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Technology in the Security Sector: Mexico

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Table of Contents

REPORT SUMMARY **3**

INTRODUCTION **5**

CRIMINAL JUSTICE REFORM IN MEXICO **6**

Police Reforms at the Federal, State and Municipal Levels & Policía de Barrio 7
Corruption, Misconduct, and Trust in the Criminal Justice System 9

THE USE OF TECHNOLOGY **11**

The Use of Technology: Baja California 12
The Use of Technology: Chihuahua 12
The Use of Technology: Colima 14
The Use of Technology: Guanajuato 15
The Use of Technology: Querétaro 15
The Use of Technology: Tamaulipas 16

METHODS **17**

Data Collection and Sampling 17
Gaps and Limitations 22

ANALYSIS AND FINDINGS **22**

Attitudes Towards Technology 23
Current Use of Technology 24
Illicit Conduct & Technology 26
Efficiency & Effectiveness 27
Police & Prosecution 27
Technology & the Community 29
Challenges to the Use of Technology 29
Technology Needs and Wishes 31

POLICY RECOMMENDATIONS **32**

DISCUSSION AND CONCLUSION **34**

APPENDIX I: ESSENTIAL FACTS ABOUT MEXICAN STATES **41**

APPENDIX II: SEARCH TERMS **42**

Report Summary

Created in 2009, the Master of Arts in International Crime and Justice at John Jay College of Criminal Justice prepares students from around the world to address the challenges posed by the growing phenomenon of international crime. Under the direction of John Jay faculty who are both distinguished scholars from multiple disciplines and practitioners in the field, students develop a deep understanding of the nature and impact of international crime and the domestic and international responses to it.

Launched by the Department of State in 2013, Diplomacy Lab is a public-private partnership that enables the State Department to "course-source" research related to foreign policy challenges by harnessing the efforts of students and faculty experts at colleges and universities across the United States. Diplomacy Lab is a partnership between the Department and U.S. colleges and universities, including John Jay College of Criminal Justice (CUNY). Partner schools participating in Diplomacy Lab conduct research around various topics presented to them by the State Department. Over the course of a semester, professors guide students in developing a final work product that accomplishes the goals outlined by the Department. Students have opportunities throughout the semester to discuss their research with U.S. Department of State officials[1].

In spring 2019, International Crime and Justice Capstone Course graduate students completed a Diplomacy Lab project entitled *INL Mexico: Technology in the Security Sector*. The Bureau of International Narcotics and Law Enforcement (INL) in Mexico was interested in understanding what information technology is being used in Mexico at the state level, what is being utilized within the United States and beyond, to compare where broader application of information technology could make impactful contributions to the security situation in the country. Specifically, INL was interested in developing a mobile application to assist police and prosecutors in daily work-related activities. With a focus on six

[1] https://www.state.gov/diplomacy-lab

Mexican states, we conducted a desk review, conducted pilot interviews, developed and translated a semi-structured interview schedule, liaised with the Bureau of International Narcotics and Law Enforcement and state contacts, and finally, conducted interviews (*n=20*) over WhatsApp. Findings indicate that technology is welcomed and encouraged along security sector professionals. However, the need for a comprehensive mobile application varies across states[2].

2 The information and analysis presented in this report do not necessarily represent the views of John Jay College of Criminal Justice, the City University of New York, or the U.S. State Department.

Introduction

The use of technology in policing seeks to improve the efficiency and effectiveness of the daily duties police officers may encounter. However, there is mixed empirical data on the use of technology and if it is really contributing to the institutional goals of the security sector, or, if it is contributing to other factors. Successful implementation of technological use in the security sector requires adequate training of users, continuous maintenance, and effective leadership. Technological use can generally include hardware and software. Examples of these technologies include two-way radios, laptops, tablets, bullet-proof vests, police cars, batons, handcuffs, pepper-spray, pocket guides for law enforcement and among others that vary by funding, practice, and culture.

The use of software for policing purposes can include geographical systems to assist in daily police and prosecutorial work, fingerprint scanning software (such as the US equivalent of Automated Fingerprint Identification System – AFIS), criminal profile databases, reports, and document filing databases. However, such software is subject to the capacity and abilities of various security agencies. Some agencies around the world, as well as in the US and Mexico use application assistance software via laptops, cellular phones, and tablets. These applications can assist with numerous tasks, and ideally, limit misconduct within the security sector. Applications can be created, such that inputted information cannot be deleted or altered to narrate the accounts of cases, but also to create a cohesive approach to gathering vital documents and evidence in daily investigations. While Mexico is not a leading pioneer in the use of technology, it can borrow ideas and strategies of successful implementation.

As of 2019, the United Nations estimates that the population of Mexico at 127,575,529 inhabitants. Mexico's female population accounts for 50.7% of the population and men makeup is 49.3% of the total population (WorldoMeter, 2022). Mexico's gross domestic product (GDP) was $115 billion US dollars in 2017 and the GDP value of Mexico (see Appendix I) represents 1.86% of the world economy (Trading

Economics, 2019). Mexico has one of the highest rates of inequality among developed countries, according to the Organization for Economic Cooperation and Development, with the richest 1% of the population owning almost half of the country's wealth (The Editorial Board, 2017). In 2018, Mexico had 79.1 million internet users, representing 67% of the population (Martinez, 2018). Transnationally, Mexico is a source and transit country for drugs intended for the US. Mexico is estimated to be the world's third largest producer of opium with poppy cultivation, after the Golden Triangle Region (Beittel, 2020). Human trafficking and violence against migrants are also extremely common and prevalent along the Mexico-United States border (Leutert, 2018).

Criminal Justice Reform in Mexico

In 2008, Mexico launched a major constitutional reform of its criminal justice system. The reform included a transition into an adversarial judicial system and was expected to be in full effect and completed by 2016 (Congressional Research Service, 2018). The United States assisted in funding the implementation of the 2008 reforms, through the Mérida Initiative, a $1.5 billion-dollar aid package to provide support to Mexico and Central American countries in combating drug-related crimes (Congressional Research Service, 2018). Under the adversarial system, criminal proceedings function as in the United States, consisting of oral trials with sworn witness testimony, cross-examinations, with the presumption that the accused is innocent until proven guilty (Congressional Research Service, 2018). Criminal activity in Mexico falls under either federal or state jurisdiction, although the Mexican system categorizes criminal activity based on who or what is affected, and where the crime takes place (Congressional Research Service, 2018).

Fuero Federal (federal jurisdiction) denotes actions that affect the "*health, economy and overall national security or interests of the Mexican Federation, including its structure, organization, operation and heritage*" (Kingman-Brundage, 2016). Since these crimes fall under federal jurisdiction, then, they

are investigated and prosecuted by the Federal Public Ministry and tried in federal courts (Kingman-Brundage, 2016). *Fuero Común* (state jurisdiction) denotes actions committed "*between individuals, i.e., those in which the criminal effect falls only on the victim*" (Kingman-Brundage, 2016). These crimes fall under the jurisdiction of the state, and therefore, are investigated and prosecuted by the State Public Ministry and tried in state courts (Kingman-Brundage, 2016).

