Using Technology to Understand Mexico's Epidemic of Violence

n Mexico's deadly war on drugs, the use of information technology has become widespread. Once journalists became targets of the cartels and reduced their reporting in traditional media, information began flowing from Facebook pages, Twitter accounts, and YouTube videos. After the Mexican government decided to stop publishing information about the number of people killed by organized crime, websites started using Google Maps to track patterns of violence. At a Cato Policy Forum in March, Jared Cohen, director of Google Ideas, discussed the unique opportunity that Mexico's network connectivity provides. Karla Zabludovsky, a reporter for the *New York Times*, commented on the role that alternative media has played in covering the war on drugs. Andrés Monroy-Hernández, a social computing expert at Microsoft Research, highlighted the empowering effect this phenomenon has had in the face of failing traditional institutions—both public and private.

JARED COHEN: You may find it surprising that a company like Google is here engaging in a conversation about violence in Mexico. My response to that is that you shouldn't be surprised at all. Five billion new people will connect to the Internet in just the next decade. And those five billion people, for the most part, live in parts of the world ridden with the greatest number of challenges—where conflict is prevalent, where instability is rampant, and where repression is all too familiar.

This means that in the future, technology is going to be relevant to every single challenge in the world. In short, there is a space between philanthropy and business that is currently unoccupied, and we need more technological expertise involved in understanding the tools that people in these environments are going to use.

Google Ideas was founded to anticipate the unique sets of challenges that the vast majority of our future users are going to encounter in these environments. Our aim is twofold. First, we are attempting to play a translation role by bridging the gap between those who understand the tools and those who understand the geopolitical problems playing out across the globe. Second, we try to actively build products that can help address the thorniest chal-



The challenge of self-censorship is one in which technology can play an enormous role.

lenges faced by those next five billion.

We don't need to look any further than south of our own border to see that Mexico is a case in point. One of our main focus areas is identifying ways to use technology to map, expose, and disrupt illicit networks—everything from narco-traffickers to the illegal arms trade. All of these networks are deeply intertwined. They're part of the same illicit chain making its way around countries throughout the world.

Last year, Google's executive chairman and I had an opportunity to visit Ciudad Juárez. For most of my career, I've spent time in radicalization hotbeds in the Middle East, South Asia, and parts of Latin America. To my mind, there were three idiosyncrasies that stood out, distinguishing Juárez from some of these other violent environments.

For starters, the police that escorted us around—as well as those that patrolled the streets of the city—were wearing facemasks. There was no greater illustration of how deeply embedded fear is in that society. It's difficult to imagine what this does to stifle people's enthusiasm for engaging with law enforcement.

Second, it was fascinating to stand in Juárez and look across the border to El Paso. It was clear that it's really just the same city with a wall passing through it—reinforcing the notion that this problem is so deeply intertwined between our two societies. The conflict has spilled over into our own backyard.

Finally, the most interesting, the most surprising, and probably the most prescriptive observation was the invisibility of the problem to somebody like me coming from the outside. There was no equivalent, for instance, to the gang graffiti you see in other places. I asked one of the police officers driving around with us if he could point to some indicator of the presence of the drug cartels, and he said that the only way to know they're here is to talk to members of the community. There's no real visual representation of them.

We did talk to people, and what we learned is that all the information about where the cartels operate, where the drugs are moving, and where the activity is taking place exists within the community. There's no shortage of data. The problem is how to actually make that data public. Unfortunately, individuals are hesitant to report crimes for fear of retaliation, they have little incentive to trust the police, and they have even less reason to believe that whistleblowing will lead to action. So why take the risk?

This immediately got me thinking about free expression. In my industry, when we think of suppressing free speech, we think of countries like North Korea, Iran, Cuba, Syria—countries that actively censor their population's access to information. But this was different. Mexico is a democratic society with a free and open Internet. Nevertheless, individuals are self-censoring out of fear of nonstate actors. This begs the question: What is the benefit of open access if you don't have freedom from fear?

Five years ago, the challenges that we see south of our border were largely irrelevant to the type of expertise that you find at any technology company. It's easy to be pessimistic about Mexico—most of what I've said so far has been—but believe it or not I'm actually an optimist. The challenge of self-censorship is one in which technology can play an enormous role. The wild card in Mexico is the immense growth of connectivity, the rapid spread of mobile access, and the increased transparency, growing accountability, and expanded avenues through which ordinary citizens can intervene and help.

KARLA ZABLUDOVSKY: This past Sunday night, locals in Reynosa, Tamaulipas—a city near the United States border with Mexico—were going about their business. There were people walking around in public areas, while others were enjoying Sunday night films at the local cinema. And just like that, a shootout began at 7:30 p.m.—or so it seems.

Apparently, those walking around ran for cover, terrified. Supposedly, those in the theater were asked to remain there until 11:00 at night. Allegedly, when the gunpowder settled, there were 40 dead on the ground.

Now as a journalist, of course, I hate using words like "apparently," "supposedly," and "allegedly." But 12 hours after the shootout, this was still all the information I had to go by. There were tweets posted overnight. A 15-minute YouTube video of the shootout was floating around the blogosphere. And someone had taken photographs of burned cars. None of these



A small, online army has made it its mission to supply a constant stream of updates on security situations in Mexico.

reports, however, were verifiable.

On Monday morning, I called the Tamaulipas Police Department to inquire about the supposed shootout and was told that they would not give out any information or confirm anything, officially or unofficially. I checked local papers and couldn't find anything even mentioning the tragedy—although the local paper did have a story on the Harlem Shake.

Finally, by Monday afternoon, the state attorney's office released a vague statement, saying that there was in fact a shootout. There were two collateral victims and seven detainees. They gave no explanation of the event and certainly no final body count.

