarea/article/UC-Berkeley-program-seeks-to-help-prosecute-war-11075013.php.

Robertson, G. (2010). Human rights fact finding: Some legal and ethical dilemmas.  *Human Rights Institute Thematic Paper No. 1*.  London, UK: International Bar Association. Retrieved from:  https://www.ucl.ac.uk/human-rights/research/ucl-hrr/docs/hrreviewissue3/robertson.

San Francisco Chronicle. (2017). UC Berkeley program seeks to help prosecute war criminals. Retrieved from:  http://www.sfchronicle.com/bayarea/article/UC-Berkeley-program-seeks-to-help-prosecute-war-11075013.php.

Tavanti, M. (2012). Academic Social Responsibility Model. Retrieved from: http://www.weinstitute.org/methods.html.

Trewinnard, T. (2017).  News verification guide.  Stockholm, Sweden: The Center for Media Studies at SSE Riga.

United Nations. (2015).  Report of the special rapporteur on extrajudicial, summary or
        arbitrary executions, Christof Heyns: Use of information and communications
        technologies to secure the right to life.
        http://ap.ohchr.org/documents/dpage_e.aspx?si=A/HRC/29/37

United Nations. (2017).  Charter of the united nations.  Retrieved from:
        http://www.un.org/en/charter-united-nations/

United Nations. (2017).  Universal declaration of human rights.
        http://www.un.org/en/universal-declaration-human-rights/index.html.

Witness.  (2017).  How to navigate digital data for human rights research.  Retrieved from:
        https://witness.org/datnav-new-guide-navigate-digital-data-human-rights-research/.

Witness.  (2017).  Video as evidence field guide.  Retrieved from:
        https://vae.witness.org/video-as-evidence-field-guide/.

**Appendix A: Semi-structured Interview Protocol**

# Human Rights Investigations Lab

Survey to Collect Logic Model Insights

## Program Outcomes

Program Outcomes refer to the changes that occur after program services or activities are administered to the target population and/or participants and may represent positive and negative changes or maintenance of a particular level or status that would otherwise have deteriorated without the program. Intended program outcomes may be short-term, midterm and/or long-term in nature.

1. **What are the individual-level changes that may occur because of the program?**

 

 

 

 

2. **What skills or knowledge will participants learn from the program?**

 

 

 

 

3. **What changes in behavior or performance might one expect to see in program participants?**

_____

_____

_____

_____

_____

4. **What secondary benefits may colleagues, friends or family members derive?**

_____

_____

_____

_____

_____

5. **What organizational changes may occur because of the program?**

_____

_____

_____

_____

_____

6. **What career options, enhanced perceptions or improved skills may staff acquire?**

_____

_____

_____

_____

_____

7. **What capacities or resources may the organization develop or enhance?**

_____

_____

_____

_____

_____

8. **What community changes may occur as a result of the program?**

_____

_____

_____

_____

_____

9. **What environmental changes may result from program activities?**

_____

_____

_____

_____

_____

10. **What social changes might one expect to observe because of the program?**

_____

_____

_____

_____

_____

11. **What economic outcomes might the program have on impacted communities?**

_____

_____

_____

_____

_____

12. **What specific system-level changes could the program have?**

_____

_____

_____

_____

_____

13. **What policies or legislative impact could the program have at the local or state level?**

_____

_____

_____

_____

_____

14. **What policies or legislative impact could the program have at the national or international level?**

_____

_____

_____

_____

_____

15. **What political impact could the program have if successful? Unsuccessful?**

      _____

      _____

      _____

      _____

      _____

16. **What are the regional, national or international changes that may occur because of the program?**

      _____

      _____

      _____

      _____

      _____

17. **In your opinion, what would be the top five (5) indicators of program success?**

      _____

      _____

      _____

      _____

      _____

# Human Rights Investigations Lab
Survey to Collect Logic Model Insights

# Program Activities and Outputs

Program Activities are the specific actions and processes used to produce outputs and outcomes.  Program Outputs refer to the direct results of program activities such as services, products, techniques, tools, events, and technology.

18. **What new or existing activities does the program provide to program participants or their colleagues, friends or family members?**

_____

_____

_____

_____

_____

19. **When and where do these activities take place?**

_____

_____

_____

_____

_____

20. **Who conducts these activities?**

_____

_____

_____

_____

_____

21. **What participant needs are these activities designed to meet?**

_____

_____

_____

_____

_____

22. **What new or existing activities does the program provide to staff?**

_____

_____

_____

_____

_____

23. **When and where do these activities occur?**

_____

_____

_____

_____

_____

24. **What staff needs are these activities designed to meet?**

_____

_____

_____

_____

_____

25. **What new or existing activities does the program provide to impacted communities?**

_____

_____

_____

_____

_____

26. **When and where do these activities take place?**

_____

_____

_____

_____

_____

27. **Who conducts these activities?**

_____

_____

_____

_____

_____

28. **What community needs are these activities designed to meet?**

_____

_____

_____

_____

_____

29. **What new or existing activities does the program provide to policymakers?**

_____

_____

_____

_____

_____

30. **When and where do these activities take place?**

_____

_____

_____

_____

_____

31. **Who conducts these activities?**

_____

_____

_____

_____

_____

32. **What policy needs are these activities designed to meet?**

_____

_____

_____

_____

_____

33. **What new or existing activities does the program provide to the broader regional, national or international community?**

_____

_____

_____

_____

_____

34. **When and where do these activities take place?**

_____

_____

_____

_____

_____

35. **Who conducts these activities?**

_____

_____

_____

_____

_____

36. **What regional, national or international needs are these activities designed to meet?**

_____

_____

_____

_____

_____

# Human Rights Investigations Lab
Survey to Collect Logic Model Insights

## Program Inputs

Program Inputs refer to all of the resources invested in and used by the program to achieve its outputs and outcomes.

37. **What essential resources (i.e., facilities, equipment, materials, personnel, money, and other resources) are available to generate or support each of the aforementioned program activities?**

_____

_____

_____

_____

_____

38. **Is there a gap between the resources necessary to operate the program and the available resources?**

_____

_____

_____

_____

39. **What is the size and nature of this gap?**

_____

_____

_____

_____

40. **How has/will this gap be filled?**

_____

_____

_____

_____

41. **If the gap cannot be filled, which program activities or components are in danger of being cut or curtailed?**

_____

_____

_____

_____

42. **Who are the key program partners and what is their role and/or contribution to the program?**

_____

_____

_____

_____

Powered by

Google Forms

## Author's Bio

Erica Williams is a nonprofit consultant in the Bay Area with over seven years of experience in the nonprofit sector and fifteen years of experience in the legal sector.  She specializes in nonprofit management, strategic planning, program evaluation, organizational development, and public policy analysis.  Erica is passionate about building stakeholder relationships and community partnerships, developing cross-sector collaborations, and increasing organizational effectiveness through internal and external dialogue.

Erica is an MNA Candidate at the University of San Francisco School of Management.  She is guided by an enduring commitment to public service, relationship-centered work, and achieving social impact through mission fidelity and data-driven decision-making.