The *World Justice Project* and *Abogados con Cámara* analyzed the National Survey of Population Deprived of Liberty (ENPOL) which includes responses from more than 58,000 inmates, combined with a database with the implementation date of the new criminal justice system at the municipal level and by the type of crime (World Justice Project México, 2018). The World Justice Project found that reform would take time. The first implementers of the new criminal justice system displayed a better performance than the other states, though all of them demonstrated gradual improvements; challenges continue in the police and prosecution institutions (World Justice Project México, 2018).

Police Reforms at the Federal, State and Municipal Levels & Policía de Barrio

Mexico's police forces operate at the federal, state, and municipal levels. They are divided into crime prevention and crime investigation jurisdictions. Currently, Mexico has a total of two federal police forces (the PF and the Federal Ministerial Police – Policía Federal Ministerial or PFM), state police forces associated with each of the 31 states and 2 for the Federal District in Mexico City, as well as a high number of municipal police forces (Asch, Burger, & Fu, 2011, p. 22). Guillermo Zepeda Lecuona, a researcher professor at El Colegio de Jalisco, coordinates the research line on Security, Criminal Justice, and Human Rights in Mexico (IIDEJURE, 2017). Zepeda Lecuona estimated that there are 351 police officers for every 100,000 people in Mexico and 299 police officers for every 100,000 people when the Federal District is excluded (IIDEJURE, 2017). Preventive policing operations are conducted across the three levels of government and are organized under the auspices of a Secretariat of Public Security. Their

functions consist of patrolling, maintaining public order, preventing crime, sanctioning traffic violations, among other duties. The ministerial police are organized under the protection of federal and state public ministries, and are responsible for investigating crimes (Sabet, 2010, p. 248).

The 2008 reform helped the new police force not only obtain greater powers to gather intelligence on, combat, and investigate organized crimes, but they faced new personnel management policies that included strict screening, higher pay, and an education requirement that required at least a college degree. New recruits needed to pass a lie-detector test and were tested for their vulnerability and responses to bribes (Asch, Burger, & Fu, 2011, p. 24). Many reforms have been made at the municipal level to professionalize local police forces in terms of selection and recruitment, training, pay and benefits, and equipment (Asch, Burger, & Fu, 2011, p. 25). In four case studies, Sabet (2010) found that for the police forces of Chihuahua, Hermosillo, Mexicali, and Tijuana, although substantial progress has been made, challenges remain in these jurisdictions. Corruption and lack of professionalism remain an ongoing problem in Mexico's municipal police forces.

Some officers continue to lack adequate training and support, receive mediocre salaries, and work longer hours due to staff shortages – restraining them from fulfilling their duties (Asmann, 2018). Arguably, the biggest challenge for the police is obtaining their institutional objectives, under a new system of reform. Modernization plays an integral role in the creation of safer and more enjoyable environments with higher degrees of social continuity. For the police, this means the design, management, implementation, and evaluation of new institutional, organizational, and cultural mechanisms, allowing the police force to act effectively and professionally in any given situation. In Mexico, this new philosophical approach to public safety has not yet managed to position itself in normative, legal, and political-institutional reforms (Fontecilla Pinto & Suárez de Garay, 2014). However, in several cities and

municipalities, this approach has begun to be considered, in the context of police force modernization and transformation processes (Fontecilla Pinto & Suárez de Garay, 2014).

The Policía de Barrio (like community policing in the US) program's objective according to Müller (2010), can be identified as the (re)establishment of confidence in the local police forces which brings them closer to the local population and makes them accountable to the residents. Through this program, the goal is to generate changes with respect to police conduct. It is based on approximation, communication and confidence between the police and the citizenry to organize solutions (Müller, 2010). Policía de Barrio officers can be appropriated by a broad of variety of actors, ranging from shopkeepers to ordinary citizens (Müller, 2010, p. 30).

Corruption, Misconduct, and Trust in the Criminal Justice System

Perhaps some of the problems of police corruption grow out of the history of authoritarianism. Today, the creation of an honest, efficient, and civilian-controlled police force in Mexico City remains problematic. Scholars, politicians, and laypersons alike have been all too willing to ignore the historical origins of Mexico's police corruption and impunity (Davis, 2007). Among these origins is a history of contested state formation built on civil wars, independence wars and revolution (Davis, 2007). Whether these conflicts had a class, regional or cultural character, or a combination of the three, and whether they were fought (or won) under the banner of authoritarianism or democracy, the fact remains that achieving and consolidating state power has been an ongoing struggle in Mexico into the 20th century (Davis, 2007).

Garcia Gonzalez & Gonzalez Robles (2006) found that the general social representation of corruption in Mexico City is apparently one of institutionalization. Acts of corruption are not entirely isolated events attributable to decisions made by the officials who take advantage of their posts for personal benefit. These corrupt actions have become systematized practices that conform to the apparent habitual and ethical norms of Mexican public administration (Garcia Gonzalez & Gonzalez Robles, 2006).

In effect, involvement in situations requiring bribery has become unavoidable for the lawyers who want to successfully negotiate government matters or any other official authority (Garcia Gonzalez & Gonzalez Robles, 2006, p. 258). Unfortunately, as it stands, Mexican lawyers, officers, politicians must conform to this corruption culture to be perceived as competent professionals by their clientele (Garcia Gonzalez & Gonzalez Robles, 2006, p. 258).

Police in Mexico sometimes fail to encourage trust from its citizenry. With the help of the United States, Mexico has attempted to improve its judicial system and the northern state of Chihuahua, is considered one of the pioneers. A recent study by the Inter-American Commission on Human Rights found that 98% of crimes fail to result in convictions (Uribe, 2016). Many Mexican citizens do not trust the police, they view them at best inefficient and at worst, corrupt (Holman, 2018). Despite years of police reform, little has changed (Holman, 2018).

In 2013, the National Institute of Statistics and Geography (INEGI) conducted a survey on government quality and impact. The Institute found that 90% of participants answered that the police is the country's most corrupt institution (Yucatán Times, 2014). The INEGI indicated that during 2017, corruption was once again in the second place of the problems that concern the citizens the most; the percentage of the population concerned about this phenomenon went from 50.9%, in general terms, in 2015 to 56.7% in 2017 (Almanza, 2018). At the national level, the highest percentage in experiences of corruption was estimated in contact with public security authorities, with 59.5% of cases; followed by procedures related to permits for land use, demolition, or construction; applications for proof of freedom of encumbrance or other procedures in the Public Registry of Property with 30.7% (Almanza, 2018). In Tamaulipas, policemen do not even make 3,000 pesos a month, an equivalent of $220 USD (Yucatán Times, 2014). From 2009-2014, a report by El Universo, found that 2,543 policemen were arrested

because of extortion, homicide, and kidnapping of people to hand them over to suspected or convicted offenders, and abuse of authority (Yucatán Times, 2014).

