

# *Turning Technology's Tables on Trafficking: Building an Abolitionist Data Ecosystem.*

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**Project Abstract.** Cyberspace is a key part of the business cycle of modern-day slavery. Traffickers use digital data directly – using major web arteries to find buyers and identify victims, and indirectly – like any small business, online banking and digital communications serve as key enablers. Simultaneously, cyberspace is key terrain for trafficking's enemies – law enforcement and NGOs use the web to share data and collaborate. Traffickers have already targeted anti-trafficking websites, a trend likely to increase as more anti-trafficking work moves online. In order to counter this 'wicked problem,' state and IGO leadership needs to make cyberspace more secure for the anti-trafficking movement and far less secure for traffickers.

As to the former, the anti-human-trafficking (AHT) movement faces an endemic challenge in the inability to collaborate. The AHT movement has been plagued by data problems and unsynchronized (and even counter-productive) efforts. Cyberspace offers a solution – an online collaboration environment provides the movement both an Intranet and a Fusion Center, solving the coordination problem. Such an environment would be a target for hacking, and security is paramount.

Concerning the latter, traffickers find online collaboration far too easy – their use of cyberspace is almost uncontested. By targeting and prosecuting the cyberspace elements of the trafficking business model, the legally sanctioned elements of the AHT movement make life far more difficult for traffickers. This induces friction, reduces profits, and ultimately protects victims by disrupting trafficking networks.

In short, the traffickers have a market, which serves as a massive data aggregator transmitting both prices and best practices to each other. The Anti-Trafficking movement has an anti-market, as structural incentives inherent in the struggle for grants and donors causes groups to view each other as competitors and hence hoard resources. So long as we are an anti-market fighting a market, it is unrealistic to expect significant impacts. However, Information Technology and a shared data backbone can serve as a 'synthetic market' for the movement, allowing coordination amongst major players, and many more people to take part in the movement in meaningful ways.

**It takes a network to defeat a network, and we need a network.**

# Building a Secure Online Space.

**Key Elements.** Rather than building one single network, the movement has many players with diverse needs; moreover, the expression of slavery varies from area to area. We need to build a network structure fluid enough to let organizations innovate from the bottom up, in response to local conditions. This structure includes three elements: local 'Barricade Networks' connected by Palantir's Dynamic Ontology and Nexus Peering on a Data Ecosystem for the movement.

- **Barricade Networks:** During the later French Revolutions, people would throw whatever was on hand together into *ad hoc* defenses, where people would gather. A defensive structure made from whatever is on hand that allows normal people to protect whatever is behind it, seems in keeping with the best traditions of the movement. Rather than mandating a structure or a model, we use whatever is there. An information backbone should solve organizational problems, build a cyberspace layer atop the 'real space' relationships that already exist, make IT tasks easier for poorly resourced organizations, etc. These are then synchronized. This model makes it very easy to stand up new networks domestically and internationally. In practice, this looks like a local server under the supervision of coordinating bodies such as the BAATC in the Bay Area or Chab Dai in Cambodia. These Barricade Networks are the body of the secure online space.
- **Data Ecosystem:** Rather than one single network, which is at best inflexible, and in general unworkable given the diversity of the movement, we propose a 'data ecosystem,' or a compact between all major networks in the movement to structure data such that any data point can migrate from any system to any other system in the ecosystem. This allows organizations to share data points with one-click, which is key for time-critical situations and data-sharing. This is brought about through IT partnerships amongst the major players in the movement, as well as by the grantors and donors, who place 'data riders' in their donations which encourage data sharing and common standards. This is the backbone of the secure online space.
- **Dynamic Ontology and Nexus Peering:** A proprietary Palantir concept, dynamic ontologies overcome the classic data structure problems inherent in data sharing. Rather than making one central list of categories, by simply linking entities to each other, networks can ingest data and let the data define its own structure. Similarly, Nexus Peering allows a whole set of diverse networks to synchronize their data with each other rather than forcing a central network structure. These technologies provide the ligaments of the secure online space.