More and more, this is becoming the norm in many parts of Mexico. Unconfirmed information—flowing from online outlets such as Twitter, Facebook, and blogs—is increasingly replacing official news sources in the first critical hours, and sometimes well beyond that. And it is no surprise why.

According to the Committee to Protect Journalists, 48 journalists have been killed or have disappeared in Mexico since December 2006. In an attempt to curb this aggression, newspapers have toned down or eliminated their coverage of drug-related violence. A study by the Fundacion Mepi, an independent investigative journalism center, found, for example, that *El Mañana* newspaper, based in Nuevo Laredo, published three stories related to drug trafficking in June 2010. That month, 98 people were killed in cartel-related murders.

In March the Saltillo-based newspaper *El Zocalo* announced in an editorial, "By virtue that there are no guarantees of security in the full exercise of journalism, the Editorial Council of the Zocalo newspapers has decided to abstain from publishing all information related to organized crime." To fill this information vacuum, journalists and citizens alike have taken to social media.

The latest Reynosa shooting is a great example of how news begins to spread online in the absence of formal or official sources. Using the hashtag #ReynosaFollow, information began flowing in real-time as the shootout unfolded. But it also underscores the limits of these outlets. One of the tweets, for instance, was sent by @Baboonmd, and read, "Clean up of bodies and burned vehicles is hastily carried out by armed civilian/an official body count will never be known."

Perhaps. What I have found reporting in Mexico during the past year and a half is that, more often than not, you hit a brick wall. Information is hard to come by; verified data even more so.

Like #ReynosaFollow in Tamaulipas, there is a small, online army that has made it its mission to supply a constant stream of updates on security situations in different parts of the country. Who the people feeding violence-related social media are or why they do what they do is anyone's guess. But what is undoubtedly true is that they've formed a growing community of inform-

ants trying to document sporadic acts of violence as they happen.

The problem is that it is hard to verify any of these reports, precisely because of what makes these services so attractive in the first place. Anonymity means that it is nearly impossible to verify who the sources are, if they are indeed at the scene where they claim to be reporting from, and what their agenda is.

Which brings us to another problem. What happens when those supplying information on the drug war do not have proper online security checkpoints in place? The most popular blogger in Tamaulipas in 2011 was, by far, "La Nena de Laredo"—a woman who used to post updates often on the blog *Nuevo Laredo en Vivo*. In September, her decapitated body was found along with a note: "Nuevo Laredo en Vivo and Social Networks. I am La Nena de Laredo and I am here because of my reports and yours."

How many journalists and citizen reporters are even remotely trained in online security? How many, for example, use virtual private networks when they post sensitive information? Given the current security situation in Mexico, there are notable risks to actively participating in social media.

Twitter and Facebook are important tools. They exert pressure on the government to reveal events that would otherwise remain concealed. They increase transparency from the ground up. And when their information flow happens in real time, they may even save lives. They are, by and large, incredibly valuable. In fact, in some parts of the country, they are now the only source of information.

Users just need to be safe. The most visible local reporters would benefit greatly from training. But as important as safety is veracity. Journalists need to assess and vet the content of social media just like they would any other source. It's important to remember that citizen reporters are not protecting the reputation of their news organizations. Often, they are trying to protect themselves and their friends

In short, one of the biggest draws of social media—its anonymity—is also the best reason to approach these news sources with healthy caution.

ANDRÉS MONROY-HERNÁNDEZ: The Mexican drug war is not simply a rhetorical war on an inanimate object. It is an actual armed conflict between drug cartels and law enforcement. It has taken the lives of more than 60,000 people since 2006



This highly participatory, citizen-driven activity is beginning to fill in the gaps where traditional institutions fail.

alone, and it's a conflict that affects the everyday lives of Mexico's citizens, dramatically changing the way people in that country interact with each other.

But the Mexican drug war is not just a conflict involving bullets, either. It is also an information war. Typically, when there is an emergency in the United States, there are two main entities in charge of the flow of information: the government—which often gives an official account of the transpiring events—and the media—which broadcasts that account and fills in the details. In Mexico, those two entities are no longer fulfilling that role.

"Fearing for their lives and the safety of their families, journalists are adhering to a near complete news-blackout, under strict orders of drug smuggling organizations and their enforcers, who dictate—via daily telephone calls, e-mails and news releases—what can and cannot be printed or aired," the *Washington Post* has reported.

These censorship challenges extend to government officials as well. "In Nuevo Laredo, [for instance,] the mayor mysteriously disappears for days and refuses to discuss drug violence," the *Post* continues. "The military general who presides over the soldiers patrolling the city does not hold news conferences, issue statements or answer questions from the media. Neither do local representatives of the federal police and prosecutors."

You can imagine what this does to a person in this type of environment, who witnesses this stark escalation of violence juxtaposed with a virtual blackout of news information on the subject.

Yet, this also creates an opportunity, as the emergence of new technologies circumvents some of the censorship problems seen in Mexican society. To provide some context of the level of activity, Internet usage has doubled in the past 10 years. Of those surfing the Internet, about 61 percent use social media tools. In fact, Mexico is the fifth largest user of Twitter in the world.

At the intersection of weakened institutions, escalating violence, and increased adoption of social media is a new phenomenon. Consider, for instance, the following tweet (translated from Spanish) from a user named Angela: "Caution on Gonzalez Ave. by the big supermarket, people report a recent risk situation!"

Nearly every city in Mexico affected by the drug war violence has organically developed such mechanisms whereby useful information can be aggregated and utilized. This information ecosystem is being mediated by many of the different technologies already described. But the crucial point here is that this is a highly participatory, citizen-driven activity—a kind of model of altruistic community service—that's beginning to fill in the gaps where traditional institutions increasingly fail.