The Use of Technology

The use of technology in Mexico varies by federal, state, and municipal government entities, across its 31 states, and its federal district. In recent years, Mexico developed a complex system known as *Plataforma México*. The system allows Mexican police and prosecutors to share in real time, all information regarding criminal activities, as well as public identification information. Plataforma México is a unique system of criminal information, composed of databases such as biometrics, driver's licenses, stolen and recovered vehicles, public vehicular registration, among others (Villa Vargas, 2012). This platform has several applications that vary among states. Some of those applications are *Informe Policial Homologado*, a reporting tool for police; *Kardex Policial*, a registration of public security personnel; and the *Sistema de Gestión Operativa* (Operational Management System), a system used by police to monitor and track police agency administrative tools, needs, and assist officers in their daily activities (Bermejo and Perez, 2012).

Informe Policial Homologado helps police collect personal data of an individual they may encounter involved in any criminal, civil or administrative event. *Kardex Policial* is a software dedicated to centralizing the information related to the members of the security institutions of the federal, state, and municipal police. *Plataforma México* is located within the facilities of the Federal Police Intelligence Center in Mexico City. This center has been installed in a strategic location away from any physical threats, in addition to having all the logistical security elements necessary to safeguard the information within (Bermejo & Perez, 2012). Mexico also updated its Network of Interconnection of Comprehensive Public Safety Networks *Red Iris*, a software that provides a central network for the migration of the 32 communications, coordination, control and C4 computing centers and their sub-centers to interconnection

nodes (NITs), that can support and interconnect the new applications of the unique system of criminal information (SUIC), the emergency call system 066 and 089 and the radio communication system (Vorndran, 2018).

The Use of Technology: Baja California

Baja California, despite its separation from the mainland of Mexico by the Sea of Cortez, since 2018, has seen an increase of 300% in homicides (Stewart, 2018). One of the most effective pieces of technology introduced to the Mexican officials in this region was the introduction of a single drone, introduced to Ensenada by a California-based company, with the intent of reducing crime (Stewart, 2018). The drone has flown an average of twenty-five missions daily, deciding where to fly based on 9/11 calls (Stewart, 2018). This method has led to a crime reduction of 10% in Ensenada (Stewart, 2018). The effectiveness of drones may open the doors for more Mexican cities and security professionals to adopt similar technologies.

Body-worn cameras have also been introduced. In 2015, officers in Tijuana began using body cameras, with the hopes of reducing corruption (Kahn, 2015). According to Kahn (2015), bribery, particularly law enforcement officials taking bribes in exchange for a penalty reduction or elimination, is an issue that must be addressed in Mexico. By implementing body cameras, police stops are supervised, making it more difficult for an officer to accept some form of a bribe, and become part of the corruption phenomenon (Kahn, 2015).

The Use of Technology: Chihuahua

In 2018, the Governor of Chihuahua, Javier Corral Jurado of the National Action Party (*Partido de Acción Nacional*, PAN), indicated that his Administration supported the use of technology by participating in the launching of Plataforma Escudo Chihuahua (PECUU) on March 20, 2018. The program operates 500 video cameras in the capital of the state by the municipal government. Governor

Corral Jurado highlighted the historical investment of 150 million pesos in the platform, operated by the municipal government, headed by María Eugenia Campos, and indicated that with the PECUU improves the security of the city and it will incorporate technological tools for research and intelligence including sensors, cameras, drones, communication radios, among others (Chihuahua Gobierno del Estado, 2018**)**.

Included are video surveillance cameras with communication and storage capacity of up to 15 days, 200 PTZ cameras which can make horizontal and vertical movements, in addition to approaches, with which a conduct analysis is achieved, such as detection line crossing, intrusion detection, luggage or unattended packages, and objects removed (Chihuahua Gobierno del Estado, 2018). To explain the importance of the use of technology and video cameras, the governor recalled that this was how two of those responsible for the crime of the journalist Miroslava Breach Velducea could be arrested, after the reconstruction that was made of the movements of two people, minute by minute, with the review of more than 200 hours of recordings of 90 cameras installed in homes and businesses (Chihuahua Gobierno del Estado, 2018).

The Mayor, Marco Bonilla Mendoza, accompanied by the director of Municipal Public Security, Gilberto Loya Chávez, led the meeting offered to the members of the capital press, where it was informed that thanks to the technological efforts, they have achieved an increase in 20% of the efficiency of the police for the prevention of various crimes (Chihuahua Noticias, 2018). The frequency of homicides also shows a downward trend with 49% fewer victims, since of 176 submitted during 15 weeks before PECUU was initiated had reduced to 90, unlike the national and state trends that are going up (Chihuahua Noticias, 2018). This new technological model has led to the opening of 181 collaboration folders with the State Attorney General's Office, which has both videos and key information available for the investigation of different events, as part of the more than 500 cameras installed as part of the PECUU. The public

acceptance of this platform has been positive, since 300 individuals have joined and there is a waiting list of 1,700 interested, among businesses, schools, or individuals (Chihuahua Noticias, 2018).

The Use of Technology: Colima

The Organization of American States (2008) argues that Plataforma México is a telecommunication and information system that integrates all the databases related to public security. The purpose of having all elements of information is so that police and law enforcement agencies can combat crime efficiently. According to Barrachina and Hernandez (2014), this new model would be based on four interrelated components: legal framework, police development, police action and technology information.

In 2017, Colima implemented the use of technology in the police force. The force increased the strategic support of public security, the level of command, control, computing and communication center (C-4) which will be scaled up to level of C-5. The goal was to increase efficiency in decision making of public security, law enforcement, civil protection, and community service (Periódico Oficial, 2017). These changes were made to enact and strengthen the public security in the state.

In 2019, Colima invested over 800 million pesos for the C-5, a state project (Periódico Oficial, 2017). Funding included the placement of 825 video surveillance cameras as public safety service, 17 road arches for vehicle identification and control, as well as 2000 citizen liaison buttons for direct communication between citizens and authorities, and almost 600 emergency buttons on public transport (Periódico Oficial, 2017). Colima implemented a brand new, emergency first-response phone number and since October 2016, was part of the first states to implement a new emergency service with the prefix 9-1-1 (Periódico Oficial, 2017). It appears that the system was put in place to improve first-responder efficiency.

The Use of Technology: Guanajuato

Attorney General of Guanajuato, Carlos Zamarripa, wanted to implement the best technologies in the state to achieve greater security results (El Universo, 2019). The General Prosecutor Office, through the Criminal Investigation Agency, signed an agreement with the Public Security of the State to view and store C5i images, which allow them to build test data during an investigation. Vehicular theft in Guanajuato has decreased, ranking 26 out of 32, and becoming the third Mexican state with the largest vehicular registry in the country (El Universo, 2019). The State Attorney General's Office uses more than 200 different systems for data collection, transmission, and analysis, including one for facial recognition and another for mapping routes through the images of video surveillance cameras and the road arches (El Universo, 2019).