These three elements allow coordination and collaboration in local spaces, as well as global data sharing. The willingness to actually share data is more of an organizational problem, but if the structures are in place to allow data sharing, the benefits of shared situational awareness will trump this resistance over time, provided organizations observe **Data Reciprocity** (If an organization shares data, any benefit from the data needs to be shared with them.) The key to this structure is collaboration amongst players' IT staffs, as well as convening authority (C/TIP, J/TIP, INTERPOL and major players in the movement can serve this role.)

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**Key Roles.** In order to synchronize the movement on this data ecosystem, four key roles must partner.

- **Benchmarking and Best Practices:** A data ecosystem can share best practices and enable collaboration. Both by examining organizational process, and by enabling an Application Programming Interface, organizations can help each other by benchmarking what works and what doesn't, and passing on what works to other members. In this structure, the community would welcome new players to the movement with a 'starter pack' of web applications, information and contacts.
- **Time-Critical Data Routing:** As Polaris does admirably, this structure moves data rapidly to whoever needs it the most. In the most direct application, a time-critical tip would move to law enforcement in enough time to rescue a trafficking victim; in a more banal form, offers of assistance, resources and information would efficiently move into the ecosystem and to whatever partners could best use them.
- **Social Movement Support:** A study of history points to the critical need for social support for social justice campaigns – the British Slave Trade suppression campaign faced a crucial challenge in 1849 – 40 years in and 10 years from its eventual success – in a close-run parliamentary vote to pull the funding plug and in effect re-legalize the slave trade. This network must include access for social movement actors and civil society in order to maintain the long-term health of the campaign.
- **Big-Data Analytics:** With all data in compatible formats, insofar as players are willing to share information, we could then all operate in a space of shared situational awareness. There is a tradeoff between resolution and access in this due to security, but law enforcement could maintain the highest-res actionable picture, with vetted organizations using a medium-res and refresh version, and academics and advocates with a low-res, but accurate picture of known trafficking that poses no risk to sources.

**Implementation.** The strength of this model is the ability to leverage existing relationships and amplify existing infrastructure – it is an amplifier and accelerator of real-space partnerships. This, in turn, allows for a phased implementation plan, where these processes are first implemented as Barricade Networks under favorable conditions – existing strong partnerships, low levels of corruption, high levels of data infrastructure, (such as the SF Bay Area BAATC.) The refined model is then adapted for mobile data implementation for Barricade Networks in more challenging conditions (Cambodia - Chab Dai Charter members) with IT reach-back support to the now-strong early Barricade Networks. This 'snowball' model allows natural growth of the movement across a spectrum of conditions, with better-connected regions supporting less-connected ones.

**New Possibilities.** This proposed framework provides scaffolding for an entire range of cyber-enhanced capabilities. Cyber superiority, much like air superiority, is useful primarily for its ability to facilitate other enterprises. If the forces of modern abolition overpower the forces of modern slavery in cyberspace, they gain tremendous advantages in coordination and analysis. Losing cyberspace hurts traffickers in two ways – first, they lose a tremendously effective coordinating mechanism that is presently integral to their supply chain. Second, they will find their adversaries in law enforcement and NGOs are consistently faster and more adaptive than themselves. By the time that traffickers diffuse a counter-tactic, the police have already adapted. If the adversary network approaches a public official, they would find the transparency of free-flowing open data deters corruption. Winning cyberspace yields returns both in cyberspace and in real-space.

Such a data ecosystem brings the power for justice into the homes and streets, rather than only in institutions. **Crisis Mapping** partners well with this structure, letting citizens use data as a floodlight to illuminate trafficker sanctuaries. **Crowd Sourcing** allows a model of resourcing with dignity, letting people serve with their unique talents rather than reducing donors to funding marks. With a data ecosystem, imagination is the only limit to what people can do for human freedom.