The Use of Technology: Querétaro

Technology use is essential for police and prosecutors in Querétaro, Mexico. For example, police are trained in the academy to use a tablet for victim complaints and later promotions can be based on the use of the tablet (Secretaría de Seguridad Pública, 2008). The tablet makes a police officer's job easier as they have a questionnaire that allows them to record and store reports by citizens. The use of a tablet allows police officers to record information in real-time, provide legible information (which at times may be a challenge of the profession in general), and above all, have a system that allows for immediate submission and minimizes loss of information (Secretaría de Seguridad Pública, 2008).

Reports are then sent directly to the prosecutor through the *Sistema Informático Único*, where they will determine if the report constitutes a crime. If it does, the report (now deemed a complaint) is provided a case number which is then sent to the reportee's (assumed victim) phone or email, with information regarding schedules for further investigation and the prosecutor assigned to their case (Secretaría de Seguridad Pública, 2008). This process not only saves time, but also increases the citizens' likelihood of

filing a complaint because they develop more trust in the security sector's efficiency. Before this process, citizens could spend 4 to 6 hours in the prosecutor's office filing a report. Using tablets, police complete the complaint process in an average of 40 to 60 minutes (Secretaría de Seguridad Pública, 2008).

According to a computer system engineer employed at the *Centro de Information de Análisis* (Center of Information of Analysis for Querétaro), the *cifa negra* (crimes unreported to police) have dropped by 30% (Secretaría de Seguridad Pública, 2008). The sharing and recording of information in the Sistema Informático Único, provides all operators access to the same information, which helps ensure that the accused is never judged or processed differently. In addition, it allows the *Unidades de Analisis* to better detect criminal behavior, *modos de operandis*, and relate preventative and investigative information (Secretaría de Seguridad Pública, 2008).

Other technology used in Querétaro includes license plate readers and video surveillance. Video surveillance helps monitor and ensure the safety of the public and police officers. On the other hand, it also helps protect and support police work (Secretaría de Seguridad Pública, 2008). While Querétaro police and prosecutors have improved effectiveness using technology, such as with tablets and the Sistema Informático Único, there are rural areas that are outdated and lack technology, due to limitations in accessing city resources and technological capabilities. Nonetheless, police technology seems to be a priority that the state will continue to invest in.

The Use of Technology: Tamaulipas

Plan Tamaulipas was developed to target narco-trafficking, kidnappings, homicides among other crimes (Wilson & Weigend, 2014 p.16). Along with the state police, the Secretariat of the Navy (SEMAR) and Secretariat of National Defense (SEDENA), conducted operations with one another to combat crime. SEDENA a department of the government that manages Mexico's army and Air force, took over the operations at the states C-4 (Command, Control, Communications, Computers) to further assist policing

in the state by receiving anonymous tips through their hotline system (Wilson & Weigend, 2014, p.16). State police also use security cameras from checkpoints established by SEDENA, to identify auto theft (Nelson, 2018). Due to the high levels of crime on highways, Tamaulipas' Governor Garcia Cabeza de Vaca purchased a variety of equipment and vehicles for security professionals, totaling almost $4 million USD (Taylor, 2017).

The prosecutor's office, *La Procuraduría General de Justicia Tamaulipas,* provided the state with a website that includes statistical data from crimes that occur throughout the state in a combined effort called *Estadística e Informática*. It also serves as their own social media through its network of *Procuraduría General de Justicia Comunicacion Social* (Taylor, 2017). To date, existing literature has focused on various technological systems used by the security sector and other professional in Mexico, there are no known studies that target the assessment for the need of a comprehensive mobile application for use by this very force, to mainline effective and efficient communications across the security sectors.

Methods

Data Collection and Sampling

First, in conjunction with our liaisons at INL, we devised potential interview questions to ask participants working in Mexico's security sector. In assessing the needs of an application that would best assist police and prosecutors throughout Mexico, the questions were based on the themes in **Figure 1**. Next, we proceeded to schedule 4-5 pilot interviews with police officers in the United States, professionals working in the prosecutor's office in Mexico City, and a scholar at a Mexican university. The pilot interviews were to assess comprehension, applicability towards the public security sector, whether the length of the questions were too long or cumbersome, and to uncover the common terms used to refer to things like prosecutor, technology tools, software, etc. Once the pilot interviews were completed in

February 2019, we proceeded to revise the final draft of questions and translated them into Spanish[3], along with the project description and consent forms. We requested approval from our Institutional Review Board for these interviews and were granted an exemption on March 17, 2019 (IRB File #2019-0224).

The Bureau of International Narcotics and Law Enforcement provided a liaison that connected the research team to individuals across the states of Baja California, Chihuahua, Colima, Querétaro, and Tamaulipas, that in turn would serve as our liaison for those states. In March 2019, we were given contact information for potential state level liaisons and designated one of group member as our liaison to all the states. In email and text communications, we considered the one to three hours of time difference in New York City, to the various time zones (depending on the state) in Mexico. Through email, we introduced themselves and briefly explained how their contact information was retrieved, the goals of this study, and what their potential role in our study was.

We clarified to each contact, in each state, that the goal was to purposefully obtain participants that currently work in the security sector as a street-level police officer and/or as a prosecutor. The researcher group's liaison proceeded to directly text those who had not responded to an initial or follow up emails via WhatsApp - a common and widespread tool used to communicate in the US and Mexico. A second attempt was made to those who failed to respond with the intention of obtaining more participants. After some exchange, we were able to solidify persons that met the parameters of our study.

Using a combination of purposive and snowball sampling, we emailed potential participants and included in our recruitment letter an overview of the researchers and institutional affiliation, how their contact information was retrieved, the goals of our project, and asked about their willingness to participate. Next, if individuals were interested, they were provided a consent form, asked about their availability over the next few days, and arrangements were made to contact each other about next steps.

[3] All team members had basic knowledge of Spanish, with several team members having advanced or native fluency in Spanish.

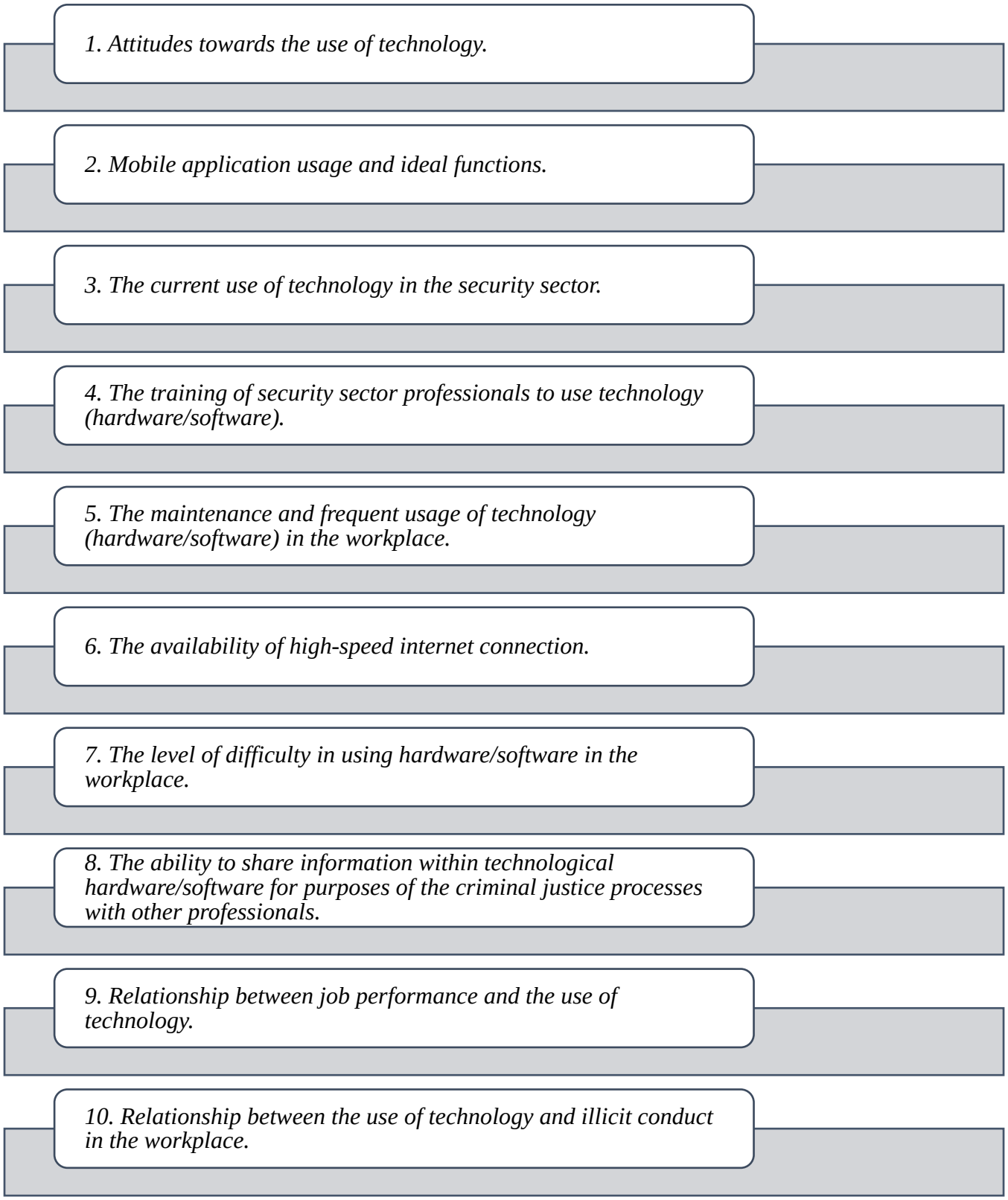

Figure 1: Interview Themes

Similarly, to the email communications, we sent the same information in a text message to the participants via WhatsApp. After further exchange, we were able to communicate with 20 out of the 25 participants provided to us via text message. Throughout April 2019, we scheduled 20 different time slots for all participants. We worked in groups of two/three interviewers and note-takers at a time. We asked participants who gave us informed consent for permission to record their responses to our questions; all but two participants allowed for us to do so. While some participants were willing to share their name and title of their current positions in Mexico, others chose to remain anonymous. The latter group are labeled as participant x, where x is a randomly assigned number. All respondents were interviewed in Spanish.

Of the participants (*n=20*) in our study, 75% (*n=15*) identified as men and 25% (*n=5*) as women. The participants in our study ranged from 28 to 51 years old, as did the male population. Among women, ages ranged from 30 to 47. Of all our participants, the age mean was 36.9, 37.2 among men and 35.8 years old among women. Ages 35 and 39 were the most frequently reported among participants. Within all our participants and the male population, levels of education completion ranged from high school diploma to doctoral degree recipients. Among women, educational achievement ranged from high school diploma to a master's degree. In the sample, 40% of participants reported completing a graduate degree and 35% of completed at least a bachelor's degree in areas of law, criminology, engineering, among other fields. More than half of our participants had extensive experience in the security sector with at least 2 years of employment with a state police or prosecutorial agency, and up to 22 years of experience at the time of the interview. 40% of the sample was employed in Chihuahua and only 5% in Tamaulipas. Only 1 participant refrained from responding when asked where they were geographically located among the six states. **Table 1** displays the descriptive statistics of the sample.

Table 1: Descriptive Statistics (N = 20)

Demographics	N	%	Minimum	Maximum	M	SD
Age	---	---	28	51	36.9	5.99
Experience	---		2	22	10.25	5.22
Gender	---		---	---	---	---
Female	5	25	---	---	---	---
Male	15	75	---	---	---	---
Level of Education	---	---	---	---	---	---
High School Diploma	3	15	---	---	---	---
Some College	1	5	---	---	---	---
College Graduate	7	35	---	---	---	---
Some Graduate School	1	5	---	---	---	---
Graduate Degree	8	40	---	---	---	---
State Location	---	---	---	---	---	---
Guanajuato	0	---	---	---	---	---
Chihuahua	8	40	---	---	---	---
Baja California	4	20	---	---	---	---
Tamaulipas	1	5	---	---	---	---
Queretaro	3	15	---	---	---	---
Colima	3	15	---	---	---	---
No Answer	1	5	---	---	---	---

Gaps and Limitations

While the overall project was procedurally successful, there were some minor concerns. The preliminary phase involving communications with state liaisons took longer than expected. There were no available participants from the state of Guanajuato. Therefore, interviews and information from Guanajuato are not represented in this study. Once we were able to communicate with most state liaisons, we initiated the interview process. Throughout the interviews, we encountered connection issues with certain callers more than others, which resulted in longer interview calls that overlapped with other interview appointments. In our desk review and throughout the formulating and editing process, we attempted to make our questions as simple as possible, while also being able to obtain the information we needed. Even when we conducted pilot interviews, we received feedback about the comprehensiveness and clarity of our questions.

However, in more than half of our interviews, some participants had trouble understanding what was being asked of them. For example, participants asked us to rephrase or provide an example as to what we meant when asking "*what are your attitudes towards the use of technology"*. Some participants also had trouble understanding what we asked with regards to what types of software and hardware they used in the workplace. In these cases, we restated the question and gave an example of what we meant by attitudes, software, and hardware (tablets, two-ways radios, etc.). Generally, all the participants were willing to participate and provided as much expertise as they could. Very few participants, perhaps fewer than five, declined to answer any or several of our questions throughout the interviews.

Analysis and Findings

The results from our study are first presented in categories we combined from our initial survey questions, and then through sensitizing concepts that were identified by participant responses after we hand-coded our data. The themes we adopted from our questionnaire to the findings included attitudes

towards the use of technology, current use of technology, and the relationship between illicit conduct and technology. The sensitizing concepts identified were efficiency and effectiveness, the relationship between the police and the prosecution, the relationship between technology and community, challenges to the use of technology, and the needs and wishes of security professionals.

Attitudes Towards Technology

When asked about attitudes towards the use of technology, participants across Baja California, Chihuahua, Colima, Querétaro, and Tamaulipas can be summarized as having positive outlooks. Most participants were in favor of the implementation of technology in their daily work. However, we found that the use of technology does indeed vary between police officers and prosecutorial security sectors. Our findings show a severe lack of communication physically, and technologically between the police and prosecutors in the states we analyzed, except for Querétaro.

> "*Technology is very important now because criminals are more updated in information technology than us*". - (Alejandra).

We found that technical support does exist for security sector professionals. Those in charge of providing technological support vary from across Mexican states. Support branches include the Centro Estatal de Análisis para Seguridad Administrativa (Querétaro), Consejo Estatal de Seguridad (Querétaro), the Technology Division (Querétaro), Tactical Analysis Team (Baja California), and the Cyber Team (Chihuahua). The use of mobile hardware includes vehicle plate readers, cellular phones, desktop computers, *radio matra*, video surveillance cameras, two-way radios, and tablets. As for technological maintenance, responses varied widely from state to state and the types of technology.

Some departments, such as Colima and Baja California, update their technology every day. According to participants, Tamaulipas updates their system every three months. Furthermore, we found that Chihuahua updates their systems every six months. Others, including Querétaro, update their

technology annually or when system licenses expire. Generally, maintenance is done as needed or requested. Most states claimed to have regular to good connection to the internet. In Baja California, participants said that for the most part, there is no access to the internet, and in the rare instance that they do have access, it is of average quality, and it does not work in all areas of the city. However, one participant from Chihuahua disclosed that their department fails to update their technology, resulting in insufficient memory space on their computers.

In Chihuahua, the security sector has difficulties connecting in some areas, such as mountainous regions and smaller towns outside the city. A participant from this state said to have very bad connection, causing reception to come and go. Overall, most participants from Chihuahua claimed to have spotty internet connection, while other states either claimed to have average or good internet connection. We conclude that most participants in some cases do not have first-hand knowledge as to the actual rate of maintenance, which can be seen in the different answers provided per state. For example, in Chihuahua alone, four different answers were given among ten participants. The answers include daily, when needed, every six months, or not at all.

Current Use of Technology

According to participants, technology is used for the collection of complaints across Baja California, Chihuahua, Colima, Querétaro, and Tamaulipas. Portable tablets are used with a mobile application that reflects different data inputs, depending on the crime or report. However, Baja California showed mixed results on the extent of technological use among prosecutors and police officers, with the former have much more access. For example, participants across Baja California were concerned that information is not shared between the municipal police and state police.

However, In Chihuahua, we found that citizens must still walk down to the Office of the Prosecutor to file a complaint, thus, making the overall process of the criminal justice system, longer and in some

cases impossible. Technology is used as a surveillance system via video cameras to prevent crimes, share information between states, trace suspects and offenders, find vehicles, and monitor the safety in communities. In addition, all the information collected in this state is analyzed to detect criminal behavior, modus operandi, and help police and prosecutors with the prevention and investigation of crimes.

Querétaro has its own technological system, Sistema Informático Único. This system allows the police and the prosecution to connect and share information in real time across platforms – tablets, laptops, and desktops. In Querétaro, a report is taken with a mobile application, via a tablet, that has an agency-developed questionnaire according to the type of crime. Once a report is issued, the information goes directly to the prosecutor who assigns an investigation folder.

Other platforms are used across security sector agencies including Program Safety, SIVA, SIVATEL and Plataforma México. Some of these software programs are used at the national or state level and in some instances, there are independent internal networks allowing for confidentiality in the workplace within state agencies. Such software is also used in administrative work, such as measuring police officer job performance. For example, there are systems that analyze the emergency response time of police officers, including the amount of time it takes them to file a report at a crime scene. This information is used to assess police officer performance and taken into consideration for advancement within their respective police agencies.

Overall, technology makes police and prosecutors work easier and helps decrease potential acts of illicit misconduct. However, according to some participants, state police officers in Baja California are not as supported compared to officers in other states, and their total technological capabilities include two-way radios and cellphones to do their jobs. There was no mention from participants that the cellphones acted in capacities higher than usual internet usage, text, and call functions. As such, making the work of a Baja California police officer more difficult and less efficient in comparison to other state police

officials. Therefore, police in Baja California are given minimal technological tools to carry out their duties.

> "*We have our own technology system, we have a software development team made up of personnel from the prosecutor's office, the citizen security secretary, as well as the judiciary that helps the state build this software saving money and making the state independent. In turn, having a unique system helps maintain confidentiality*." - (Pedro).

Illicit Conduct & Technology

We were interested in the relationship between the use of technology and illicit misconduct in the security sector, we found that overall, participants perceive technology as a tool in decreasing illicit misconduct. For example, one participant said that the illicit behavior of the police and the prosecution decreases because all the information is generated in a single computer system where there is "*greater control across the board*". Although the illicit misconduct of police and prosecution may still be an issue in some states, the implementation of more technology in this sector helped to decrease the overall potential and perhaps actual misconduct.

Information technology decreases illicit behavior of the police, having obligations and pressure to uphold confidentiality, according to participants. Technology has a positive effect as it may increase supervision by superiors to follow up and evaluate performance. It also tracks all actions and behaviors of citizens and the police. However, we found that there is an issue of ethics and vulnerability with regards to sensitive information. Such information is dependent on the morals of an individual. Any individual may take advantage of opportunities to use technology to retrieve confidential information, according to participants.

> "*Illicit misconduct has diminished; it is an integrity institution. It is important for them (police) to know that they are observed all the time*". - (Participant 42).

The use of technology is considered to decrease illicit misconduct in the prosecutor's office because they are believed to be part of an institution based on integrity and their course of actions have higher transparency than others. The ways in which technology is used by the prosecutor's office, is different than how it is used by police departments. We found that technology can impact illicit misconduct in the prosecutor's office, both positively and negatively because they are perceived as having more control of the information they receive and how they present it in court.

Efficiency & Effectiveness

When asked questions regarding efficiency and effectiveness in the use of technology, there were common responses across the five states. Technology saves time on the job, reduces the need to complete paperwork and it aids both police and the prosecutor's office. Furthermore, technology increases communication between police, prosecution, and the community.

> *"The person makes the complaint physically, the same system sends us the complaint and the investigation services, we use a platform called Justicia.net, and it is like an email that sends the investigation folder to get the information that is needed". (Edgar).*

For example, vehicle license plate readers allow officers to obtain the identity of a suspect. Surveillance cameras allow police officers to patrol in key areas and deter crime. In addition, technology provides incentives for promotion in police rank. Chihuahua is no exception to the use of platforms developed to facilitate the management of information in an efficient and effective manner, and to support the investigations and prosecutions of crimes.

> "*Individuals don't have to go to the police station to file a complaint anymore; therefore, they don't spend money on transportation. Police officers provide direct services to the community, with the use of technology*". - (Laura).

Police & Prosecution

There is a consensus among participants that the use of technology does help detect or process

certain types of crimes better than others. Technology gives them more access to information whereby prosecutors, police, and analysts can share a similar source to obtain information to solve various crimes. There are crimes that have a greater presence. The use of information technology aids in the investigation of certain crimes such as stolen vehicles, organized crime, and cybercrime.

> "*Yes, all of the information we have is shared with the prosecutor in real time to make the best decisions*." (Ernesto).

In some states, information technology is not used with victims or defendants, especially not defendants. There is no contact with victims unless a person files a complaint with the public ministry/prosecutor's office. Any communication with the complainant depends on the case type, such as in cases of kidnappings or extortion where victims or family of victims who put forth a complaint may be contacted regarding the case. In states such as Querétaro, technology is used to aid the victim of a crime. For example, the victims are entered in the Sistema Informático Único, allowing the prosecution to help the victims with psychological sessions as well as legal representation, as needed.

Additionally, technology is used for precautionary measures towards individuals who are found presumably guilty of a crime. Those individuals who leave the state penitentiary system are monitored through a unit that follows up with the individual, regarding where they will stay upon release and what employment prospects they have. This process is to ensure they do not escape, and they abide by their release conditions. In Baja California, the software and information are not shared with the prosecution unless the prosecutor's office asks for specific information related to the case in question. Communication via technology may take place by email, text message, and social media to send alerts of a crime and to request information from the public to track down a suspect. However, other states report a form of a United States' model of community policing. While some participants say that technological tools, such as radios and tablets, allows police officers to connect with people they serve.

Technology & the Community

> "*The use of technology increases the relationship between the police and the community. By using technology through the internet pages and social networks the communication is more direct*". - (Participant 46).

Mexico's law enforcement and prosecutorial sector enhance their community relations using emerging technologies. This includes technology that increases effectiveness and builds trust that encourages civilians to file complaints. Therefore, more complaints, reduces the amount of unreported. For example, the use of platforms such as *Justicia.net and Sistema Informático Único,* allows the police to send civilian complaints and reports directly to the prosecution.

> "*It does not affect the relationship between police and community; on the contrary, it improves it, and unites us more. A complaint can be sent via social networks or email in an anonymous manner, and one just follows up on the complaint*." - (Participant 99).

Challenges to the Use of Technology

> "*There is no good technology and network coverage varies depending on the place*." - (Participant 81).

In our desk review, we found Mexico is utilizing a new system, *Plataforma México*, adopted and used by all states in the country. Our findings are diverse between and within the five states. States with minimal problems and exceptional internet connection according to participants are Colima and Querétaro. Chihuahua, Baja California, and Tamaulipas range from regular to poor internet connection to good internet. In our sample, Chihuahua was the pioneer among states in terms of technological usage. However, we found that they have unreliable internet connection. In our interviews with police officers and the prosecutor's office personnel, we found that internet services provided in the center of Chihuahua are good. However, the signals are often lost in rural areas. The challenges for some of the participants were obtaining information about a crime due to lack of internet connection.

"*The network in Chihuahua is unavailable, sometimes it causes problems in obtaining a police report*." - (Participant 34).

In Querétaro, the internet connection in the metropolitan area is of good quality. With regards to the use of software, Querétaro is among the only researched states that owned its own version of Sistema Informático Único. This system allows effective and efficient information sharing between police agencies and prosecutors. Therefore, it seems as if in Querétaro, perhaps the only challenge is improving the quality of its internet connection.

"*The internet service is regular, it has little signal, there are challenges, and many things are not accessible since the police need the continuous consent of a superior*". - (Joshua).

On the contrary, the data shows no issues with the internet connection in Colima. One participant stressed that Colima updates its internet system and all its data constantly. In an interview with another participant, we found that Colima uses a surveillance monitoring platform and are in the process of change in which the emergency capture system is improving and developing. A third participant also said that the use of Plataforma México in Colima is important, since that is how they verify criminal information, as needed. In Baja California, according to some participants, the internet is excellent. However, others expressed different standpoints, as demonstrated below.

"*The internet is excellent but there are challenges with certain activities since documents are still made by hand*". - (Participant 21).

"*The internet is bad; it goes and comes all the time. There is not much memory in the computers we use. The challenges we face are regarding the technology and with updating the computers and its systems*." - (Participant 28).

Challenges to the use of technology is dependent upon the state since the extent of internet

connection and how systems are accessed will vary greatly by urban to rural areas. A big challenge is the need to upgrade technology to obtain updated and accurate information, especially for processing arrests and conducting investigations. We found that upgrading technology also provides difficulty in training, since some states have more availability to train their personnel, compared to others. Most participants stated that although it is still necessary to have hard copy forms, it sometimes results in double the work and it will be necessary to improve or build upon having a system where a common source of communication for sharing information exists with other agencies.

Technology Needs and Wishes

We learned how important technology is and the need to continue its advancement. We found that the need and use of technology is essential for many areas of work including performance and satisfaction. There were mixed results in the use of technology, such as availability and training for the use of them. These mixed results were based on the idea that some states or municipalities did not have the appropriate resources or tools to either obtain these new technologies or use them, mostly due to the lack of network connection. Network or high-speed internet was a common concern among states. In Querétaro, participants expressed their desire for all Mexican federal agencies to have direct contact and access to Querétaro's Sistema Informático Único.

Police officers and prosecutors in Querétaro are doing double the work when having to create and complete a report via an online platform and in traditional writing format, ultimately submitting these reports to the federal government. Therefore, the integration of the Sistema Informático Único may improve various levels of government to efficiently reduce the workload. Contrary to this, police in Chihuahua and Tamaulipas expressed the need for new data processors. Both states experience challenges in their everyday work due to the limited number of sufficient resources such as advanced technological software.

Policy Recommendations

Most criminal justice operators have a positive attitude towards the use of technology at their job and throughout the Mexican criminal justice system. Participants believe it improves effectiveness and makes their jobs easier, applications should be expanded to include more features and accessibility. In addition, the use of technology in rural areas, federal and state communication must improve to reap the benefits of advanced applications and information systems. In this paper, we highlighted that technology may be one solution to minimizing public mistrust, improve crime solving and evidence gathering, ensure defendant and victim rights, and enhance community trust in the police. In our conversations with participants in Baja California, if first responders, such as police officers, are given minimal tools to successfully do their jobs. This state, and perhaps others, pending more research on the use of technology across Mexico, could benefit from a pilot mobile application program that will assist in crime reporting and procedural justice.

Across states, police officers and prosecutors alike provided input on what a mobile application could look like. Such an application could collect on the ground complaints by police officers, but also, perhaps in the future, do more. Therefore, our recommendations to the Bureau of International Narcotics and Law Enforcement in Mexico are listed below. INL should consider piloting a mobile application with the elements provided in **Figure 2**. Most of all, no matter what kind of mobile application is created, it is important for state level superiors, the Bureau of International Narcotics and Law Enforcement in Mexico, technological units, and application creators, to conduct thorough trainings for prospective users. Such trainings must be created and implemented in a way in which, regardless of age, gender, level of education, amount of security sector experience, everyone can comprehend and use this mobile application.

Figure 2: Proposed Mobile Application Features

User friendly instructions withing the application (especially for new users).
Provide different levels of clearance for users (police officers vs. supervisors).
Real-time communication with supervisors, colleagues, technological support, and access to state systems (sometimes, police officers need help).
Municipal and State Penal Codes (to aid the security sector in upholding the law).
Safety (password and theft protection).
Confidential for users (identification profiles for users).
Reliable (minimal or no technological malfunctions, e.g.: loading or crashing of pages).
Fast and stable internet connection.
Enough cloud storage for required tasks.
Easy to use (regardless of age, gender, level of education, experience on the job, knowledge of procedures for first-time police and prosecutors, and of the local laws).
Measure police officer tasks for professional advancement.

Additionally, based on existing programs that collect such complaints, like in Querétaro, a mobile application must be updated at least once a year, and maintained as often as system glitches are reported by users. Furthermore, implementations of a mobile application must come equipped with a team of technological experts or at least, individuals with knowledge of mobile crashes and fixings, updating internal software, ability to aid various security sector professionals and agencies per state. Depending on each state budget, a mobile application can be created, such that it is accessible across platforms, including work cellphones and, if possible mobile tablets/laptops.

In Querétaro, tablets combined with Sistema Informático Único lowers the number of crimes that go unreported. In addition, Sistema Informático Único helps ensure that all operators have the same information, allowing the accused to be processed consistently. States like Querétaro, Chihuahua, and to some extent, Colima, seem to be technologically advanced in terms of hardware, software, and using such tools effectively and efficiently. These states may not exactly require the implementation of a new mobile application, but in fact, serve as a model for other struggling states to follow. While the increased reporting of crimes to police suggests that applications may deter police misconduct, research on a direct association and the extent of that association should be conducted in the future.

Discussion and Conclusion

Mexico has made significant progress in its efforts towards the implementation of technology in the security sector. Most Mexican states continue to progress, and, in some areas, technological advances have become more modern with time, leading to both innovations and unintended consequences. Most participants in this study agreed that the use of technology and its application has made their jobs easier and more pleasurable. Research on police technology in Mexico for example, is in its infancy, and it can be suggested that technology's impact on police has not been as effective as it has been expected to be or as research has shown. We found that police officers had very little knowledge on the technology usage throughout their respective states, nor did they have any technological materials to assist in their work, in comparison to other states. Some participants suggested the only equipment they have exposure to were laptops, radios, and phones. They had zero knowledge about software, types of software used by their agencies, if they share software with other departments, or how often they are updated. We found that both training and technology usage varies by state. Querétaro has made it their goal to not only become modern but have added value within the technology sector.

The differences in technological availability, technology use and efficiency, may result from the various levels of funding allocation in technology or security sector per state, instead of the amount of money generated by a state. Chihuahua, a state, with the second highest GDP of the states interviewed ($34,500,000), had respondents who claimed to have poor internet connection, as well as low rates of maintenance on their existing technology. In contrast, Querétaro, a state with the second lowest GDP of the interviewed states ($23,400,000), had the most positive responses regarding their existing technology.

After conducting research on technology use by law enforcement in five different Mexican states put forward by the Bureau of International Narcotics and Law Enforcement Affairs in Mexico City, we conclude that technology use and efficiency varied from state to state. In states such as Baja California, very little technology is used to begin with; however, it is advancing as time progresses. Other states, such as Querétaro, have technology, such as tablets, readily available to them as early as training, beginning in the police academy. Mexican states should emulate Querétaro based on reported efficiency and use of mobile technology. Querétaro's security sector utilizes databases in their daily professional routine such as Sistema Informático Único, that enables police officer to share information directly with the prosecutor's office.

Ultimately, the International Narcotics and Law Enforcement Affairs Bureau, members of Mexico's security sector, and scholars should consider creating researcher-practitioner partnerships that can foster evaluations of existing and future mobile applications that can inform research and practice. Such evaluations should focus on the degree of implementation of the new adversarial system, strengths and weakness of mobile applications, mobile performance results that could be used to explore and confirm findings relating to institutional efficacy, comparative best practices, and upholding human rights.

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Appendix I: Essential Facts about Mexican States

Mexican State	Total Municipalities	Total State Population	State Gross Domestic Product (USD, 2017)
Guanajuato	*46*	*5,853,677*	*42,500,000*
Chihuahua	*67*	*3,556,574*	*34,500,000*
Baja California	*5*	*3,315,766*	*33,700,000*
Tamaulipas	*43*	*3,441,698*	*29,800,000*
Querétaro	*18*	*2,038,372*	*$23,400,000*
Colima	*10*	*711,235*	*6,100,000*

Sources: *(Instituto Nacional de Estadística y Geografía, 2019; Pro Mexico: Trade and Investment, n.d).*

Appendix II: Search Terms

Section of Paper	English Search Terms	Spanish Search Terms
Essential Facts	*GDP in Mexico/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Major Cities in Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Area size in Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Population in Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Statehood of Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Municipalities in Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas*	GDP en *México/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Ciudades en Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Tamaño de Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Poblacion de* México*/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Categoría de estado México/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas* *Municipales en México/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas*
Legal Traditions and the Criminal Justice System	*Mexico Legal Tradition* *Mexico Civil Law* *Mexico Legal System* *Mexico New Criminal Justice System* *Mexico Adversarial System*	*Sistema Jurídico* *Revisiones Jurídicas* *Sistema Legal en México* *Teoría Constitucional* *Sistema Jurídico de la Doctrina Mexicana*

Policing and Prosecution	*Mexican Police Profile* *Mexican Police corruption* *Perception of Mexican Police* *Policing & Prosecution in Mexico* *Mexico's Policing* *Prosecution in Mexico*	*Policía en México* *Corrupción y México Policía* *Percepción de Policía y* México *Policía y Fiscal de* México *Modo Policial de* México *Fiscalia en* México
Corruption and the Criminal Justice System	*Corruption in Mexico/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas and the police* *Corruption in Mexico/Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas and the prosecution* *Trust in the Mexican Criminal Justice System Mexico's Criminal Justice System*	*Corrupción en/y Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas y la policía* *Corrupción en Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas y fiscal/fiscalía* *Confianza en el Sistema de Justicia penal Mexicano Sistema de Justicia Penal de México*
Use of Technology	*The use of technology in Mexico/ Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas*	*Uso de tecnología en/y Baja California/Chihuahua/Colima/Guanajuato/Querétaro/Tamaulipas*